



Global Industry Partner



# SCE Guide Trainer Packages

Siemens Automation Cooperates with Education (SCE) | 01/2022



# Siemens Automation Cooperates with Education (SCE) Teaching made easy

## The SCE program offers a system for sustainable educational support which is unique worldwide.

As a technology leader, we support educational and research & development institutions in the field of automation and drive technology with our industrial know-how and specific services on the way to Industry 4.0.

#### Overview of SCE services

- Learning/training documents for classes and individual study
- Trainer Packages for practice-oriented education
- Courses for conveying up-to-date technical knowledge
- Support for your projects/technical books
- Partnerships with educators, producers of learning systems and WorldSkills
- Information portal for quick access to all SCE offers



# Digitalization is changing our world quickly and dramatically





Siemens – as the technology leader in automation engineering – supports educators on the way to Industry 4.0 through SCE





## The SCE digitalization concept

Implemented by Vocational School 2 in Wolfsburg, Germany in a group project



- 1. Virtual commissioning with the help of the digital twin using Siemens NX-MCD CAD software
- 2. Intuitive TIA Portal engineering of the real automation plant with SIMATIC S7-1500/ET 200SP/RFID/SCALANCE/SINAMICS
- 3. Cloud connection via IOT2050 for evaluation of production data

## **SCE Trainer Packages for educators**

SCE Trainer Packages are specially priced hardware and software packages specifically compiled for up-to-date educational content in automation and drive technology.

## > 90 Trainer Packages for practice-oriented education

- Innovative hardware/software components incl. complete accessories
- Completely and functionally coordinated with one another in terms of content
- Low-cost original industrial components for classes
- Perfectly coordinated with SCE learning and training documents and aligned with teaching curriculums/content
- Innovative trends taken into account



## Why do we provide SCE Trainer Packages?

Assembling individual products requires a lot of know-how and is time-consuming. We have therefore mapped the relevant configurations from practical educational use in hardware & software packages for you

## Who are these Trainer Packages for?

- For research, development and educational institutions
- For didactic companies (Suppliers of Learning Systems) for integration into their didactic solution
- For industrial and initial corporate training → see order information
- For SinuTrain, there are separate approval/order processes
   → see order information

## What should be considered when using Trainer Packages?

- The products listed may be subject to European/German and/or US export regulations.
- The order information must also be observed



## **7 SCE Trainer Package list**



## **Overview of Trainer Packages**

## SIMATIC TIA engineering and runtime software Overview structure STEP 7 and HMI SIMATIC TIA Portal Engineering STEP 7 Professional and WinCC software for training/for students SIMOTION SCOUT software incl. CamTool for training/for students SIMATIC CFC software for training/for students SIMATIC NET IE Softnet \* **Simulation** SIMIT Simulation Platform SIMIT demo version **Basic automation** LOGO! 8 12/24V, LOGO! 8 230V (ETHERNET) S7-1200 Basic Controller 1215C Upgrade STEP 7 Basic for S7-1200 package Basic Panels KTP400 for LOGO! Basic Panels KTP700 for S7-1200 SIRIUS industrial controls **Open source platform IOT2050**

### **Operator control & monitoring**

- MTP700/MTP1500 HMI Unified Comfort Panels
- TP700/TP1500 Comfort Color Panel
- SCADA system SIMATIC WinCC with options additionally available as ASIA variant

#### **Process automation**

- Process Control System PCS 7 3er license/upgrade
- Process control system PCS 7 6er license
- Process control system PCS 7 AS CPU 410E + ET 200SP HA

### **Drive technology**

- SINAMICS G120 standard drive
- SINAMICS S120 servo drive
- SINAMICS S210 servo drive

#### **Industrial identification**

- SIMATIC code reader MV540
- SIMATIC RFID system RF200/RF300/RF600

#### **SIMATIC** controller

- ET 200SP 1515SP PC2 F Open Controller
- ET 200SP 1515SP PC2 TF Open Controller
- ET 200SP 1512SP F-1 PN Distributed Controller
- S7-1516F PN/DP, S7-1516 PN/DP
- S7-1517TF-3 PN/DP
- Upgrade S7-314C-2PN/DP

#### **Distributed IOs**

\*

- ET 200SP digital PROFINET
- ET 200SP with input module
  - ET 200SP with communication module
- ET 200SP with communication module
- ET 200SP Expansion Analog

#### Energy Meter IO-Link

- IO-LIIK
- odule AS-i Master
  - Safety

#### **Industrial communication**

- SINEC Network Management Software
- FASTCONNECT cable set
- IE SCALANCE switch XC208
- IE SCALANCE Security/LAN router S615
- Development Kit PROFINET

### WorldSkills partnership

## **Order information for Trainer Packages**

incl. SinuTrain

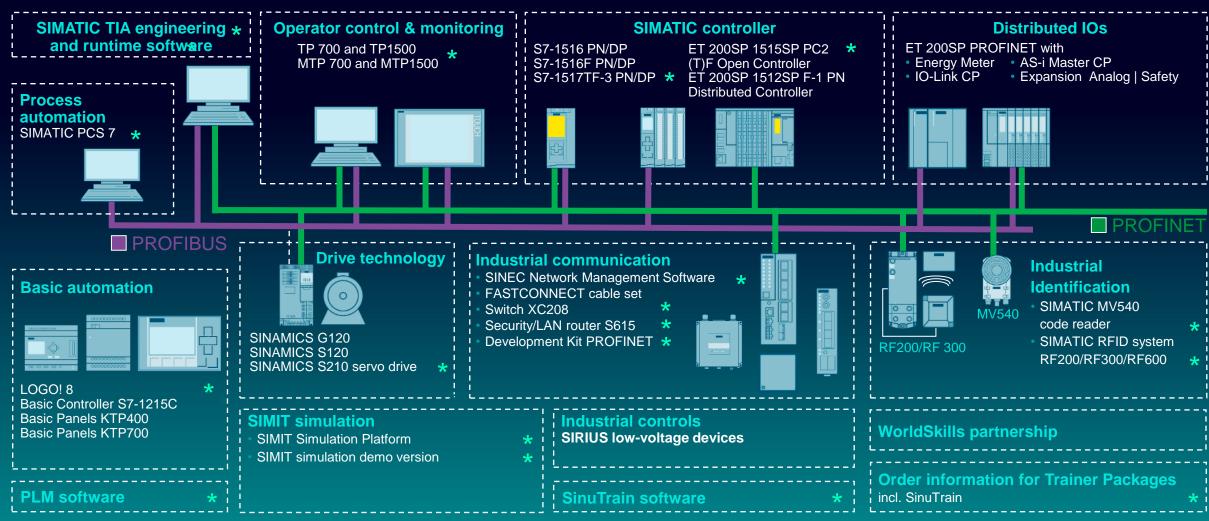


\*

SinuTrain software

**PLM** software

## **System architecture of the Trainer Packages**



\* New package

## **SITOP Power supply**

# Advanced

# Standard



PROFI

## **SITOP** overview

#### 7 PSU8600

The power supply with complete TIA integration, open communication up to the cloud

#### 7 PSU6200

The all-round power supply for a large number of applications

#### 7 PSU100L

The low-cost basic power supply

- ► IOT2000
- ► Industrial Controls
- ▶ Engineering SW
- ▶ SIMIT Simulation
- ▶ Basic Automation
- ► SIMATIC Controller
- ▶ Distributed IOs
- ► Operator control & monitoring
- ▶ Process Automation
- ▶ Industrial Communication
- Industrial Identification
- ▶ Drive Technology
- ► SinuTrain SW
- ▶ PLM Software
- ▶ WorldSkills
- ▶ Ordering Inform.

**SIEMENS** 



# SIMATIC IOT2050 Open source platform



Product	HW sets	Licenses	SW version	Order number (MLFB)	Note
SIMATIC IOT2050 with Quad Core Processor (AM6548 HS), 2 x Ethernet Gigabit (IE/PN), 1 x RS 232/485/422, 2 x USB 2.0, RTC, incl. 6x SIMATIC IO Shields: SIMATIC IOT2000 Input/Output Module with 5 DE, 2 DA, 2 AE, ARDUINO Shield for IOT2050	6			6ES7647-0BA20-0SC2	NEW O
3rd Party IO Shield: IKHDS-Power Shield for IOT2050 with 10 DI, 8 DO with PWM, 2 AI, 1 AO  Can only be ordered from KAFTAN media UG kaftan-media.com/iot2000	1			100320	NEW O



■ Relevant Information: <a href="https://support.industry.siemens.com/cs/de/en/view/65601780">https://support.industry.siemens.com/cs/de/en/view/65601780</a>
 ★ Only for schools, colleges and universities

Information about SIMATIC IOT2000: see siemens.com/iot2000 and siemens.com/sce/iot2000



## **SIMATIC IOT2050**







6 x SIMATIC IoT2050 Input/Output Modul

#### Recommended accessories

#### 6XV1870-3RH60

Industrial Ethernet TP XP Cord RJ45/RJ45, CAT 6A, crossed TP cable 4x2, pre-assembled with 2 RJ45 connectors, length 6 m

#### 6GK1950-0BB00

Trainer Package FastConnect cable set

#### 6EP3336-7SB00-3AX0

SITOP PSU6200 24 V/20 A stabilized power supply input: 120 - 230 V AC (110 - 240 V DC) output: 24 V DC/20 A with diagnostic interface

A MicroSDHC memory card must be present in addition

- 6 x SIMATIC IOT2050; 2x Gb Ethernet RJ45; Display port; 2x USB2.0; 16 GB eMMC; SD card slot; 24 V DC 6ES7647-0BA00-1YA2 industrial power supply
- 6 x SIMATIC IoT2000 input/output module, 5x DI 2x AI 2x DQ, ARDUINO Shield for SIMATIC IoT2040/IoT2050 6ES7647-0KA01-0AA2

System requirements: None available

Sales note: Schools, colleges and universities, for in-house vocational training departments

Technical note: None available

Order number: 6ES7647-0BA20-0SC2

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# **Industrial controls**

# Overview



Product	HW Licenses SW version	Order number (MLFB)	Note
SIRIUS low-voltage devices with IO-Link	1	3TK3388-0TP00	



## SIRIUS low-voltage devices with IO-Link (1/3)



2 x Circuit breaker 3RV2011-1BA20



2 x Contactor 3RT2015-2BB42-0CC0



3 x Contactor 3RT2015-2BB42



1 x FM IO-Link 3RA2711-2BA002



1 x FM Star-delta 3RA2816-0EW20



1 x Digital monitoring relay 3UG4841-2CA40



1 x Overload relay 3RB3113-4PE0



1 x Operator panel for devices with IO-link 3RA6935-0A



1 x 3-phase busbar 3RV2917-1A



1 x 3-phase busbar 3RV2917-4B



5 x Contactor base 3RV2917-7AA00



2 x Cable connector 3RV2917-5AA00



2 x Link module 3RA2911-2AA00



1 x Wiring kit 3RA2913-2AA2



1 x Wiring kit 3RA2913-2BB2



Matching: Trainer Package ET 200SP with IO-Link communication module: 6ES7155-6AU00-0AB2

▶ Ordering Inform.

▶ IOT2000

► Industrial Controls

▶ Engineering SW

SIMIT Simulation

▶ Basic Automation

Distributed IOs

Industrial

Industrial

▶ SIMATIC Controller

▶ Operator control & monitoring

Communication

Identification

► SinuTrain SW

▶ PLM Software

▶ WorldSkills

▶ Drive Technology

**Process Automation** 

## SIRIUS low-voltage devices with IO-Link (2/3)

1 x	3-phase busbar with infeed left, for 2 circuit breakers, size S00 and S0	3RV2917-1A
1 x	3-phase busbar including extension connector for 3 circuit breakers, size S00 and S0	3RV2917-4B
5 x	Contactor base, for contactor size S00 with screw/spring-loaded terminal (single-unit pack)	3RV2917-7AA00
2 x	Cable connector, size S00, spring-loaded terminal	3RV2917-5AA00
2 x	Circuit breaker, size S00, for motor protection, class 10, A-release 1.42A, N-release 26A, spring-loaded terminal, standard switching capacity	3RV2011-1BA20
2 x	Link module, electrical and mechanical, for 3RV2011 and 3RT2011, spring-loaded terminal	3RA2911-2AA00
2 x	Contactor, AC-3, 3kW/400V, 1NC, 24 V DC, communication-capable, 3-pin, size S00, spring-loaded terminal	3RT2015-2BB42-0CC0
3 x	Contactor, AC-3 3kW/400V, 1NC, 24 V DC, 3-pin, size S00, spring-loaded terminal	3RT2015-2BB42

## Matching: Trainer Package ET 200SP with IO-Link communication module: 6ES7155-6AU00-0AB2

Schools, colleges and universities, for in-house vocational training departments Sales note:

Technical note: See slides below

None available

Order number: 3TK3388-0TP00



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**7 SIRIUS** 

System requirements:

## SIRIUS low-voltage devices with IO-Link (3/3)

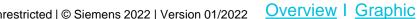
1 x	Wiring kit, spring-loaded terminal, electrical and mechanical, including mechanical interlock for reversing starters, size S00	3RA2913-2AA2
1 x	Function module for IO-Link, reverse start, spring-loaded terminal, installation on contactors 3RT2 S00/S0, communication-capable contactor required	3RA2711-2BA00
1 x	Wiring kit, spring-loaded terminal, electrical and mechanical, including mechanical interlock, for star-delta starter, size S00	3RA2913-2BB2
1 x	Function module star-delta consisting of basic module and 2 coupling modules with integrated connecting cable, time range 0.560 s, 24240 V AC/DC for contactors 3RT2	3RA2816-0EW20
1 x	Digital monitoring relay cos phi and current monitoring for IO-Link 90 to 690 V AC, 0.2 to 10 A, overshoot and undershoot, on-delay time, tripping delay time, hysteresis 0.1 to 3.0 A, 2 change-over contacts, spring-type connection system	3UG4841-2CA40
1 x	Overload relay 14 A for motor protection, size S00, class 530, contactor mounting main circuit: sprint-type terminal, auxiliary circuit: spring-type terminal, manual-automatic reset, internal ground fault detection	3RB3113-4PE0
1 x	Operator control block for devices with IO-Link, operator control block for SIRIUS with IO-Link	3RA6935-0A

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- ► SinuTrain SW

**IO**-Link

- ▶ PLM Software
- ▶ WorldSkills
- ▶ Ordering Inform.

Matching: Trainer Package ET 200SP with IO-Link communication module: 6ES7155-6AU00-0AB2



Project manual

**7 SIRIUS** 

## SIRIUS industrial controls modular system



SIRIUS Industrial Controls **7** 

SIRIUS Command and Signaling Devices <a>Z</a>



Safety Integrated **2** 

Safety Relays 3SK1 Z



SIRIUS@YouTube 7

Safety@YouTube <a>Z</a>

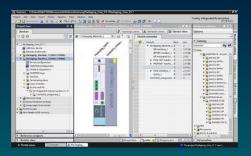
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# **Engineering and runtime software**

# Overview





industrial version



Product	HW sets	Licenses	SW version	Order number (MLFB)	Note
SIMATIC TIA Portal Engineering Software STEP 7 Professional/WinCC V17		1	V17	6ES7822-1AA07-4YA5	NEW O
SIMATIC TIA Portal Engineering Software STEP 7 Professional/WinCC V17		6+20	V17	6ES7822-1BA07-4YA5	NEW O
Upgrade SIMATIC TIA Portal Engineering Software STEP 7 Professional / WinCC V17 as of 2006/2010/V11/V12/V13/V14/V15/V16		6+20	V17	6ES7822-1AA07-4YE5	NEW O
SIMATIC TIA Portal Engineering Software STEP 7 Professional/WinCC V17 – <b>365 days</b>		20	V17	6ES7822-1AC07-4YA5	NEW O★
SIMOTION SCOUT Software incl. CamTool for STEP 7 Professional exclusively with V17		6+20	V5.4 SP1	In preparation (until 12/2021)	NEW O
SIMOTION SCOUT Software incl. CamTool for students for STEP 7 Prof. exclusively with V17 – <b>365 days</b>		20	V5.4 SP1	In preparation (until 12/2021)	NEW O★
Upgrade SIMATIC STEP 7 BASIC for S7-1200		6	V17	6ES7822-0AA07-4YE5	NEW O
SIMATIC CFC Software		12	V9.0	6ES7658-1EX58-0YS5	0
SIMATIC CFC Software for students – <b>365 days</b>		20	V9.0	6ES7658-1EX58-0YS6	<b>0</b> *
SIMATIC NET IE SOFTNET		12	V17	6GK1950-0BB01	NEW O
SIMATIC TIA Portal Engineering Software STEP 7 Professional/WinCC V17		1	V17	6ES7822-1AA07-4YA5	NEW O
SIMATIC TIA Portal Engineering Software STEP 7 Professional/WinCC V17		6+20	V17	6ES7822-1BA07-4YA5	NEW O
Relevant Information: <a href="https://support.industry.siemens.com/cs/de/en/views/">https://support.industry.siemens.com/cs/de/en/views/</a>	ew/656	01780	<b>★</b> Only	for schools, colleges and u	niversities

# System structure of Trainer Packages STEP 7 and SIMATIC HMI

#### **SIMATIC** software

- STEP 7 as basis

### **Engineering tools for STEP 7**

- S7-PLCSIM simulation of S7 hardware
- S7-SCL similar to ST according to IEC61131 high-level language
- S7-GRAPH for sequencers according to DIN 1131-3

# SIMATIC software HMI – Human Machine Interface

#### WinCC with

- Advanced level
- Smart Options
- Smart Access
- OPC interface

- ..

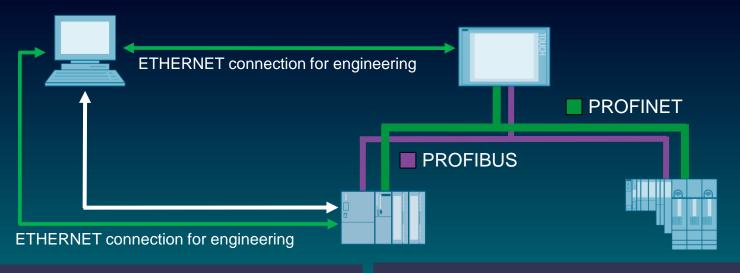
### **Software Engineering Tool for STEP 7**

- SIMATIC CFC
- SIMATIC NET software

• ...

### **Touch Panel**

TP700 and TP1500
MTP700 and MTP1500
PROFIBUS and PROFINET connection



#### S7 controller

Trainer Package with PROFINET and PROFIBUS

# ET 200SP Open Controller. ET 200SP ...

Trainer Package with PROFINET For PROFIBUS, only interface has to be ordered separately



1er license (individual license)

#### Combo license for changeable use:

- STEP 7 Professional V17
- STEP 7 Professional 2021

#### Combo license for changeable use:

- Safety Advanced V17
- Distributed Safety V5.4 SP5 Update 2

#### License for engineering SW:

- CFC V17
- Cloud Connector V1.0
- Network Planner V2.0
- Multiuser V17
- Teamcenter Gateway V17
- Test Suite Advanced V17

#### License for S7-1500 hardware:

- S7-PLCSIM Advanced V4.0
- S7-ODK 1500S V2.5 (for Open Controller)
- S7-Target 1500S for Simulink® V5.0 (for Open Controller)

#### License for SINAMICS hardware:

- SINAMICS Startdrive license Basic V17
- SINAMICS Startdrive license Advanced V17
- SINAMICS DCC V17



Totally Integrated **Automation PORTAL** 

Check HW compatibility for TIA Portal 7

- ► IOT2000
- Industrial Controls
- ▶ Engineering SW
- SIMIT Simulation
- ▶ Basic Automation
- ▶ SIMATIC Controller
- Distributed IOs
- ▶ Operator control & monitoring
- Process Automation
- Industrial Communication
- Industrial Identification
- Drive Technology
- ▶ SinuTrain SW
- PLM Software
- ▶ WorldSkills
- ▶ Ordering Inform.





1er license (individual license)

#### License for SIRIUS hardware:

- SIRIUS ENGINEERING SAFETY ES Professional
- SIRIUS SIMOCODE ES Professional COMBO
- SIRIUS Soft Starter ES PREMIUM COMBO

#### License for S7-300 hardware:

- S7-Technology V4.2
- S7 PID Professional V17

#### Combo license for changeable use:

- SIMATIC WinCC Unified V17
- SIMATIC WinCC Advanced V17
- SIMATIC WinCC flexible 2008 SP5
- Energy Suite Engineering V17
- Visualization Architect (SiVArc) V17



Totally
Integrated
Automation
PORTAL

- ▶ IOT2000
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Option and runtime software 1er license (individual license)

#### WinCC Advanced V17:

- WinCC RT Advanced (512 PowerTags)
- WinCC Recipes for RT Advanced
- WinCC Logging for RT Advanced
- WinCC Sm@rtServer for RT Advanced
   WinCC Sm@rtServer for SIMATIC Comfort/Mobile Panels
   WinCC Sm@rtServer for SIMATIC Basic Panels
- ProDiag for WinCC RT Advanced
- ProDiag for SIMATIC Comfort/Mobile Panels

#### WinCC Unified V17:

- WinCC Unified PC (1k) RT
- WinCC Unified Parameter Control (Unified PC)

Unrestricted | © Siemens 2022 | Version 01/2022

- WinCC Unified Client Operate (10)
- WinCC Unified V17 Collaboration
- WinCC Unified Logging Tags (1000)

#### WinCC flexible 2008 SP5:

- WinCC flexible Runtime (128 PowerTags)
- WinCC flexible/Sm@rtAccess for Panels
- WinCC flexible/Sm@rtAccess for PC
- WinCC flexible/Sm@rtService for Panels
- WinCC flexible/Sm@rtService for PC
- WinCC flexible/OPC Server for PC
- WinCC flexible/Archives for PC
- WinCC flexible/Recipes for PC

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7 TIA Portal

▶ Ordering Inform.



1er license (individual license)

#### Packaging 1 x DVD per package:

- STEP 7 Prof/Safety/WinCC Adv/WinCC Unified V17
- CFC V17
- TIA Portal Test Suite Advanced V17
- S7-PLCSIM Advanced V4.0
- S7-PLCSIM V17
- WinCC Images V17
- WinCC Unified PC Runtime V17
- WinCC Runtime Advanced V17
- Energy Suite V17

- Visualization Architect (SiVArc) V17
- Siemens Network Planner V2.0
- S7-ODK 1500S V2.5 (for Open Controller)
- S7-Target 1500S for Simulink® V5.0 (for Open Controller)
- SINAMICS Startdrive V17
- SINAMICS DCC V17
- STEP 7 Professional 2021
- Distributed Safety V5.4 Update 2



Totally Integrated Automation **PORTAL** 

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#### All other DVDs can be downloaded

support.industry.siemens.com/cs/de/en/ps/13613/dl

System requirements: WIN10 (64-bit) Prof. 1909, 2004, 20H2/Enterprise 1909, 2004, 20H2/IoT

Enterprise 2016 LTSB / 2019 LTSC

Schools, colleges and universities, for in-house vocational training departments Sales note:

Technical note: Authorization on USB stick (1 stick)

Order number: 6ES7822-1AA07-4YA5 Core product for vocational World Cup Industrial Control **↗** 



### 6er classroom license

#### Combo license for changeable use:

- STEP 7 Professional V17
- STEP 7 Professional 2021

#### Combo license for changeable use:

- Safety Advanced V17
- Distributed Safety V5.4 SP5 Update 2

#### **License for Engineering SW:**

- CFC V17
- Cloud Connector V1.0
- Network Planner V2.0
- Multiuser V17
- Teamcenter Gateway V17
- Test Suite Advanced V17

#### License for S7-1500 hardware:

- S7-PLCSIM Advanced V4.0
- S7-ODK 1500S V2.5 (for Open Controller)
- S7-Target 1500S for Simulink® V5.0 (for Open Controller)

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- SINAMICS DCC V17



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- SIMATIC WinCC Unified V17
- SIMATIC WinCC Advanced V17
- SIMATIC WinCC flexible 2008 SP5
- Energy Suite Engineering V17
- Visualization Architect (SiVArc) V17

1 x SCE Trainer Package: SIMATIC STEP 7 / WinCC V17 software for students Software subject to time limit of 365 days with authorization



Totally Integrated Automation **PORTAL** 

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6ES7822-1AC07-4YA5

# SIMATIC TIA Portal STEP 7 Professional Engineering and WinCC V17 Engineering and Runtime – Software for Training Option and runtime software 6er classroom license

#### WinCC Advanced V17:

- WinCC RT Advanced (512 PowerTags)
- WinCC Recipes for RT Advanced
- WinCC Logging for RT Advanced
- WinCC Sm@rtServer for RT Advanced
   WinCC Sm@rtServer for SIMATIC Comfort/Mobile Panels
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## 6er classroom license

#### Packaging 1 x DVD per package:

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- TIA Portal Test Suite Advanced V17
- S7-PLCSIM Advanced V4.0
- S7-PLCSIM V17
- WinCC Images V17
- WinCC Unified PC Runtime V17
- WinCC Runtime Advanced V17
- Energy Suite V17
- Visualization Architect (SiVArc) V17

- Siemens Network Planner V2.0
- S7-ODK 1500S V2.5 (for Open Controller)
- S7-Target 1500S for Simulink® V5.0 (for Open Controller)
- SINAMICS Startdrive V17
- SINAMICS DCC V17
- STEP 7 Professional 2021
- Distributed Safety V5.4 Update 2

#### All other DVDs can be downloaded

support.industrv.siemens.com/cs/de/en/ps/13613/dl

1 x SCE Trainer Package: SIMATIC STEP 7 / WinCC V17 software for students

Software subject to time limit of 365 days with authorization

WIN10 (64-bit) Prof. 1909, 2004, 20H2/Enterprise 1909, 2004, System requirements:

20H2/IoT Enterprise 2016 LTSB / 2019 LTSC

Sales note: Schools, colleges and universities, for in-house vocational training departments

Technical note: Authorization on USB stick (1 stick + 1 stick with 20 software for students)

Order number: 6ES7822-1BA07-4YA5 Upgrade from 2006/2010/V11/V12/V13/V14/V15/V16 → V17/2021

6ES7822-1AA07-4YE5



Check HW compatibility for TIA Portal 7

Totally Integrated

**Automation** 

**PORTAL** 

► IOT2000

- ► Industrial Controls
- ▶ Engineering SW
- SIMIT Simulation
- Basic Automation
- ▶ SIMATIC Controller
- Distributed IOs
- ▶ Operator control & monitoring
- Process Automation
- Industrial Communication
- Industrial Identification
- Drive Technology
- ► SinuTrain SW
- PLM Software
- ▶ WorldSkills
- ▶ Ordering Inform.







# SIMATIC TIA Portal STEP 7 and WinCC V17 software for <u>students</u> Individual licenses – limited to 365 days with 20er licenses

#### Combo license for changeable use:

- STEP 7 Professional V17
- STEP 7 Professional 2021

#### Combo license for changeable use:

- Safety Advanced V17
- Distributed Safety V5.4 SP5 Update 2
- License for Engineering SW:
- CFC V17
- Multiuser V17
- Test Suite Advanced V17

#### License for S7-1500 hardware:

- S7-PLCSIM Advanced V4.0
- S7-ODK 1500S V2.5 (for Open Controller)
- S7-Target 1500S for Simulink® V5.0 (for Open Controller)

#### **Option and Runtime software:**

- · WinCC Unified PC (1k) RT
- WinCC RT Advanced (512 PowerTags)
- WinCC flexible Runtime (128 PowerTags)



Totally
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Automation
PORTAL

Check HW compatibility for TIA Portal 7

- ▶ IOT2000
- ▶ Industrial Controls
- ▶ Engineering SW
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- ► SIMATIC Controller
- Distributed IOs
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- Industrial Communication
- Industrial Identification
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- ► SinuTrain SW
- PLM Software
- ▶ WorldSkills
- ► Ordering Inform.

Software subject to time limit of 365 days with authorization

# SIMATIC TIA Portal STEP 7 and WinCC V17 software for <u>students</u>

## Individual licenses – limited to 365 days with 20er licenses

#### Packaging 1 x DVD per package:

- STEP 7 Prof/Safety/WinCC Adv/WinCC Unified V17
- CFC V17
- TIA Portal Test Suite Advanced V17
- S7-PLCSIM Advanced V4.0
- WinCC Unified PC Runtime V17
- WinCC Runtime Advanced V17
- S7-ODK 1500S V2.5 (for Open Controller)

- S7-Target 1500S for Simulink® V5.0 (for Open Controller)
- SINAMICS Startdrive V17
- STEP 7 Professional 2021
- Distributed Safety V5.4 Update 2



Totally
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Automation
PORTAL

- ► IOT2000
- ▶ Industrial Controls
- ▶ Engineering SW
- ► SIMIT Simulation
- Basic Automation
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- Distributed IOs
- Operator control & monitoring
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- Industrial Communication
- Industrial Identification
- Drive Technology
- ► SinuTrain SW
- ▶ PLM Software
- ▶ WorldSkills
- ► Ordering Inform.

#### All other DVDs can be downloaded

support.industry.siemens.com/cs/de/en/ps/13613/dl

System requirements: WIN10 (64-bit) Prof. 1909, 2004, 20H2/Enterprise 1909, 2004, 20H2/IoT Enterprise 2016 LTSB / 2019 LTSC

Sales note: Use only for students for independent study at home.

Schools, colleges and universities, not for in-house vocational training departments

Technical note: Authorization on USB stick (1 stick)

Order number: 6ES7822-1AC07-4YA5

## SIMOTION SCOUT V5.4 SP1 incl. CamTool V4.2 –

# Software for training – 6er classroom license

6 x License for SIMOTION SCOUT V5.4 SP1

6 x License for CamTool V4.2

6 x License for DCC SIMOTION V3.2 SP1

#### 1x Package for 20 students (6AU1810-1BE5 -1YA5)

1 x 20 licenses for SIMOTION SCOUT V5.4 SP1 – for students

1 x 20 licenses for CamTool V4.2 – for students

1 x 20 licenses for DCC SIMOTION V3.2 SP1 – for students

Software subject to time limit of 365 days with authorization

Content: Software and documentation on a DVD

#### Please note: Only for STEP 7 Professional V17

WIN10 (64-bit) Prof. 1909, 2004, 20H2/Enterprise 1909, 2004, 20H2/IoT Enterprise 2016 LTSB / 2019 LTSC System requirements:

Sales note: Schools, colleges and universities, for in-house vocational training departments

Technical note: Authorization on USB stick (1 stick)

6AU1810-1BC5 -1YA5 in preparation Order number:



- ► IOT2000
- Industrial Controls
- ▶ Engineering SW
- SIMIT Simulation
- ▶ Basic Automation
- ► SIMATIC Controller
- Distributed IOs
- ▶ Operator control & monitoring
- Process Automation
- Industrial Communication
- Industrial Identification
- Drive Technology
- ► SinuTrain SW
- PLM Software
- ▶ WorldSkills
- ▶ Ordering Inform.



## SIMOTION SCOUT V5.4 SP1 incl. CamTool V4.2 – for students limited to 365 days

#### 1x Package for 20 students

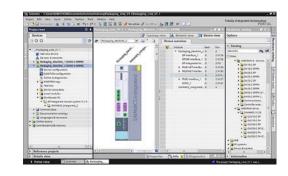
1 x 20 licenses for SIMOTION SCOUT V5.4 SP1 – for students

1 x 20 licenses for CamTool V4.2 – for students

1 x 20 licenses for DCC SIMOTION V3.2 SP1 – for students

Software subject to time limit of 365 days with authorization

Content: Software and documentation on a DVD



- ► IOT2000
- Industrial Controls
- ▶ Engineering SW
- SIMIT Simulation
- ▶ Basic Automation
- ► SIMATIC Controller
- Distributed IOs
- ▶ Operator control & monitoring
- Process Automation
- Industrial Communication
- Industrial Identification
- Drive Technology
- ► SinuTrain SW
- PLM Software
- ▶ WorldSkills
- ▶ Ordering Inform.

#### Please note: Only for STEP 7 Professional V17

WIN10 (64-bit) Prof. 1909, 2004, 20H2/Enterprise 1909, 2004, 20H2/IoT Enterprise 2016 LTSB / 2019 LTSC System requirements:

Use only for students for independent study at home. Sales note:

Schools, colleges and universities, not for in-house vocational training departments

Technical note: Authorization on USB stick (1 stick)

Order number: 6AU1810-1BE5 -1YA5 in preparation

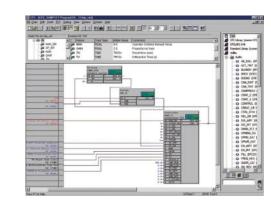
## **SIMATIC CFC software**

## 12er classroom license

12 x SIMATIC CFC V9.0

3 x 20 Software for students SIMATIC CFC V9.0

SW limited to 365 days through authorization 20 licenses per USB stick.



- ► IOT2000
- ► Industrial Controls
- ▶ Engineering SW
- ► SIMIT Simulation
- ▶ Basic Automation
- ► SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- ► Process Automation
- Industrial Communication
- Industrial Identification
- Drive Technology
- ► SinuTrain SW
- ▶ PLM Software
- ▶ WorldSkills
- ► Ordering Inform.

System requirements: WIN10 (64-bit) Prof. 1909, 2004, 20H2/Enterprise 1909, 2004, 20H2/IoT Enterprise 2016 LTSB / 2019 LTSC

Sales note: Schools, colleges and universities, for in-house vocational training departments

Technical note: Authorization on USB stick (1 stick)

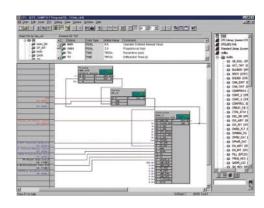
Order number: 6ES7658-1EX58-0YS5

# **SIMATIC CFC software for students**

# Single-user licenses – limited to 365 days

#### 20 x SIMATIC CFC V9.0 for students

SW limited to 365 days through authorization 20 licenses per USB stick



- ► IOT2000
- ▶ Industrial Controls
- ▶ Engineering SW
- ▶ SIMIT Simulation
- ▶ Basic Automation
- ► SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Process Automation
- Industrial Communication
- Industrial Identification
- Drive Technology
- ► SinuTrain SW
- ▶ PLM Software
- ▶ WorldSkills
- ► Ordering Inform.

System requirements: WIN10 (64-bit) Prof. 1909, 2004, 20H2/Enterprise 1909, 2004, 20H2/IoT Enterprise 2016 LTSB / 2019 LTSC

Sales note: Use only for students for independent study at home.

Schools, colleges and universities, not for in-house vocational training departments

Technical note: Authorization on USB stick (1 stick)

Order number: 6ES7658-1EX58-0YS6

## SIMATIC NET IE SOFTNET

## 12er classroom license

#### 12 x SIMATIC NET IE SOFTNET-S7 V17

#### 6GK1704-1CW17-0AA0

SOFTNET-IE S7 V17 software for S7, S5-compatible communication, OPC; PG/OP communication, configuration software, up to 64 connections; floating license; runtime software, software and electronic manual; on DVD; license key on USB flash drive; class A; 2 languages (en, de); for Windows® 10 Pro/Enterprise (64-bit) version 1909, 2004, 20H2; Windows® Server 2016 (standard edition, Datacenter); Windows® Server 2019 (standard edition, Enterprise) Windows® 10(IoT) Enterprise 2016 LTSB Windows® 10(IoT) Enterprise 2019 LTSC



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PORTAL

Check HW compatibility for TIA Portal Z

- ► IOT2000
- ► Industrial Controls
- ▶ Engineering SW
- ▶ SIMIT Simulation
- Basic Automation
- ► SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- ▶ Process Automation
- Industrial Communication
- Industrial Identification
- Drive Technology
- ► SinuTrain SW
- ▶ PLM Software
- ▶ WorldSkills
- Ordering Inform.

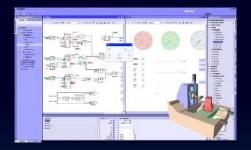
System requirements: WIN10 (64-bit) Prof. 1909, 2004, 20H2/Enterprise 1909, 2004, 20H2/IoT Enterprise 2016 LTSB / 2019 LTSC

Sales note: Schools, colleges and universities, for in-house vocational training departments

Technical note: Authorization on USB stick (1 stick)

Order number: 6GK1950-0BB01

# **Virtual commissioning with SIMIT Simulation Platform** Overview

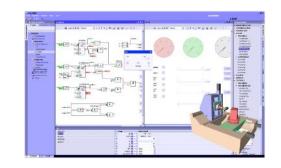


Product	HW sets	Licenses :	SW version	Order number (MLFB)	Note
SIMIT simulation software: License USB dongle & carrier USB must be ordered additionally (includes SIMIT S & CTE, FLOWNET, CONTEC libraries) – 4000 simulation tags		1	V10.3	6DL8913-0AK30-0AS5	NEW O
SIMATIC license USB dongle (must be ordered with every SIMIT package)	1			6DL8900-8XX00-0XB8-Z Y01 {Y01:0000-0000- 0000}	NEW O
SIMATIC license carrier USB stick (must be ordered with every SIMIT package)	1			6DL8900-7XX00-0XB8-Z Y01+Y02 {Y01:0000-0000- 0000} {Y02:0-0000000}	NEW O
SIMIT Simulation Platform, software media package		1	V10.3	6DL8913-0XK30-0XT8	NEW O
Demo version SIMIT Simulation Platform, Software Media Package	SIMIT WBT	1	V10.3	<u>Download</u>	NEW O



# SIMIT Simulation Platform – full version V10.3 with dongle (valid for the next 3 versions)

- SIMIT 10.3 Trainer Package has the range of functions of SIMIT Model S
- SIMIT 10.3 cannot be installed "side by side" with older SIMIT versions
- SIMIT 10.3 has a new licensing procedure (with new dongle)
- The limitations in demo mode of SIMIT Runtime V10.x demo mode are the same as for SIMIT Runtime V8.x and V9.x



#### ► IOT2000

- ▶ Industrial Controls
- ► Engineering SW
- SIMIT Simulation
- Basic Automation
- ► SIMATIC Controller
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#### Full version with one dongle (dongle owner = single license)

- 1. Creating/changing/testing/upgrading of virtual plant models with full range of functions of SIMIT Version SMALL: with max. 4000 simulation tags and CTE and FLOWNET as well as CONTEC libraries
- 2. The following IO quantity restrictions apply to SIMIT models that are to be used in the demo version (without dongle): 30 bytes each for the input and output area (coupling area), independent of the absolute address. A byte is considered "occupied" when at least one bit of the byte has been used. Max. 4000 simulation tags are usable.

Coupling with S7-1200 not possible

System requirements: WIN10 (64-bit) Prof. 1909, 2004, 20H2/Enterprise 1909, 2004, 20H2/IoT Enterprise 2016 LTSB / 2019 LTSC

Sales note: Schools, colleges and universities, for in-house vocational training departments

Technical note: Hardware USB dongle

Order number: 6DL8913-0AK30-0AS5 6DL8900-8XX00-0XB8-Z 6DL8900-7XX00-0XB8-Z Y01+Y02

Y01 {Y01:0000-0000} \* Y01+Y02 {Y01:0000-0000} {Y02:0-0000000} \*

Unrestricted | © Siemens 2022 | Version 01/2022 Overview | Graphic

<sup>\*</sup> Must be ordered with each SIMATIC package

## Demo version:

## SIMIT Simulation Platform – Full version V10.3 without dongle

#### SIMIT V10.3 demo version

The demo version is based on SIMIT S and can be used with max. 4000 simulation tags

#### The following restrictions apply for this demo version:

- The simulation will only run for 45 minutes and then has to be restarted
- Only one coupling can be added to the project
- The address space is limited to 30 bytes each for the input and output area (coupling area), independent of the absolute address. A byte is considered "occupied" when at least one bit of the byte has been used
- The FLOWNET and CONTEC libraries are not supported
- The editor for dynamic graphics, the component type editor (CTE), the trend and message function, the macro component editor, the SMD Typical import and the interface for automatic control are available for test purposes in demo mode
- Projects created in demo mode cannot be executed in regular mode and are limited to the SIMIT installation in which they were created

SIMIT Simulation Media Systems (incl. Videos) → Download for Offline Usage Discover SIMIT

**Coupling with** S7-1200 not possible

WIN10 (64-bit) Prof. 1909, 2004, 20H2/Enterprise 1909, 2004, System requirements:

20H2/IoT Enterprise 2016 LTSB / 2019 LTSC

Schools, colleges and universities, for in-house vocational training departments Sales note:

Technical note: None available

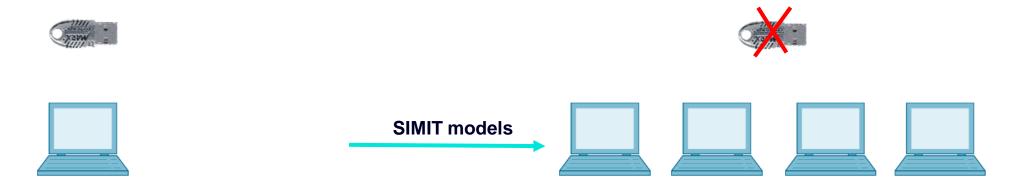
Order number: Download

- ► IOT2000
- Industrial Controls
- ▶ Engineering SW
- SIMIT Simulation
- Basic Automation
- ► SIMATIC Controller
- Distributed IOs
- ▶ Operator control & monitoring
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- PLM Software
- ▶ WorldSkills
- ▶ Ordering Inform.



## **SIMIT Simulation Platform V10.3**

# Application versions



Test of PLC user program

#### Test of PLC user program

### **Educator (dongle owner):**

- Creation, adaptation and transfer of models without restrictions
- Creation, adaptation and transfer of models for demo version within restrictions of demo version

## Students (demo version without dongle):

- Use of the models within the restrictions of the demo version
- Creation of own models with address space restriction
- Projects created in the demo version are restricted to the SIMIT installation in which they were created

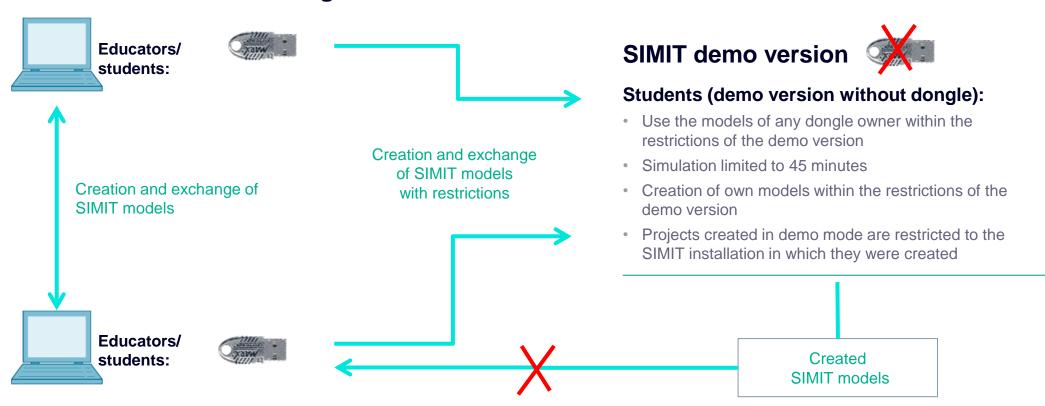
- ► IOT2000
- ▶ Industrial Controls
- ▶ Engineering SW
- ▶ SIMIT Simulation
- ▶ Basic Automation
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- ▶ PLM Software
- ▶ WorldSkills
- ► Ordering Inform.



## **SIMIT Simulation Platform V10.3**

# **Application versions**

# **SIMIT V10.3 with SIMIT dongle A**



# SIMIT V10.3 with SIMIT dongle B

- ► IOT2000
- ▶ Industrial Controls
- ▶ Engineering SW
- ▶ SIMIT Simulation
- ▶ Basic Automation
- ► SIMATIC Controller
- Distributed IOs
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- Industrial Communication
- Industrial Identification
- Drive Technology
- ▶ SinuTrain SW
- ▶ PLM Software
- ▶ WorldSkills
- ▶ Ordering Inform.



# **Basic automation**Overview







Product	HW sets	Licenses SW versi	on Order number (MLFB)	Note
LOGO! 8 12/24V ETHERNET with digital modules DM8 12/24R	6	6	6ED1057-3SA20-0YA1	NEW O
LOGO! 8 230V ETHERNET with digital modules DM8 230R	6	6	6ED1057-3SA20-0YB1	NEW O
LOGO! 8 12/24V ETHERNET without digital modules DM8 12/24R	9	9	6ED1057-3SA30-0YA1	NEW O
Basic Controller SIMATIC S7-1200, CPU 1215C; DC/DC/DC	6	6 V17	6ES7215-1AG40-4AB1	NEW O
Basic Controller SIMATIC S7-1200, CPU 1215C; AC/DC/RELAY	6	6 V17	6ES7215-1BG40-4AB1	NEW O
Basic Controller SIMATIC S7-1200, CPU 1215C; DC/DC/RELAY	6	6 V17	6ES7215-1HG40-4AB1	NEW O
Basic Controller SIMATIC S7-1200, CPU 1215C; DC/DC/RELAY with S7 Memory Card	6	6 V17	6ES7215-1HG40-4AB8	NEW O
Upgrade SIMATIC STEP 7 BASIC for S7-1200		6 V17	6ES7822-0AA07-4YE5	NEW O
SIMATIC KTP400 Basic Color Panel for LOGO! 7/8	1	1 V17	6AV2123-2DB03-0AA1	NEW O
SIMATIC KTP400 Basic Color Panel for LOGO! 7/8	6	6 V17	6AV2123-2DB03-0AA0	NEW O
SIMATIC KTP700 Basic Color Panel for S7-1200	1		6AV2123-2GB03-0AA1	0
SIMATIC KTP700 Basic Color Panel for S7-1200	6		6AV2123-2GB03-0AA0	0

• Relevant Information: <a href="https://support.industry.siemens.com/cs/de/en/view/65601780">https://support.industry.siemens.com/cs/de/en/view/65601780</a>

## LOGO! 8 12/24V or 230V

# with ETHERNET interface and digital modules DM8

#### LOGO! 12/24V

 6x LOGO! 12/24 RCE
 6ED1052-1MD08-0BA1

 6x LOGO! DM8 12/24R expansion module
 6ED1055-1MB00-0BA2

 6x LOGO! Soft Comfort V8
 6ED1058-0BA08-0YA1



 6x LOGO! 230 RCE
 6ED1052-1FB08-0BA1

 6x LOGO! DM8 230R expansion module
 6ED1055-1FB00-0BA2

 6x LOGO! Soft Comfort V8
 6ED1058-0BA08-0YA1

#### Perfectly tailored to the current examinations for:

Electronics Technician for Building and Infrastructure Systems (EGI) Occupation No. 3160
 An additional Micro SDHC memory card must be available for the examinations





#### Recommended accessories

6AV2123-2DB03-0AA1; 6AV2123-2DB03-0AA0 Trainer Package: SIMATIC Basic Panel KTP400

#### 6XV1870-3RH60

SIMATIC NET Industrial ETHERNET, TP XP Cord RJ45/RJ45, CAT 6 A, crossed TP cable 4x2, length 6 m

#### 6GK1950-0BB00

Trainer Package: FastConnect cable set

#### 6EP3333-6SB00-0AY0

LOGO!Power 24 V / 4 A stabilized power supply input: 100-240 V AC output: 24 V DC / 4 A

System requirements: Windows XP, 7, 8, 10 (32- and 64-bit), Mac OSx 10.7 Lion up to and including Mac OSx El Capitan,

Linux SUSE 11.3, SP3, K 3.0.76

Sales note: Schools, colleges and universities, for in-house vocational training departments

Technical note: ETHERNET cable required

Order number: 12/24V : 6ED1057-3SA20-0YA1

230V: 6ED1057-3SA20-0YB1

Core product for vocational World Cup Industrial Control 7



- ► IOT2000
- Industrial Controls
- ▶ Engineering SW
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- Industrial Identification
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- ▶ SinuTrain SW
- PLM Software
- ▶ WorldSkills
- ▶ Ordering Inform.



### LOGO! 8 12/24V

9x LOGO! Soft Comfort V8

# with ETHERNET interface without digital modules DM8

#### LOGO! 9 set

9x LOGO! 12/24 RCE 6ED1052-1MD08-0BA1



#### Recommended accessories

6AV2123-2DB03-0AA1: 6AV2123-2DB03-0AA0

Trainer Package: SIMATIC Basic Panel KTP400

#### 6XV1870-3RH60

SIMATIC NET Industrial ETHERNET, TP XP Cord RJ45/RJ45, CAT 6 A, crossed TP cable 4x2, length 6 m

#### 6GK1950-0BB00

Trainer Package: FastConnect cable set

#### 6EP3333-6SB00-0AY0

LOGO!Power 24 V / 4 A stabilized power supply input: 100-240 V AC output: 24 V DC / 4 A

- ▶ IOT2000
- ► Industrial Controls
- ▶ Engineering SW
- SIMIT Simulation
- ▶ Basic Automation
- ► SIMATIC Controller
- Distributed IOs
- ▶ Operator control & monitoring
- Process Automation
- Industrial Communication
- Industrial Identification
- Drive Technology
- ► SinuTrain SW
- PLM Software
- ▶ WorldSkills
- ▶ Ordering Inform.

System requirements: Windows XP, 7, 8, 10 (32- and 64-bit), Mac OSx 10.7 Lion up to and including Mac OSx El Capitan, Linux SUSE 11.3, SP3, K

6ED1058-0BA08-0YA1

3.0.76

Sales note: Schools, colleges and universities, for in-house vocational training departments

Technical note: ETHERNET cable required

Order number: 6ED1057-3SA30-0YA1

# Basic Controller SIMATIC S7-1200, CPU 1215C DC/DC/DC, AC/DC/RELAY, DC/DC/RELAY

Orders before 09/2021 contain SW Status V16

# 6 x Alternative 1: → DC/DC/DC Package: SIMATIC S7-1200, CPU 1215C, compa

SIMATIC S7-1200, CPU 1215C, compact CPU, DC/DC/DC, 2 PROFINET ports, onboard IO: 14 DI 24 V DC; 10 DQ 24 V DC; 0.5A; 2 AI 0-10 V DC, 2 AQ 0-20 mA DC, Power supply: 20.4-28.8 V DC, program/data memory 125 KB

6ES7215-1AG40-0XB0

► IOT2000

► Industrial Controls

► Engineering SW

► SIMIT Simulation

Basic Automation

► SIMATIC Controller

Distributed IOs

Operator control & monitoring

Process Automation

Industrial Communication

► Industrial Identification

Drive Technology

► SinuTrain SW

PLM Software

▶ WorldSkills

Ordering Inform.

#### 6 x Alternative 2: → AC/DC/RELAY Package:

SIMATIC S7-1200, CPU 1215C, compact CPU, AC/DC/Relay, 2 PROFINET ports, Onboard IO: 14 DI 24 V DC; 10 DQ Relay 2A, 2 AI 0-10V DC, 2 AQ 0-20mA DC, Power supply: 85-264V AC at 47-63 Hz, program/data storage 125 KB

6ES7215-1BG40-0XB0

6ES7215-1HG40-0XB0

6 x Alternative 3: → DC/DC/RELAY Package

SIMATIC S7-1200, CPU 1215C, compact CPU, DC/DC/Relay, 2 PROFINET ports, Onboard IO: 14 DI 24 V DC; 10 DQ Relay 2A, 2 AI 0-10V DC, 2 AQ 0-20mA DC, Power supply: 20.4-28.8 V DC, program/data memory 125 KB

6 x SIMATIC STEP 7 Basic V17; floating license; engineering software in TIA Portal; software and documentation on DVD; license key on USB flash drive; class A; 9 languages: en, de, zh included, fr, es, it, ru, jp, kr as download; executable in Windows 10, Windows Server 2016/2019; for configuration of SIMATIC S7-1200 SIMATIC Basic Panels

6 x SIMATIC NET Industrial ETHERNET, TP XP Cord RJ45/RJ45, CAT 6 A, crossed TP cable 4x2, length 6 m

6ES7822-0AA07-0YA5

6XV1870-3RH60

# **Upgrade SIMATIC STEP 7 Basic for S7-1200 V17**Software for training

#### 6 x STEP 7 Basic V17 Upgrade Version V10.5 /V11/V12/V13/14/15/15.1/16 to V17

SIMATIC STEP 7 Basic V17 Trainer Package Upgrade V17

Engineering software; upgrade for 6 V10.5/V11/V12/V13/V14/V15/V15.1/V16

Single floating →V17 floating; software and documentation on DVD

License keys on USB; 9 languages: en, de, zh included and fr, es, it, ru, jp, kr as download

For configuration of SIMATIC S7-1200, SIMATIC Basic Panels



Totally
Integrated
Automation
PORTAL

Check HW compatibility for TIA Portal <u></u>

Z

#### ▶ IOT2000

- ▶ Industrial Controls
- ▶ Engineering SW
- ▶ SIMIT Simulation
- Basic Automation
- ► SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- ▶ Process Automation
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- Industrial Identification
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- ▶ SinuTrain SW
- PLM Software
- ▶ WorldSkills
- ► Ordering Inform.

# 6 x SINAMICS Startdrive Basic license V17 for SINAMICS G120 CONTROL UNIT CU240E-2, CU250S-2, as of firmware V4.6

### Package with:

- 1 x DVD SIMATIC STEP 7 Basic V17
- 1 x DVD PLCSIM V17
- 1 x DVD SINAMICS Startdrive Basic V17

### NOTE for SIMATIC STEP 7 basic software: Only one hardware S7-1200, Basic Panel KTP400 and Basic Panel KTP700

System requirements: WIN10 (64-bit) Home. 1909, 2004, 20H2

WIN10 (64-bit) Prof. 1909, 2004, 20H2/Enterprise 1909, 2004, 20H2/IoT Enterprise 2016 LTSB / 2019 LTSC

Sales note: Schools, colleges and universities, for in-house vocational training departments

Technical note: Authorization on USB stick

Order number: 6ES7822-0AA07-4YE5

# SIMATIC KTP400 Basic Color Panel for LOGO! **ETHERNET**









SIMATIC KTP400 Basic Color PN 6AV2123-2DB03-0AX0 **SCALANCE** XB005 6GK5005-0BA00-1AB2 SIMATIC WinCC Basic V17 **Engineering SW** 6AV2100-0AA07-0AA5

ETHERNET cable 6XV1870-3RH60

Package 6AV2123-2DB03-0AA1 contains 1 x

Package 6AV2123-2DB03-0AA0 contains 6 x

Package 6AV2123-2DB03-0AA1 contains 2 x

Package 6AV2123-2DB03-0AA0 contains 12 x

**7** TIA Portal

- ▶ IOT2000
- ► Industrial Controls
- ▶ Engineering SW
- ► SIMIT Simulation
- ▶ Basic Automation
- ► SIMATIC Controller
- ▶ Distributed IOs
- ▶ Operator control & monitoring
- Process Automation
- Industrial Communication
- Industrial Identification
- ▶ Drive Technology
- ► SinuTrain SW
- ▶ PLM Software
- ▶ WorldSkills
- ▶ Ordering Inform.



# **SIMATIC KTP400 Basic Color Panel for LOGO!**

### ETHERNET 1er

1 x SIMATIC KTP400 Basic Color PN, key and touch operation, 4" TFT display, 65536 colors, PROFINET interface 6AV2123-2DB03-0AX0 configurable as of WinCC Basic V13/STEP 7 Basic V13

6GK5005-0BA00-1AB2

1 x SCALANCE XB005, unmanaged Industrial ETHERNET switch for 10/100 Mbps; with 5 x 10/100 Mbps twisted pair ports with RJ45 sockets; for configuring small star and line topologies; LED diagnostics, IP20, 24 V DC power supply, including manual

2 x SIMATIC NET Industrial ETHERNET, TP XP Cord RJ45/RJ45, CAT 6 A, crossed TP cable 4x2, length 6 m 6XV1870-3RH60

1 x SIMATIC WinCC Basic V17, engineering software in the TIA Portal; floating license; software and documentation on DVD; license key on USB flash drive; class A; 6 languages: en, de, fr, es, it, zh; for configuration of SIMATIC Basic Panels. Please observe product release: support.industry.siemens.com entry ID: 109795525

6AV2100-0AA07-0AA5

System requirements: WIN10 (64-bit) Home. 1909, 2004, 20H2

WIN10 (64-bit) Prof. 1909, 2004, 20H2/Enterprise 1909, 2004, 20H2/IoT Enterprise 2016 LTSB / 2019 LTSC

Sales note: Schools, colleges and universities, for in-house vocational training departments

Technical note: Authorization for WinCC Basic on USB stick

Order number: 6AV2123-2DB03-0AA1

- ▶ IOT2000
- ▶ Industrial Controls
- ► Engineering SW
- SIMIT Simulation
- Basic Automation
- ► SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Process Automation
- Industrial Communication
- Industrial Identification
- Drive Technology
- ▶ SinuTrain SW
- PLM Software
- ▶ WorldSkills
- ▶ Ordering Inform.



# **SIMATIC KTP400 Basic Color Panel for LOGO!**

### ETHERNET 6er

6 x SIMATIC KTP400 Basic Color PN, key and touch operation, 4" TFT display, 65536 colors, PROFINET interface 6AV2123-2DB03-0AX0 configurable as of WinCC Basic V13/STEP 7 Basic V13

6 x SCALANCE XB005, unmanaged Industrial ETHERNET switch for 10/100 Mbps; with 5 x 10/100 Mbps twisted pair ports with RJ45 sockets; for configuring small star and line topologies; LED diagnostics, IP20, 24 V DC power supply, including manual

6GK5005-0BA00-1AB2

12 x SIMATIC NET Industrial ETHERNET, TP XP Cord RJ45/RJ45, CAT 6 A, crossed TP cable 4x2, length 6 m

6XV1870-3RH60

6 x SIMATIC WinCC Basic V17, engineering software in the TIA Portal; floating license; software and documentation on DVD; license key on USB flash drive; class A; 6 languages: en, de, fr, es, it, zh; for configuration of SIMATIC Basic Panels. Please observe product release: support.industry.siemens.com entry ID: 109795525

6AV2100-0AA07-0AA5

System requirements: WIN10 (64-bit) Home. 1909, 2004, 20H2

WIN10 (64-bit) Prof. 1909, 2004, 20H2/Enterprise 1909, 2004,

20H2/IoT Enterprise 2016 LTSB / 2019 LTSC

Sales note: Schools, colleges and universities, for in-house vocational training departments

Technical note: Authorization for WinCC Basic on USB stick

Order number: 6AV2123-2DB03-0AA0

Totally

Integrated

Automation **PORTAL** 

► IOT2000

▶ Industrial Controls

► Engineering SW

SIMIT Simulation

Basic Automation

▶ SIMATIC Controller

Distributed IOs

Operator control & monitoring

Process Automation

Industrial Communication

Industrial Identification

Drive Technology

► SinuTrain SW

PLM Software

▶ WorldSkills

▶ Ordering Inform.

## SIMATIC KTP700 Basic Color Panel for S7-1200



SIMATIC KTP700 Basic Color PN 6AV2123-2GB03-0AX0



SCALANCE XB005 6GK5005-0BA00-1AB2

Package 6AV2123-2DB03-0AA1 contains 1 x

Package 6AV2123-2DB03-0AA0 contains 6 x



ETHERNET cable 6XV1870-3RH60

Package 6AV2123-2DB03-0AA1 contains 2 x

Package 6AV2123-2DB03-0AA0 contains 12 x

- ► IOT2000
- ► Industrial Controls
- ► Engineering SW
- ▶ SIMIT Simulation
- ▶ Basic Automation
- ► SIMATIC Controller
- ▶ Distributed IOs
- Operator control & monitoring
- ▶ Process Automation
- Industrial Communication
- Industrial Identification
- Drive Technology
- ► SinuTrain SW
- ▶ PLM Software
- ▶ WorldSkills
- ▶ Ordering Inform.

NOTE: SIMATIC STEP 7/WinCC ≥ V13 is absolutely necessary for configuration! Upgrade, see Basic Automation

## SIMATIC KTP700 Basic Color Panel 1er

1 x SIMATIC KTP700, basic color panel, key and touch operation, 7" TFT display, 65536 colors, PROFINET interface, configurable as of WinCC Basic V13/STEP 7 Basic V13

6AV2123-2GB03-0AX0

1 x SCALANCE XB005, unmanaged Industrial ETHERNET switch for 10/100 Mbps; with 5 x 10/100 Mbps twisted pair ports with RJ45 sockets; for configuring small star and line topologies; LED diagnostics, IP20, 24 V DC power supply, including manual

6GK5005-0BA00-1AB2

SIMATIC NET Industrial ETHERNET, TP XP Cord RJ45/RJ45, CAT 6 A, crossed TP cable 4x2, length 6 m

6XV1870-3RH60

### NOTE: SIMATIC STEP 7/WinCC ≥ V13 is absolutely necessary for configuration! Upgrade, see Basic Automation

WIN10 (64-bit) Home. 1909, 2004, 20H2 System requirements:

WIN10 (64-bit) Prof. 1909, 2004, 20H2/Enterprise 1909, 2004,

20H2/IoT Enterprise 2016 LTSB / 2019 LTSC

Sales note: Schools, colleges and universities, for in-house vocational training departments

Technical note: Configuration software required

Order number: 6AV2123-2GB03-0AA1



Totally Integrated **Automation PORTAL** 

Check HW compatibility for TIA Portal 7

7 TIA Portal

- ► IOT2000
- Industrial Controls
- Engineering SW
- SIMIT Simulation
- Basic Automation
- ▶ SIMATIC Controller
- Distributed IOs
- ▶ Operator control & monitoring
- **Process Automation**
- Industrial Communication
- Industrial Identification
- Drive Technology
- ► SinuTrain SW
- PLM Software
- ▶ WorldSkills
- ▶ Ordering Inform.

## SIMATIC KTP700 Basic Color Panel 6er

6 x SIMATIC KTP700, basic color panel, key and touch operation, 7" TFT display, 65536 colors, PROFINET interface, configurable as of WinCC Basic V13/STEP 7 Basic V13

6AV2123-2GB03-0AX0

6 x SCALANCE XB005, unmanaged Industrial ETHERNET switch for 10/100 Mbps;

with 5 x 10/100 Mbps twisted pair ports with RJ45 sockets; for configuring small star and line topologies; LED diagnostics, IP20, 24 V DC power supply, including manual

6GK5005-0BA00-1AB2

6XV1870-3RH60

NOTE: SIMATIC STEP 7/WinCC ≥ V13 is absolutely necessary for configuration! Upgrade, see Basic Automation

System requirements: WIN10 (64-bit) Home. 1909, 2004, 20H2

WIN10 (64-bit) Prof. 1909, 2004, 20H2/Enterprise 1909, 2004,

12 x SIMATIC NET Industrial ETHERNET, TP XP Cord RJ45/RJ45, CAT 6 A, crossed TP cable 4x2, length 6 m

20H2/IoT Enterprise 2016 LTSB / 2019 LTSC

Sales note: Schools, colleges and universities, for in-house vocational training departments

Technical note: Configuration software required

Order number: 6AV2123-2GB03-0AA0



Totally
Integrated
Automation
PORTAL

Check HW compatibility for TIA Portal <a>Z</a>

- ► IOT2000
- Industrial Controls
- ► Engineering SW
- SIMIT Simulation
- Basic Automation
- ▶ SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Process Automation
- Industrial Communication
- Industrial Identification
- Drive Technology
- ► SinuTrain SW
- PLM Software
- ▶ WorldSkills
- ▶ Ordering Inform.

# **Controller** Overview







Product	HW sets	Licenses	SW version	Order number (MLFB)	Note
SIMATIC ET 200SP Open Controller CPU 1515SP PC2 F with WinCC RT Advanced 512 PTs	1	1	V17	6ES7677-2SB42-4AB1	NEW O
SIMATIC ET 200SP Open Controller CPU 1515SP PC2 TF with WinCC RT Advanced 512 PTs	1	1	V17	6ES7677-2WB42-4AB1	NEW O
SIMATIC ET 200SP Distributed Controller CPU 1512SP F-1 PN Safety	1	1	V17	6ES7512-1SK00-4AB2	NEW O
SIMATIC CPU 1517TF-3 PN/DP Safety with software without IOs (must be purchased separately)	1	1	V17	6ES7517-3UP00-4AB1	NEW O
SIMATIC CPU 1516F PN/DP Safety with software	1	1	V17	6ES7516-3FN00-4AB2	NEW O
SIMATIC CPU 1516 PN/DP with software	1	1	V17	6ES7516-3AN00-4AB3	NEW O
Upgrade SIMATIC CPU 314C-2 PN/DP – <b>Available until 09/2022</b>	1			6ES7314-6EH04-4AB4	

• Relevant Information: <a href="https://support.industry.siemens.com/cs/de/en/view/65601780">https://support.industry.siemens.com/cs/de/en/view/65601780</a>



► IOT2000

Industrial Controls

Engineering SW

SIMIT Simulation

Basic Automation

Distributed IOs

▶ SIMATIC Controller

# **ET 200SP Open Controller – Second Generation** CPU 1515SP PC2 F with S7-1500 SW Controller and WinCC RT Advanced 512 PTs







BusAdapter 2 x DI 8x24 VDC/ 0.5A HF



2 x DQ 8x24 VDC/ 0.5A HF



4 x BaseUnits



1 x ETHERNET cable



STEP 7 Professional incl. ODK + Target 1500S for Simulink and WinCC Advanced V17 SW for training, 1er license

#### Recommended accessories

6ES7134-6PA20-0BD0

Analog input module, Al Energy Meter

6ES7193-6BP00-0BD0

BaseUnit

6ES7193-6SC00-1AM0

5 shielding terminals

6ES7137-6BD00-0BA0

Communication Module **IO-Link Master** 

6ES7193-6BP00-0DA0

BaseUnit

3RK7137-6SA00-0BC1

Communication Module **ASI Master** 

6ES7193-6BP20-0DC0

BaseUnit

6GK1950-0BB00

Trainer Package: FastConnect cable set 6EP7133-6AE00-0BN0

Power Supply Input: 120/230 V AC output: 24 V DC/10 A

6EP7133-6AB00-0BN0

Power Supply Input: 120/230 V AC output: 24 V DC/5A



Color-coded labels. labeling strips

monitoring

**Process Automation** 

▶ Operator control &

Industrial Communication

Industrial Identification

Drive Technology

▶ SinuTrain SW

PLM Software

▶ WorldSkills

▶ Ordering Inform.

Expansions: ET 200SP analog modules: 6ES7155-6AU00-0AB6

NOTE: SIMATIC STEP 7 Professional ≥ V14 is absolutely necessary for configuration

# ET 200SP Open Controller – Second Generation CPU 1515SP PC2 F with S7-1500 SW Controller and WinCC RT Advanced 512 PTs

1 x SIMATIC, standard mounting rail 35 mm, length 483 mm for 19" cabin	net
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1 x SIMATIC ET 200SP Open Controller, CPU 1515SP PC2 F + HMI 512PT, 8 GB RAM, 128 GB CFast with Windows 10 IoT Enterprise 64 bit, S7-1500 Fail-safe Software Controller CPU 1505SP F and WinCC Runtime Advanced pre-installed, with 512 PowerTags license, interfaces: 1x slot CFast, 1x slot SD/MMC, 1x connection for ET 200SP BusAdapter PROFINET, 1x 10/100/1000 Mbps ETHERNET, 2x USB 3.0; 2x USB 2.0, 1x DisplayPort, documentation on CFast, restore image on CFast

6ES5710-8MA11 6ES7677-2SB42-0GL0

- 2 x DI 8x24VDC/0.5A HF
- 2 x DQ 8x24VDC/0.5A HF
- 1 x BusAdapter 2x RJ45
- 4 x BU type A0, 16 push-in, 2 infeed terminals separated (digital/analog max 24 V DC/10 A)
- 1 x Color-coded labels, 16 process terminals, gray/red, CC01, 10 units
- 1 x 1000 labeling strips, light gray, 10 sheets DIN A4, perforated, paper
- 1 x Color-coded labels, 16 process terminals, gray/blue, CC02, 10 units
- 1 x SIMATIC NET Industrial ETHERNET, TP XP Cord RJ45/RJ45, CAT 6 A, crossed TP cable 4x2, length 6 m
- 1 x STEP 7 Professional incl. ODK + Target 1500S for Simulink and WinCC Advanced V17 SW for Training, 1er license

0E37077-23B42-0GE0

6ES7131-6BF00-0CA0

6ES7132-6BF00-0CA0

- 6ES7193-6AR00-0AA0 6ES7193-6BP00-0DA0
- 6ES7193-6CP01-2MA0
- 6ES7193-6LA10-0AA0
- 6ES7193-6CP02-2MA0
- 6XV1870-3RH60
- 6ES7822-1AA07-4YA5

7 TIA Portal

System requirements: WIN10 (64-bit) Prof. 1909, 2004, 20H2/Enterprise 1909, 2004, 20H2/IoT Enterprise 2016 LTSB / 2019 LTSC

Sales note: Schools, colleges and universities, for in-house vocational training departments

Technical note: SIMATIC STEP 7 Professional from V15 required

Order number: 6ES7677-2SB42-4AB1

- ► IOT2000
- ▶ Industrial Controls
- ▶ Engineering SW
- SIMIT Simulation
- Basic Automation
- ► SIMATIC Controller
- ▶ Distributed IOs
- Operator control & monitoring
- Process Automation
- Industrial Communication
- Industrial Identification
- Drive Technology
- ► SinuTrain SW
- ▶ PLM Software
- ▶ WorldSkills
- ▶ Ordering Inform.



► IOT2000

# **ET 200SP Open Controller – Second Generation** CPU 1515SP PC2 TF with S7-1500 SW Controller & WinCC RT Advanced 512 PTs



ET 200SP Open Controller, **CPU 1515SP PC2 F** + HMI 512PT



BusAdapter 2 x DI 8x24 VDC/ 0.5A HF



2 x DQ 8x24 VDC/ 0.5A HF



4 x BaseUnits 1 x ETHERNET cable



STEP 7 Professional incl. ODK + Target 1500S for Simulink and WinCC Advanced V17 SW for training, 1er license



▶ SIMATIC Controller Distributed IOs

Industrial Controls

Engineering SW

SIMIT Simulation

Basic Automation

▶ Operator control &

monitoring

- **Process Automation**
- Industrial Communication
- Industrial Identification
- Drive Technology
- ▶ SinuTrain SW
- PLM Software
- ▶ WorldSkills
- ▶ Ordering Inform.

**SIEMENS** 

#### Recommended accessories

#### 6ES7134-6PA20-0BD0

Analog input module, Al Energy Meter

#### 6ES7193-6BP00-0BD0

**BaseUnit** 

#### 6ES7193-6SC00-1AM0

5 shielding terminals

#### 6ES7137-6BD00-0BA0

Communication Module **IO-Link Master** 

#### 6ES7193-6BP00-0DA0

BaseUnit

#### 3RK7137-6SA00-0BC1

Communication Module **ASI Master** 

#### 6ES7193-6BP20-0DC0

BaseUnit

#### 6GK1950-0BB00

Trainer Package: FastConnect cable set

#### 6EP7133-6AE00-0BN0

Power Supply Input: 120/230 V AC output: 24 V DC/10 A

#### 6EP7133-6AB00-0BN0

Power Supply Input: 120/230 V AC output: 24 V DC/5A



Color-coded labels. Labeling strips

Expansions: ET 200SP analog modules: 6ES7155-6AU00-0AB6

NOTE: SIMATIC STEP 7 Professional ≥ V14 is absolutely necessary for configuration

► IOT2000

Industrial Controls

► Engineering SW

SIMIT Simulation

Basic Automation

Distributed IOs

monitoring

► SIMATIC Controller

# **ET 200SP Open Controller – Second Generation** CPU 1515SP PC2 TF with S7-1500 SW Controller & WinCC RT Advanced 512 PTs

- 1 x Standard mounting rail 35 mm, length 483 mm, for 19" cabinet
- 1 x SIMATIC ET 200SP Open Controller, CPU 1515SP PC2 TF + HMI 512PT, 8 GB RAM, 128 GB CFast with Windows 10 IoT Enterprise 64 bit, S7-1500 Fail-safe Software Controller CPU 1505SP TF and WinCC Runtime Advanced pre-installed, with 512 PowerTags license, interfaces: 1x slot CFast, 1x slot SD/MMC, 1x connection for ET 200SP BusAdapter PROFINET, 1x 10/100/1000 Mbps ETHERNET, 2x USB 3.0; 2x USB 2.0, 1x DisplayPort, documentation on CFast, restore image on CFast

6ES5710-8MA11 6ES7677-2SB42-0GL0

- 2 x DI 8x24VDC/0.5A HF
- 2 x DQ 8x24VDC/0.5A HF
- 1 x BusAdapter 2x RJ45
- 4 x BU type A0, 16 push-in, 2 infeed terminals separated (digital/analog max 24 V DC/10 A)
- 1 x Color-coded labels, 16 process terminals, gray/red, CC01, 10 units
- 1 x 1000 labeling strips, light gray, 10 sheets DIN A4, perforated, paper
- 1 x Color-coded labels, 16 process terminals, gray/blue, CC02, 10 units
- 1 x SIMATIC NET Industrial ETHERNET, TP XP Cord RJ45/RJ45, CAT 6 A, crossed TP cable 4x2, length 6 m
- 1 x STEP 7 Professional incl. ODK + Target 1500S for Simulink and WinCC Advanced V17 SW for Training, 1er license

6ES7131-6BF00-0CA0 6ES7132-6BF00-0CA0 6ES7193-6AR00-0AA0 6ES7193-6BP00-0DA0 6ES7193-6CP01-2MA0 6ES7193-6LA10-0AA0 6ES7193-6CP02-2MA0 6XV1870-3RH60 6ES7822-1AA07-4YA5

Process Automation

▶ Operator control &

- Industrial Communication
- Industrial Identification
- Drive Technology
- ► SinuTrain SW
- PLM Software
- ▶ WorldSkills
- ▶ Ordering Inform.

WIN10 (64-bit) Prof. 1909, 2004, 20H2/Enterprise 1909, 2004, 20H2/IoT Enterprise 2016 LTSB / 2019 LTSC System requirements:

Overview I Graphic

Sales note: Schools, colleges and universities, for in-house vocational training departments

Technical note: SIMATIC STEP 7 Professional from V15 required

Order number: 6ES7677-2WB42-4AB1







BusAdapter



2 x DI 8x24 VDC/ 0.5A HF



2 x DQ 8x24

VDC/

0.5A HF

4 x BaseUnits





Color-coded labels. 1 x Memory Labeling strips Card 24 MB

► IOT2000

Industrial Controls

▶ Engineering SW

SIMIT Simulation

▶ Basic Automation

▶ SIMATIC Controller

Distributed IOs

▶ Operator control & monitoring

**Process Automation** 

Industrial Communication

Industrial Identification

Drive Technology

► SinuTrain SW

PLM Software

▶ WorldSkills

▶ Ordering Inform.

#### Recommended accessories

#### 6ES7134-6PA20-0BD0

Analog input module, Al Energy Meter

#### 6ES7193-6BP00-0BD0

**BaseUnit** 

#### 6ES7193-6SC00-1AM0

5 shielding terminals

## 6ES7137-6BD00-0BA0

Communication Module **IO-Link Master** 

#### 6ES7193-6BP00-0DA0

BaseUnit

Trainer Package: FastConnect cable set

#### 3RK7137-6SA00-0BC1

Communication Module **ASI Master** 

#### 6ES7193-6BP20-0DC0

BaseUnit

#### 6GK1950-0BB00

#### 6EP7133-6AE00-0BN0

**ETHERNET** 

1 x

cable

Power Supply Input: 120/230 V AC output: 24 V DC/10 A

#### 6EP7133-6AB00-0BN0

Power Supply Input: 120/230 V AC output: 24 V DC/5A



STEP 7 Professional and WinCC Advanced V17 SW for training, 1er license

NOTE: SIMATIC STEP 7 Professional and Safety Advanced ≥ V13 SP1 Update 4 are absolutely necessary for configuration

# ET 200SP Distributed Controller CPU 1512SP F-1 PN Safety

1 x Standard mounting rail 35 mm, length 483 mm for 19" cabinet	6ES5710-8MA11
1 x CPU 1512SP F-1 PN for ET 200SP, central processing unit with work memory 300 KB for program and 1 MB for data, 1st interface, PROFINET IRT with 3-port switch, 48 ns bit performance, Memory Card required	6ES7512-1SK01-0AB0
1 x SIMATIC S7, Memory Card for S7-1X00 CPU/SINAMICS, 3,3 V Flash, 24 MB	6ES7954-8LF03-0AA0
2 x DI 8x24VDC/0.5A HF	6ES7131-6BF00-0CA0
2 x DQ 8x24VDC/0.5A HF	6ES7132-6BF00-0CA0
1 x BusAdapter 2x RJ45	6ES7193-6AR00-0AA0
4 x BU type A0, 16 push-in, 2 infeed terminals separated (digital/analog max 24 V DC/10 A)	6ES7193-6BP00-0DA0
1 x Color-coded labels, 16 process terminals, gray/red, CC01, 10 units	6ES7193-6CP01-2MA0
1 x 1000 labeling strips, light gray, 10 sheets DIN A4, perforated, paper	6ES7193-6LA10-0AA0
1 x Color-coded labels, 16 process terminals, gray/blue, CC02, 10 units	6ES7193-6CP02-2MA0
1 x SIMATIC NET Industrial ETHERNET, TP XP Cord RJ45/RJ45, CAT 6 A, crossed TP cable 4x2, length 6 m	6XV1870-3RH60
1 x STEP 7 Professional and WinCC Advanced V17 SW for Training, 1er license	6ES7822-1AA07-4YA5

## Expansions: ET 200SP F-technology 6ES7136-6BA00-0AB1 and/or ET 200SP analog modules: 6ES7155-6AU00-0AB600

System requirements: WIN10 (64-bit) Prof. 1909, 2004, 20H2/Enterprise 1909, 2004, 20H2/IoT Enterprise 2016 LTSB / 2019 LTSC

Sales note: Schools, colleges and universities, for in-house vocational training departments

Technical note: SIMATIC STEP 7 Professional and Safety Advanced as of V13 SP1 Update 4 required

Order number: 6ES7512-1SK00-4AB2

- ► IOT2000
- ► Industrial Controls
- ► Engineering SW
- ► SIMIT Simulation
- ▶ Basic Automation
- ► SIMATIC Controller
- ▶ Distributed IOs
- Operator control & monitoring
- ▶ Process Automation
- Industrial Communication
- Industrial Identification
- Drive Technology
- ► SinuTrain SW
- ▶ PLM Software
- ▶ WorldSkills

7 TIA Portal

Ordering Inform.



# SIMATIC CPU 1517TF-3 PN/DP Safety with software

without IOs (must be purchased separately)



1 x CPU 1517TF-3 PN/DP



1 x Power supply Input: 120/230 V AC; Output: 24 V DC, 8 A



1 x Memory Card 256 MB



1 x ETHERNET cable



1 x SIMATIC S7-1500, mounting rail 482 mm



STEP 7 Professional and WinCC Advanced V17 SW for training, 1er license

- ► IOT2000
- ▶ Industrial Controls
- ► Engineering SW
- SIMIT Simulation
- ▶ Basic Automation
- ► SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Process Automation
- Industrial Communication
- Industrial Identification
- Drive Technology
- ► SinuTrain SW
- ▶ PLM Software
- ▶ WorldSkills
- ► Ordering Inform.

SIMATIC STEP 7 Professional ≥ V16 is absolutely necessary for configuration

6EP1333-4BA00

7 TIA Portal

# SIMATIC CPU 1517TF-3 PN/DP Safety with software without IOs (must be purchased separately)

1 x SIMATIC PM 1507 24 V/8 A stabilized power supply for SIMATIC S7-1500, input: 120/230 V AC

SIMATIC STEP 7 Professional from V16 required

output: 24 V DC/8 A	0EF 1333-4BA00
<ul> <li>1 x SIMATIC S7-1500TF, CPU 1517TF-3 PN/DP, central processing unit with work memory 3 MB for program and 8 MB for data,</li> <li>1st interface: PROFINET IRT with 2-port switch</li> <li>2nd interface: ETHERNET,</li> <li>3rd interface: PROFIBUS, 2 ns bit performance, SIMATIC Memory Card required</li> <li>1 x SIMATIC S7-1500, mounting rail 482.6 mm (approx. 19 inch); incl. grounding screw, integrated DIN rail for mounting</li> </ul>	6ES7517-3UP00-0AB0 6ES7590-1AE80-0AA0
1 x SIMATIC S7, Memory Card for S7-1X00 CPU, 3.3 V FLASH, 256 MBYTE	6ES7954-8LL03-0AA0
1 x SIMATIC NET Industrial ETHERNET XP Cord RJ45/RJ45, CAT 6A, crossed TP cable 4x2, length 6 m	6XV1870-3RH60
1 x STEP 7 Professional and WinCC Advanced V17 SW for Training, 1er license	6ES7822-1AA07-4YA5
System requirements: WIN10 (64-bit) Prof. 1909, 2004, 20H2/Enterprise 1909, 2004, 20H2/IoT Enterprise 2016 LTSB /	2019 LTSC

- ► IOT2000
- ► Industrial Controls
- ► Engineering SW
- SIMIT Simulation
- ▶ Basic Automation
- ► SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- ▶ Process Automation
- Industrial Communication
- Industrial Identification
- Drive Technology
- ▶ SinuTrain SW
- ▶ PLM Software
- ▶ WorldSkills
- Ordering Inform.



Schools, colleges and universities, for in-house vocational training departments

Sales note:

Technical note:

Order number:

6ES7517-3UP00-4AB1

# **SIMATIC CPU 1516F PN/DP Safety with software**

#### Orders before 09/2021 contain SW Status V16



1 x CPU 1516 F PN/DP



1 x Digital input module DI 32 x 24 V DC



1 x Digital output module DQ 32 x 24VDC/0.5 A



1 x Analog input module AI 8 x U/I/RTD/TC



1 x Analog output module AQ 4 x U/I ST



1 x Power supply Input: 120/230 V AC Output: 24 V DC, 8 A





SIMIT Simulation

▶ Basic Automation

▶ SIMATIC Controller

Distributed IOs

▶ Operator control & monitoring

**Process Automation** 

Industrial Communication

Industrial Identification

▶ Drive Technology

► SinuTrain SW

▶ PLM Software

▶ WorldSkills

▶ Ordering Inform.



4 x Front connector 40-pin



1 x Memory Card 24 MB



1 x ETHERNET cable, 6 m



1 x S7-1500, mounting rail 482 mm



STEP 7 Professional and WinCC Advanced V17 SW for training, 1er license

NOTE: SIMATIC STEP 7 Professional and Safety Advanced ≥ V13 SP1 Update 4 are absolutely necessary for configuration

1 x SIMATIC PM 1507 24 V/8 A stabilized power supply, input: 120/230 V AC, output: 24 V DC/8 A	6EP1333-4BA00
1 x SIMATIC S7-1500F, CPU 1516F-3 PN/DP, with work memory 1.5 MB for program, 5 MB for data,	6ES7516-3FN02-0AB0
1st interface, PROFINET IRT with 2-port switch	
2nd interface, ETHERNET	
3rd interface, PROFIBUS, 10 ns bit performance, SIMATIC Memory Card required	
1 x SIMATIC S7-1500, digital input module DI 32 x 24V DC, 32 channels in groups of 16	6ES7521-1BL00-0AB0
1 x SIMATIC S7-1500, digital output module DQ 32 X 24 V DC/0.5 A; 32 channels	6ES7522-1BL01-0AB0
1 x SIMATIC S7-1500, analog input module AI 8 x U/I/RTD/TC, 16-bit resolution, 8 channels, in groups of 8	6ES7531-7KF00-0AB0
1 x SIMATIC S7-1500, analog output module AQ 4 x U/I ST; 16-bit resolution, 4 channels in groups of 4	6ES7532-5HD00-0AB0
1 x SIMATIC S7-1500, mounting rail, 482 mm	6ES7590-1AE80-0AA0
1 x SIMATIC S7, Memory Card for S7-1X00 CPU/SINAMICS, 3.3 V FLASH, 24 MB	6ES7954-8LF03-0AA0
4 x SIMATIC S7-1500, front connector, screw-type, 40-pin	6ES7592-1AM00-0XB0
1 x SIMATIC NET, Industrial ETHERNET XP Cord RJ45/RJ45, CAT 6 A, crossed TP cable 4x2, length 6 m	6XV1870-3RH60
1 x STEP 7 Professional and WinCC Advanced V17 SW for Training, 1er license	6ES7822-1AA07-4YA5

System requirements:	WIN10 (64-bit) Prof. 1909, 2004, 20H2/Enterprise 1909, 2004, 20H2/IoT Enterprise 2016 LTSB / 2019	LTSC
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Sales note: Schools, colleges and universities, for in-house vocational training departments

Technical note: SIMATIC STEP 7 Professional and Safety Advanced V13 SP1 Update 4 required

Order number: 6ES7516-3FN00-4AB2

- ► IOT2000
- ► Industrial Controls
- ▶ Engineering SW
- ▶ SIMIT Simulation
- ▶ Basic Automation
- ► SIMATIC Controller
- ▶ Distributed IOs
- Operator control & monitoring
- ▶ Process Automation
- ► Industrial Communication
- Industrial Identification
- Drive Technology
- ► SinuTrain SW
- ▶ PLM Software
- ▶ WorldSkills

7 TIA Portal

▶ Ordering Inform.



▶ IOT2000

► Industrial Controls

▶ Engineering SW

SIMIT Simulation

▶ Basic Automation



1 x CPU 1516 F PN/DP



1 x Digital input module DI 32 x 24 V DC



1 x Digital output module DQ 32 x 24VDC/0.5 A



1 x Analog input module AI 8 x U/I/RTD/TC



1 x Analog output module AQ 4 x U/I ST



1 x Power supply Input: 120/230 V AC Output: 24 V DC, 8 A



▶ SIMATIC Controller Distributed IOs

- ▶ Operator control & monitoring
  - **Process Automation**
- Industrial Communication
- Industrial Identification
- ▶ Drive Technology
- ► SinuTrain SW
- ▶ PLM Software
- ▶ WorldSkills
- ▶ Ordering Inform.



4 x Front connector 40-pin



1 x Memory Card 24 MB



1 x ETHERNET cable, 6 m



1 x S7-1500, mounting rail 482 mm



STEP 7 Professional and WinCC Advanced V17 SW for training, 1er license

NOTE: SIMATIC STEP 7 Professional and Safety Advanced ≥ V13 SP1 Update 4 are absolutely necessary for configuration

▶ IOT2000

► Industrial Controls

► Engineering SW

▶ SIMIT Simulation

▶ Basic Automation

Distributed IOs

► SIMATIC Controller

Operator control & monitoring

▶ Process Automation

Communication

1 x SIMATIC PM 1507 24 V/8 A stabilized power supply, input: 120/230 V AC, output: 24 V DC/8	6EP1333-4BA00
1 x SIMATIC S7-1500, CPU 1516-3 PN/DP, central processing unit with 1 MB work memory for program	6ES7516-3AN02-0AB0
and 5 MB for data,	
1st interface: PROFINET IRT with 2-port switch	
2nd interface: ETHERNET	
3rd interface: PROFIBUS, 10 ns bit performance, SIMATIC Memory Card required	
1 x SIMATIC S7-1500, digital input module DI 32 x 24V DC, 32 channels in groups of 16	6ES7521-1BL00-0AB0
1 x SIMATIC S7-1500, digital output module DQ 32 X 24VDC/0.5 A; 32 channels	6ES7522-1BL01-0AB0
1 x SIMATIC S7-1500, analog input module AI 8 x U/I/RTD/TC, 8 channels in groups of 8	6ES7531-7KF00-0AB0
1 x SIMATIC S7-1500, analog output module AQ 4 x U/I ST; 4 channels in groups of 4	6ES7532-5HD00-0AB0
1 x SIMATIC S7-1500, mounting rail, 482 mm, incl. grounding screw, integrated DIN profile rail	6ES7590-1AE80-0AA0
1 x SIMATIC S7, Memory Card for S7-1X00 CPU/SINAMICS, 3.3 V FLASH, 24 MB	6ES7954-8LF03-0AA0
4 x SIMATIC S7-1500, front connector, screw-type, 40-pin	6ES7592-1AM00-0XB0
1 x SIMATIC NET, Industrial ETHERNET XP Cord RJ45/RJ45, CAT 6 A, crossed TP cable 4x2, length 6 m	6XV1870-3RH60
1 x STEP 7 Professional NS WinCC Advanced V17 SW for Training, 1er license	6ES7822-1AA07-4YA5

	Industrial

Identification

Industrial

- Drive Technology
- ► SinuTrain SW
- ▶ PLM Software
- ▶ WorldSkills
- ▶ Ordering Inform.

System requirements: WIN10 (64-bit) Prof. 1909, 2004, 20H2/Enterprise 1909, 2004, 20H2/IoT Enterprise 2016 LTSB / 2019 LTSC

Sales note: Schools, colleges and universities, for in-house vocational training departments

Technical note: SIMATIC STEP 7 Professional V13 SP1 Update 4 required

Order number: 6ES7516-3AN00-4AB3

# **Upgrade SIMATIC S7-314C-2PN/DP** for TIA Portal



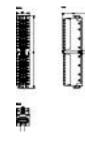
1 x CPU314C-2 PN/DP with 192 KB work memory



1 x Digital module SM 323, 16 DI and 16 DQ, 24 V DC, 0.5 A, 40-pin



1 x Micro Memory Card 512 KB



3x Front connector for SM, 40-pin



1 x ETHERNET cable

- ► IOT2000
- ▶ Industrial Controls
- ▶ Engineering SW
- ▶ SIMIT Simulation
- ▶ Basic Automation
- ► SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- ▶ Process Automation
- IndustrialCommunication
- Industrial Identification
- Drive Technology
- ► SinuTrain SW
- ▶ PLM Software
- ▶ WorldSkills
- ► Ordering Inform.



# Upgrade SIMATIC S7-314C-2PN/DP for TIA Portal

1 x SIMATIC S7-300, CPU 314C-2PN/DP compact CPU with 192 KB work memory, 24 DI/16 DQ, 4AI, 2AQ,
1 PT100, 4 high speed counters (60 kHz),
1st interface MPI/DP 12 Mbps
2nd interface ETHERNET PROFINET, with 2-port switch, integrated 24 V DC power supply,
front connector (2 x 40-pin) and Micro Memory Card required

1 x SIMATIC S7, Micro Memory Card for S7-300, 3.3 V NFlash, 512 KB 6ES7953-8LJ31-0AA0

1 x SIMATIC S7-300, Digital Module SM 323, potential-separated, 16 DI and 16 DQ, 24 V DC, 0.5 A, 6ES7323-1BL00-0AA0 total current 4 A, 1 x 40-pin

3 x SIMATIC S7-300, front connector 392 with screw contacts, 40-pin

1 x SIMATIC NET, Industrial ETHERNET XP Cord RJ45/RJ45, CAT 6 A, crossed TP cable 4x2, length 6 m 6XV1870-3RH60

#### Recommended accessories

#### 6GK1950-0BB00

Trainer Package: FastConnect cable set

System requirements: WIN10 (64-bit) Prof. 1909, 2004, 20H2/Enterprise 1909, 2004, 20H2/IoT Enterprise 2016 LTSB / 2019 LTSC

Sales note: Schools, colleges and universities, for in-house vocational training departments

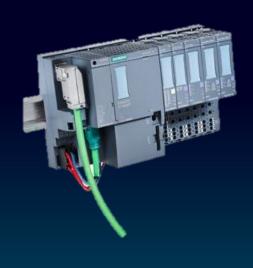
Technical note: SIMATIC STEP 7 Professional as of V5.5 and as of V13 required

Order number: 6ES7314-6EH04-4AB4 Available until September 2022

- ► IOT2000
- ▶ Industrial Controls
- ► Engineering SW
- ▶ SIMIT Simulation
- Basic Automation
- ► SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Process Automation
- Industrial Communication
- Industrial Identification
- Drive Technology
- ▶ SinuTrain SW
- ▶ PLM Software
- ▶ WorldSkills
- Ordering Inform.

6FS7392-1AM00-0AA0

# **Distributed IOs** Overview



Product	HW Licenses SW version	Order number (MLFB)	Note
SIMATIC ET 200SP digital PROFINET	1	6ES7155-6AU00-0AB0	
SIMATIC ET 200SP digital with input module ENERGY METER PN	1	6ES7155-6AU00-0AB1	
SIMATIC ET 200SP digital with communication module IO-LINK MASTER V1.1 PN	1	6ES7155-6AU00-0AB2	
SIMATIC ET 200SP digital with communication module CM AS-i MASTER ST PN	1	6ES7155-6AU00-0AB3	
SIMATIC ET 200SP analog expansion module	1	6ES7155-6AU00-0AB6	
SIMATIC ET 200SP safety expansion module	1	6ES7136-6BA00-0AB1	



# **SIMATIC ET 200SP digital PROFINET**



1 x IM 155-6 PN HF incl. server module



BusAdapter



2 x DI 8x24V DC HF



2 x DQ 8x24V DC/0.5A HF



4 x BaseUnits

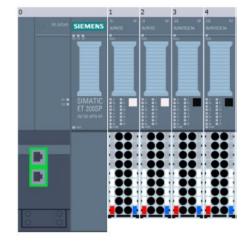
- ► IOT2000
- ▶ Industrial Controls
- ▶ Engineering SW
- ▶ SIMIT Simulation
- ▶ Basic Automation
- ► SIMATIC Controller
- ▶ Distributed IOs
- ► Operator control & monitoring
- ▶ Process Automation
- ▶ Industrial Communication
- ▶ Industrial Identification
- ▶ Drive Technology
- ► SinuTrain SW
- ▶ PLM Software
- ▶ WorldSkills
- ▶ Ordering Inform.

**SIEMENS** 





Color-coded labels Labeling strips



#### Recommended accessories

#### 6XV1870-3RH60

SIMATIC NET Industrial ETHERNET, TP XP Cord RJ45/RJ45, CAT 6 A, crossed TP cable 4x2, length 6 m

#### 6GK1950-0BB00

Trainer Package: FastConnect cable set

# **SIMATIC ET 200SP digital PROFINET**

1 x Standard mounting rail 35 mm, length 483 mm for 19" cabinet

1 x IM155-6PN HF including server module

2 x DI 8x24VDC HF

2 x DQ 8x24V DC/0.5 A HF

1 x BusAdapter 2x RJ45

4 x BU type A0, 16 push-in, 2 infeed terminals separated (digital/analog, max. 24 V DC/10 A)

1 x Color-coded labels, 16 process terminals, gray/red, CC01, 10 units

1 x Color-coded labels, 16 process terminals, gray/blue, CC02, 10 units

1 x 1000 labeling strips, light gray, 10 sheets DIN A4, perforated, paper

6ES5710-8MA11

6ES7155-6AU01-0CN0

6ES7131-6BF00-0CA0

6ES7132-6BF00-0CA0

6ES7193-6AR00-0AA0

6ES7193-6BP00-0DA0

6ES7193-6CP01-2MA0

6ES7193-6CP02-2MA0

6ES7193-6LA10-0AA0

Expansions: ET 200SP F-technology 6ES7136-6BA00-0AB1 and/or ET 200SP analog modules: 6ES7155-6AU00-0AB6

System requirements: None available

Sales note: Schools, colleges and universities, for in-house vocational training departments

Technical note: STEP 7 as of V5.5 and as of V13 required

Order number: 6ES7155-6AU00-0AB0

- ► IOT2000
- Industrial Controls
- ► Engineering SW
- **►** SIMIT Simulation
- ▶ Basic Automation
- ► SIMATIC Controller
- ▶ Distributed IOs
- Operator control & monitoring
- ▶ Process Automation
- Industrial Communication
- Industrial Identification
- ▶ Drive Technology
- ► SinuTrain SW
- ▶ PLM Software
- ▶ WorldSkills
- ▶ Ordering Inform.

SIEMENS



# SIMATIC ET 200SP digital with Energy Meter input module PN















1 x IM 155-6 PN HF

BusAdapter

2 x DI 8x24V DC HF

2 x DQ 8x24V DC/ 0.5A HF

4 x BaseUnits

Color-coded labels Labeling strips

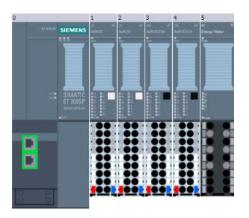
# incl. server module



1 x Energy 1 x BaseUnit Meter



1 x Shielding terminals



#### Recommended accessories

#### 6XV1870-3RH60

SIMATIC NET Industrial ETHERNET, TP XP Cord RJ45/RJ45, CAT 6 A, crossed TP cable 4x2, length 6 m

#### 6GK1950-0BB00

Trainer Package: FastConnect cable set

- ▶ IOT2000
- ► Industrial Controls
- ► Engineering SW
- ▶ SIMIT Simulation
- ▶ Basic Automation
- ► SIMATIC Controller
- ▶ Distributed IOs
- ▶ Operator control & monitoring
- ▶ Process Automation
- ▶ Industrial Communication
- Industrial Identification
- ▶ Drive Technology
- ► SinuTrain SW
- ▶ PLM Software
- ▶ WorldSkills
- ▶ Ordering Inform.



# SIMATIC ET 200SP digital with Energy Meter input module PN

1	x Standard	mounting	rail 35	mm,	length	483	mm,	for	19"	cabinet

1 x IM155-6PN HF including server module

2 x DI 8x24VDC HF

2 x DQ 8x24VDC/0.5A HF

1 x BusAdapter 2x RJ45

4 x BU type A0, 16 push-in, 2 infeed terminals separated (digital/analog, max. 24 V DC/10 A)

1 x Color-coded labels, 16 process terminals, gray/red, CC01, 10 units

1 x 1000 labeling strips, light gray, 10 sheets DIN A4, perforated, paper

1 x Color-coded labels, 16 process terminals, gray/blue, CC02, 10 units

1 x Al Energy Meter ST

1 x BaseUnit Push-in terminals, without AUX terminals, jumpered to left

1 x Shielding terminals, 5 units

6ES5710-8MA11

6ES7155-6AU01-0CN0

6ES7131-6BF00-0CA0

6ES7132-6BF00-0CA0

6ES7193-6AR00-0AA0

6ES7193-6BP00-0DA0

0207 100 027 00 027 0

6ES7193-6CP01-2MA0

6ES7193-6LA10-0AA0

6ES7193-6CP02-2MA0

6ES7134-6PA20-0BD0

6ES7193-6BP00-0BD0

6ES7193-6SC00-1AM0

Expansions: ET 200SP F-technology 6ES7136-6BA00-0AB1 and/or ET 200SP analog modules: 6ES7155-6AU00-0AB6

System requirements: None available

Sales note: Schools, colleges and universities, for in-house vocational training departments

Technical note: STEP 7 as of V13 required

Order number: 6ES7155-6AU00-0AB1

- ► IOT2000
- ► Industrial Controls
- ▶ Engineering SW
- ▶ SIMIT Simulation
- ▶ Basic Automation
- ▶ SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- ▶ Process Automation
- Industrial Communication
- Industrial Identification
- Drive Technology
- ► SinuTrain SW
- ▶ PLM Software
- ▶ WorldSkills
- ▶ Ordering Inform.



# SIMATIC ET 200SP digital with IO-Link communication module















1 x IM 155-6 PN HF incl. server module

BusAdapter

2 x DI 8x24V DC HF

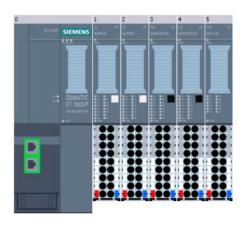
2 x DQ 8x24V DC/ 0.5A HF

4 x BaseUnits

Color-coded labels Labeling strips

1 x CM 4xIO-Link ST







**7** TIA Portal

#### **Recommended accessories**

#### 6XV1870-3RH60

SIMATIC NET Industrial ETHERNET, TP XP Cord RJ45/RJ45, CAT 6 A, crossed TP cable 4x2, length 6 m

#### 6GK1950-0BB00

Trainer Package: FastConnect cable set

- ▶ IOT2000
- ► Industrial Controls
- ► Engineering SW
- ▶ SIMIT Simulation
- ▶ Basic Automation
- ► SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Process Automation
- Industrial Communication
- Industrial Identification
- Drive Technology
- ► SinuTrain SW
- ▶ PLM Software
- ▶ WorldSkills
- ▶ Ordering Inform.



# SIMATIC ET 200SP digital with IO-Link communication module

1 x Standard mounting rail 35 mm, length 483 mm for 19" cabinet

1 x IM155-6PN HF including server module

2 x DI 8x24VDC HF

2 x DQ 8x24VDC/0.5A HF

1 x BusAdapter 2x RJ45

4 x BU type A0, 16 push-in, 2 infeed terminals separated (digital/analog, max. 24 V DC/10 A)

1 x Color-coded labels, 16 process terminals, gray/red, CC01, 10 units

1 x 1000 labeling strips, light gray, 10 sheets DIN A4, perforated, paper

1 x Color-coded labels, 16 process terminals, gray/blue, CC02, 10 units

1 x BU type A0, 16 push-in, 2 infeed terminals separated (digital/analog, max. 24 V DC/10 A)

1 x CM 4xIO-Link ST

1 x Color-coded labels, 16 process terminals, gray/blue, CC04, 10 units

6ES5710-8MA11

6ES7155-6AU01-0CN0

6ES7131-6BF00-0CA0

6ES7132-6BF00-0CA0

6ES7193-6AR00-0AA0

6ES7193-6BP00-0DA0

6ES7193-6CP01-2MA0

6ES7193-6LA10-0AA0

6ES7193-6CP02-2MA0

6ES7193-6BP00-0DA0

6ES7137-6BD00-0BA0

6ES7193-6CP04-2MA0

Matching: Trainer Package SIRIUS Industrial Controls 3TK3388-0TP00

Expansions: ET 200SP F-technology 6ES7136-6BA00-0AB1 and/or ET 200SP analog modules: 6ES7155-6AU00-0AB6

System requirements: None available

Schools, colleges and universities, for in-house vocational training departments Sales note:

Technical note: STEP 7 as of V13 required

Order number: 6ES7155-6AU00-0AB2 **IO**-Link

Core product for vocational World Cup Industrial Control 7



- ► IOT2000
- Industrial Controls
- ▶ Engineering SW
- SIMIT Simulation
- ▶ Basic Automation
- ► SIMATIC Controller
- Distributed IOs
- ▶ Operator control & monitoring
- Process Automation
- Industrial Communication
- Industrial Identification
- Drive Technology
- ► SinuTrain SW
- PLM Software
- ▶ WorldSkills
- ▶ Ordering Inform.



# SIMATIC ET 200SP digital with AS-i Master communication module















1 x IM 155-6 PN HF

BusAdapter

2 x DI 8x24V DC HF

2 x DQ 8x24V DC/

4 x BaseUnits

Color-coded labels Labeling strips

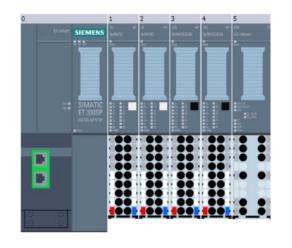
- incl. server module

- 0.5A HF





1 x BaseUnit



#### Recommended accessories

#### 6XV1870-3RH60

SIMATIC NET Industrial ETHERNET, TP XP Cord RJ45/RJ45, CAT 6 A, crossed TP cable 4x2, length 6 m

#### 6GK1950-0BB00

Trainer Package: FastConnect cable set

- ▶ IOT2000
- ► Industrial Controls
- ► Engineering SW
- ▶ SIMIT Simulation
- ▶ Basic Automation
- ► SIMATIC Controller
- ▶ Distributed IOs
- ▶ Operator control & monitoring
- ▶ Process Automation
- Industrial Communication
- Industrial Identification
- ▶ Drive Technology
- ► SinuTrain SW
- ▶ PLM Software
- ▶ WorldSkills
- ▶ Ordering Inform.



## SIMATIC ET 200SP digital with AS-i Master communication module

	l X	standard	mounting	rail 35	mm,	length	483	mm	tor	19"	cabine	t
-	1 x	IM155-6F	PN HF incl	udina s	servei	r modu	ıle					

2 x DI 8x24V DC HF

2 x DQ 8x24V DC/0.5A HF

1 x BusAdapter 2x RJ45

4 x BU type A0, 16 push-in, 2 infeed terminals separated (digital/analog, max. 24 V DC/10 A)

1 x Color-coded labels, 16 process terminals, gray/red, CC01, 10 units

1 x 1000 labeling strips, light gray, 10 sheets DIN A4, perforated, paper

1 x Color-coded labels, 16 process terminals, gray/blue, CC02, 10 units

1 x CM AS-i Master ST ET 200SP (AS-i V3.0)

1 x BU type C0, BU20-P6+A2+4D

6ES5710-8MA11

6ES7155-6AU01-0CN0

6ES7131-6BF00-0CA0

6ES7132-6BF00-0CA0

6ES7193-6AR00-0AA0

6ES7193-6BP00-0DA0

6ES7193-6CP01-2MA0

6ES7193-6LA10-0AA0

6ES7193-6CP02-2MA0

3RK7137-6SA00-0BC1

6ES7193-6BP20-0DC0

► IOT2000

Industrial Controls

► Engineering SW

SIMIT Simulation

▶ Basic Automation

► SIMATIC Controller

Distributed IOs

▶ Operator control & monitoring

Process Automation

Industrial Communication

Industrial Identification

Drive Technology

▶ SinuTrain SW

PLM Software

▶ WorldSkills

▶ Ordering Inform.

SIEMENS

### Expansions: ET 200SP F-technology 6ES7136-6BA00-0AB1 and/or ET 200SP analog modules: 6ES7155-6AU00-0AB6

System requirements: None available

Schools, colleges and universities, for in-house vocational training departments Sales note:

Technical note: STEP 7 as of V13 required

Order number: 6ES7155-6AU00-0AB3

## **SIMATIC ET 200SP Analog module expansion**

#### SIMATIC ET 200SP analog module expansion consisting of:

2 x AI 2xU/I 2-/4-wire HS

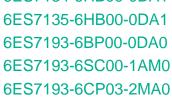
1 x AQ 2xU/I HS

3 x BU type A0, 16 push-in, 2 infeed terminals (digital/analog, max. 24 V DC/10A)

1 x Shielding terminals, 5 units

1 x Color-coded labels, 16 process terminals, gray/red/blue, CC03, 10 units

6ES7134-6HB00-0DA1 6ES7135-6HB00-0DA1 6ES7193-6BP00-0DA0 6ES7193-6SC00-1AM0







1 x AQ 2xU/I HS





Color-coded labels



3 x BaseUnits



System requirements: None available

Schools, colleges and universities, for in-house vocational training departments Sales note:

5 x Shielding terminals

Technical note: STEP 7 as of V13 required

Order number: 6ES7155-6AU00-0AB6 Core product for vocational World Cup Industrial Control **↗** 





► IOT2000

► Industrial Controls

► Engineering SW

SIMIT Simulation

▶ Basic Automation

Distributed IOs

► SIMATIC Controller

▶ Operator control &

- Communication
- Industrial Identification
- ▶ Drive Technology
- ► SinuTrain SW
- ▶ PLM Software
- ▶ WorldSkills
- ► Ordering Inform.



## **SIMATIC ET 200SP Safety module expansion**

#### SIMATIC ET 200SP safety module expansion consisting of:

- 1 x Electronic module F-DI 8x24V DC HF
- 1 x Electronic module F-DQ 4x24V DC/2A PM HF
- 1 x Electronic module F-RQ 24VDC/24..230V AC/5A
- 2 x BaseUnits BU type A0, 16 push-in, 2 infeed terminals separated (digital/analog, max. 24 V DC/10 A)
- 1 x BaseUnits BU type F0, push-in terminals, with 4 AUX terminals
- 1 x SIMATIC ET 200SP, 1000 labeling strips, yellow

6ES7136-6BA00-0CA0 6ES7136-6DB00-0CA0 6ES7136-6RA00-0BF0 6ES7193-6BP00-0DA0 6ES7193-6BP20-0BF0 6ES7193-6LA10-0AG0





1x F-DI 8x24VDC HF 4x2



1x F-DQ 4x24VDC/2A PM HF



1x F-RQ DC24V/AC24..230V/5A



Labeling strips



3 x BaseUnits

- System requirements: None available
- Sales note: Schools, colleges and universities, for in-house vocational training departments
- Technical note: STEP 7 as of V13 required
- Order number: 6ES7136-6BA00-0AB1

- ► IOT2000
- Industrial Controls
- ▶ Engineering SW
- ▶ SIMIT Simulation
- ▶ Basic Automation
- ► SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- ► Process Automation
- Industrial Communication
- Industrial Identification
- Drive Technology
- ► SinuTrain SW
- PLM Software
- ▶ WorldSkills
- ► Ordering Inform.



# **Operator control & monitoring**

# Overview



industrial version





Product	HW sets	Licenses	SW version	Order number (MLFB)	Note
SIMATIC MTP700 Unified Comfort Panel	1	1	V17	6AV2128-3GB06-4AB1	NEW O
SIMATIC MTP1500 Unified Comfort Panel	1	1	V17	6AV2128-3QB06-4AB1	NEW O
SIMATIC TP700 Comfort Color Panel – Available until 09/2022	1	1	V17	6AV2133-4AF00-0AA0	NEW O
SIMATIC TP1500 Comfort Color Panel – <b>Available until 09/2022</b>	1	1	V17	6AV2133-4BF00-0AA0	NEW O
SCADA system SIMATIC WinCC with options Only WIN10 (64-bit) Professional 1903/Enterprise 1903		6	V7.5 SP2	6AV6371-1DH07-5AX5	NEW
SCADA system SIMATIC WinCC with options – ASIA Only WIN10 (64-bit) Professional 1903/Enterprise 1903		6	V7.5 SP2	6AV6371-1DH07-5AV5	NEW
Upgrade SCADA system SIMATIC WinCC with options from V1.0 → Only WIN10 (64-bit) Professional 1903/Enterprise 1903		6	V7.5 SP2	6AV6381-1BP07-5AX3	NEW

• Relevant Information: <a href="https://support.industry.siemens.com/cs/de/en/view/65601780">https://support.industry.siemens.com/cs/de/en/view/65601780</a>



## SIMATIC MTP700/MTP1500 Unified Comfort Panels with PROFINET

Orders before 09/2021 contain SW Status V16

1 x 7" SIMATIC HMI MTP700, Unified Comfort Panel

6AV2128-3GB06-0AX0

touch operation, 7" widescreen TFT display, 16 million colors, PROFINET interface, configurable from WinCC Unified Comfort V16, contains open source software, which is provided free of charge, see enclosed Blu-Ray

#### MTP 700 can be configured with WinCC Unified as of V16

#### Alternative:

1 x 15" SIMATIC HMI MTP1500, Unified Comfort Panel

6AV2128-3QB06-0AX0

touch operation, 15.6" widescreen TFT display, 16 million colors, PROFINET interface, configurable from WinCC Unified Comfort V16, contains open source software, which is provided free of charge, see enclosed Blu-Ray

#### MTP 1500 can be configured with WinCC Unified as of V16

#### Also included in the package:

1 x STEP 7 Professional and WinCC Unified V17 SW for Training, 1er license

1 x SIMATIC NET, Industrial ETHERNET XP Cord RJ45/RJ45, CAT 6 A, crossed TP cable 4x2, length 6 m

6ES7822-1AA07-4YA5 6XV1870-3RH60



Totally Integrated **Automation PORTAL** 

Check HW compatibility for TIA Portal 7



- ► IOT2000
- Industrial Controls
- Engineering SW
- SIMIT Simulation
- Basic Automation
- ► SIMATIC Controller
- Distributed IOs
- ▶ Operator control & monitoring
- **Process Automation**
- Industrial Communication
- Industrial Identification
- Drive Technology
- ► SinuTrain SW
- PLM Software
- ▶ WorldSkills
- ▶ Ordering Inform.

System requirements: WIN10 (64-bit) Prof. 1909, 2004, 20H2/Enterprise 1909, 2004, 20H2/IoT Enterprise 2016 LTSB / 2019 LTSC

Sales note: Schools, colleges and universities, for in-house vocational training departments

Technical note: Authorization on USB stick

Order number: 6AV2128-3GB06-4AB1 (with MTP700) 6AV2128-3QB06-4AB1 (with MTP1500) Core product for vocational World Cup Industrial Control **↗** 



# Orders before 09/2021 contain SW Status V16

# SIMATIC TP700/TP1500 Comfort Panel with PROFINET and MPI/PROFIBUS DP Interface

1 x 7" SIMATIC TP700 Comfort, Touch Panel with 6AV2124-0GC01-0AX0 PROFINET and MPI/PROFIBUS DP INTERFACE (Panel with integrated switch with 2x RJ45 port)

TP 700 can be configured with WinCC Comfort, Advanced, Prof. as of V11 SP2

#### Alternative:

1 x 15" SIMATIC TP1500 Comfort, Touch Panel with
PROFINET and MPI/PROFIBUS DP INTERFACE (Panel with integrated switch with 2x RJ45 port)

TP 1500 can be configured with WinCC Comfort, Advanced, Prof. as of V14 SP1

#### Also included in the package:

1 x STEP 7 Professional WinCC Advanced V17 SW for Training, 1er license
 1 x SIMATIC NET, Industrial ETHERNET XP Cord RJ45/RJ45, CAT 6 A, crossed TP cable 4x2, length 6 m

6ES7822-1AA07-4YA5 6XV1870-3RH60



Totally Integrated Automation **PORTAL** 



- ► IOT2000
- Industrial Controls
- Engineering SW
- ▶ SIMIT Simulation
- Basic Automation
- ► SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Process Automation
- Industrial Communication
- Industrial Identification
- Drive Technology
- ▶ SinuTrain SW
- PLM Software
- ▶ WorldSkills
- ► Ordering Inform.

## Available until September 2022

System requirements: WIN10 (64-bit) Prof. 1909, 2004, 20H2/Enterprise 1909, 2004, 20H2/IoT Enterprise 2016 LTSB / 2019 LTSC

Sales note: Schools, colleges and universities, for in-house vocational training departments

Technical note: Authorization on USB stick

Order number: 6AV2133-4AF00-0AA0 (with TP700) 6AV2133-4BF00-0AA0 (with TP1500)

# SCADA system SIMATIC WinCC V7.5 SP2 with options

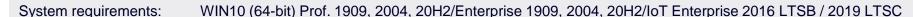
## 6er classroom license

#### SCADA system SIMATIC WinCC V7.5 SP2 with options, additionally available as ASIA variant

- 6 x WinCC System software, RC 2048 (2048 Power Tags), Runtime/Configuration Software
- 6 x WinCC/User Archives
- 6 x WinCC/Connectivity Pack
- 6 x SIMATIC WinCC/Web Navigator, 3 Client Licenses (countable)
- 6 x SIMATIC WinCC/DataMonitor, 1 Client Licenses (countable)
- 6 x SIMATIC WinCC/Cloud Connect V7.5 SP2

#### Upgrade SCADA system SIMATIC WinCC with options from V1.0 to V7.5 SP2

- 6 x Upgrade WinCC System software, RC 2048 (2048 Power Tags), Runtime/Configuration Software
- 6 x Upgrade WinCC/User Archives
- 6 x Upgrade WinCC/Connectivity Pack
- 6 x Upgrade SIMATIC WinCC/Web Navigator, 3 client licenses (countable)
- 6 x Upgrade SIMATIC WinCC/DataMonitor, 1 client licenses (countable)
- 6 x SIMATIC WinCC/Cloud Connect V7.5 SP2



Sales note: Schools, colleges and universities, for in-house vocational training departments

Technical note: Authorization on USB stick

Order number: ASIA Upgrade from V1.0,... to V7.5 SP2

6AV6371-1DH07-5AX5 6AV6371-1DH07-5AV5 6AV6381-1BP07-5AX3

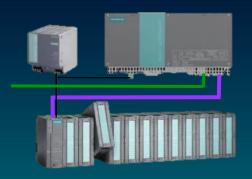


- ▶ IOT2000
- ▶ Industrial Controls
- ▶ Engineering SW
- ► SIMIT Simulation
- Basic Automation
- ► SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- ▶ Process Automation
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- Industrial Identification
- Drive Technology
- SinuTrain SW
- PLM Software
- ▶ WorldSkills
- ▶ Ordering Inform.



# **Process automation**Overview





Product	HW sets	Licenses S	SW version	Order number (MLFB)	Note
SIMATIC PCS 7		3	V9.1	6ES7650-0XX68-0YS5	NEW O
Upgrade SIMATIC PCS 7 from V8.X $\rightarrow$		3	V9.1	6ES7650-0XX68-0YE5	NEW O
Upgrade SIMATIC PCS 7 from V9.0 $\rightarrow$		3	V9.1	6ES7650-8XX68-0YE5	NEW O
SIMATIC PCS 7		6	V9.1	6ES7650-0XX68-2YS5	NEW O
SIMATIC CPU 410E Single	1			6ES7654-0UE23-0XS4	NEW
SITOP PSU6200 24V/20A, stabilized power supply				6EP3336-7SB00-3AX0	NEW
SIMATIC ET 200SP HA	1			6ES7654-0UE23-0XS3	NEW

• Relevant Information: <a href="https://support.industry.siemens.com/cs/de/en/view/65601780">https://support.industry.siemens.com/cs/de/en/view/65601780</a>



# Process control system SIMATIC PCS 7 Software licenses

#### **3er license / 3er upgrade:**

1 x DVD: PCS 7 software V9.1

1 x Paper: Certificate of License (A5E00276662)

1 x Stick: License key USB stick with 3 \* floating licenses

6ES7650-0XX68-0YS5

## 6er license:

2 x SIMATIC PCS 7 - 3er license

System requirements: Microsoft Windows 10 (64-bit) Enterprise LTSC 2019

Microsoft Windows Server 2019 (64-bit) Standard / Datacenter

Sales note: Schools, colleges and universities, for in-house vocational training departments

Technical note: Authorization on USB stick

Order number: 3er license 3er upgrade 3er upgrade 6er license

from V9.0 to V9.1 from V8.x to 9.1

6ES7650-0XX68-0YS5 6ES7650-8XX68-0YE5 6ES7650-0XX68-0YE5 6ES7650-0XX68-2YS5

- ► IOT2000
- ► Industrial Controls
- ▶ Engineering SW
- ► SIMIT Simulation
- ▶ Basic Automation
- ► SIMATIC Controller
- Distributed IOs
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- ▶ SinuTrain SW
- PLM Software
- ▶ WorldSkills
- ▶ Ordering Inform.



## **Process Control System SIMATIC PCS 7 Hardware**

#### Packaging:

- 1 x SIMATIC PCS 7 AS SIMATIC CPU 410E Single ...
- 1 x SIMATIC ET 200SP HA Station with IO modules...
- Details: See following slides

#### Note:

- PCS 7 software licenses must be purchased separately, see previous slide
- SITOP power supply 20A and SIMATIC NET Industrial ETHERNET TP XP Cord RJ45/RJ45 must be purchased separately
- 2 x 6XV1870-3RH60 Industrial ETHERNET TP XP Cord RJ45/RJ45, CAT 6A, crossed TP cable 4x2, assembled with 2 RJ45 plugs, length 6 m
- 1 x 6EP3336-7SB00-3AX0 SITOP PSU6200 24 V/20 A stabilized power supply input: 120 ... 230 V AC (110 ... 240 V DC) Output: 24 V DC/20 A with diagnostics interface

NOTE: The PCS 7 AS Hardware Trainer Package consists of two sub-packages. These must be ordered together. Separation is necessary for logistical reasons.

System requirements: Microsoft Windows 10 (64-bit) Enterprise LTSC 2019

Microsoft Windows Server 2019 (64-bit) Standard / Datacenter

Sales note: Schools, colleges and universities, for in-house vocational training departments

Technical note: See above

Order number: 6ES7654-0UE23-0XS4 + 6ES7654-0UE23-0XS3







- ► IOT2000
- ▶ Industrial Controls
- ► Engineering SW
- SIMIT Simulation
- ▶ Basic Automation
- ► SIMATIC Controller
- Distributed IOs
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- Industrial Identification
- Drive Technology
- ► SinuTrain SW
- ▶ PLM Software
- ▶ WorldSkills
- ▶ Ordering Inform.



# SIMATIC PCS 7 AS CPU 410E Single (PROFINET) 6ES7654-0UE23-0XS4 can only be ordered in combination with SIMATIC ET 200SP HA (PROFINET) 6ES7654-0UE23-0XS3

### → See next slide

1 x	SIMATIC PCS 7, CPU 410E Process Automation, central processing unit for S7-400 and S7-400H/F/FH, 5 interfaces: 2x PN, 1x DP, 2x for sync modules for using as spare part, without System Expansion Card	6ES7410-5HM08-0AB0
1 x	SIMATIC PCS 7 System Expansion Card up to 200 process objects only for PCS 7 CPU 410E	6ES7653-2CB00-0XB0
1 x	SIMATIC PCS 7, CR3 XTR S7-400 rack central with 4 slots for extended temperature range and with conformal coating	6ES7401-1DA01-0AA1
1 x	SIMATIC PCS 7, PS 405 4A XTR S7-400 power supply wide range, 24/48/60 V DC; 5 V DC/4 A, for extended temperature range and with conformal coating	6ES7405-0DA02-0AA1
1 x	SIMATIC PCS 7, software, Runtime license AS (PO 100), floating license for 1 user R-SW, without SW, without documentation, License key on USB stick, Class A, Reference HW: PCS 7 IPC bundle, PCS 7 Box bundle	6ES7653-2BA00-0XB5
1 x	SIMATIC S7, software, F-systems, Runtime license license; copy license for 2 installations per AS; Reference HW: SIMATIC S7-400F/FH, Content: 2 certificates + 2 stickers	6ES7833-1CC00-6YX0
1 x	SIMATIC S7-400, backup battery 3.6 V/2.3 AH for PS 405 4 A/10 A/20 A and PS 407 4 A/10 A/20 A for extended temperature range	6ES7971-0BA02

NOTE: The SIMATIC PCS 7 AS CPU 410E Single (PROFINET) must be ordered in combination with the package SIMATIC ET 200SP HA (PROFINET). See next slide.

► IOT2000

- Industrial Controls
- ► Engineering SW
- SIMIT Simulation
- Basic Automation
- ▶ SIMATIC Controller
- Distributed IOs
- ▶ Operator control & monitoring
- **Process Automation**
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- ▶ WorldSkills
- ▶ Ordering Inform.



# SIMATIC ET 200SP HA (PROFINET) 6ES7654-0UE23-0XS3 for RTX Box (PROFINET) only in combination with SIMATIC PCS 7 AS CPU 410E Single (PROFINET) 6ES7654-0UE23-0XS4

# → See previous slide

1 x	SIMATIC ET 200SP HA, carrier module in single carrier for holding one interface module of the ET 200SP HA incl. server module	6DL1193-6BH00-0SM0
1 x	SIMATIC ET 200SP HA, BusAdapter BA 2xRJ45, 2 RJ45 sockets for PROFINET	6DL1193-6AR00-0AA0
2 x	SIMATIC ET 200SP HA, carrier module 8-fold carrier for holding 8 I/O modules of the ET 200SP HA	6DL1193-6GC00-0NN0
4 x	SIMATIC ET 200SP HA, digital input module, DI 16X24VDC HA, suitable for terminal block H1, M1, color code CC01, channel diagnostics	6DL1131-6BH00-0PH1
2 x	SIMATIC ET 200SP HA, digital input module, DI 32X24VDC HA, suitable for terminal block, H1, P0, color code CC00, channel diagnostics	6DL1131-6BL00-0PH1
2 x	SIMATIC ET 200SP HA, digital output module, DQ 16X24VDC/0,5A HA, suitable for terminal block, H1, M1, color code CC02, channel diagnostics	6DL1132-6BH00-0PH1
1 x	SIMATIC ET 200SP HA, digital output module, DQ 32X24VDC/0.5A HA, suitable for terminal block, H1, N0, color code CC00, channel diagnostics	6DL1132-6BL00-0PH1
1 x	SIMATIC ET 200SP HA, analog HART input module, AI 16XI 2-wire HART HA, suitable for terminal block H1, M1, color code CC01, channel diagnostics, 16-bit, +/-0.1%,	6DL1134-6TH00-0PH1
1 x	SIMATIC ET 200SP HA, configurable I/O module, AI-DI16/DQ16X24VDC HART, suitable for terminal block H1, M1, color code CC00, channel diagnostics, 16-bit, +/-0.1%,	6DL1133-6EW00-0PH1
1 x	SIMATIC ET 200SP HA, analog input module, AI 16XTC/8XRTD 2-/3-/4-wire HA, suitable for terminal block H1, M1, color code CC00, channel diagnostics, 16-bit, +/-0.05%, 2-/3-/4-wire	6DL1134-6JH00-0PH1
1 x	SIMATIC ET 200SP HA, analog output module, AQ 8XI HART HA suitable for terminal block H1, M1, color code CC00, channel diagnostics, 16-bit, +/-0.1%	6DL1135-6TF00-0PH1
1 x	SIMATIC ET 200SP HA, terminal block, type H1, 32 push-in terminals, internal reference temperature. New load group, width: 22.5 mm	6DL1193-6TP00-0DH1
7 x	SIMATIC ET 200SP HA, terminal block, type H1, 32 push-in terminals, internal reference temperature. Width: 22.5 mm	6DL1193-6TP00-0BH1
1 x	SIMATIC ET 200SP HA, terminal block, type M1, 32 push-in terminals, internal reference temperature. Width: 45 mm	6DL1193-6TP00-0BM
1 x	SIMATIC ET 200SP HA, terminal block, type P0, 64 push-in terminals, width: 45 mm	6DL1193-6TP00-0DP0
1 x	SIMATIC ET 200SP HA, terminal block, type P0, 64 push-in terminals, width: 45 mm	6DL1193-6TP00-0BP0
1 x	SIMATIC ET 200SP HA, terminal block, type N0, 64 push-in terminals, width: 45 mm	6DL1193-6TP00-0DN0

NOTE: The Trainer Package SIMATIC ET 200SP HA (PROFINET) must be ordered in combination with SIMATIC PCS 7 AS CPU 410E Single (PROFINET). See previous slide.

- ▶ IOT2000
- ► Industrial Controls
- ▶ Engineering SW
- SIMIT Simulation
- ▶ Basic Automation
- ▶ SIMATIC Controller
- Distributed IOs
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- Industrial Identification
- Drive Technology
- ▶ SinuTrain SW
- ▶ PLM Software
- ▶ WorldSkills
- Ordering Inform.



# **Industrial communication** Overview





Product	HW sets	Licenses \$	SW version	Order number (MLFB)	Note
SIMATIC NET SINEC NMS 50 V.1		6	V1.0	6GK1950-0BB06	NEW O
FASTCONNECT Cable Set	1			6GK1950-0BB00	
IE SCALANCE switch XC208	1			6GK1950-0BB12	•
IE SCALANCE S615 with Software SINEMA RC Basic	1	1		6GK1950-0BB13	•
IE SCALANCE S615 LAN router	2			6GK1950-0BB23	•
Development Kit PROFINET	1			6ES7195-3BE00-4AB1	

• Relevant Information: <a href="https://support.industry.siemens.com/cs/de/en/view/65601780">https://support.industry.siemens.com/cs/de/en/view/65601780</a>



## SINEC NMS 50 V1.0

#### **6 x SINEC NMS 50 V1.0**

6GK8781-1BA01-0AA0

SINEC NMS 50 V1.0. Type of delivery: DVD. Network management software for administration of industrial networks, monitoring, network configuration, license type: single. Monitorable IP devices: 50. Windows 10 Version 1709 (64-bit), Windows Server 2016 and 2019 Version 1607 (64-bit)



Totally Integrated Automation PORTAL



- ► IOT2000
- Industrial Controls
- ► Engineering SW
- SIMIT Simulation
- ▶ Basic Automation
- ► SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- ▶ Process Automation
- Industrial Communication
- Industrial Identification
- Drive Technology
- ► SinuTrain SW
- ▶ PLM Software
- ▶ WorldSkills
- ► Ordering Inform.

System requirements: WIN10 (64-bit) Prof. 1909, 2004, 20H2/Enterprise 1909, 2004, 20H2/IoT Enterprise 2016 LTSB / 2019 LTSC

Sales note: Schools, colleges and universities, for in-house vocational training departments

Technical note: Authorization on USB stick

Order number: 6GK1950-0BB06

## **FASTCONNECT** cable set



1 x FastConnect Stripping tool



2 X SIMATIC NET IE FC RJ45 Plug connector



4 x SIMATIC NET IE FC RJ45 PLUG 90 2X2, RJ45 Plug connector



1 x SIMATIC NET IE FC M12 PLUG PRO M12 Plug connector



▶ Basic Automation ► SIMATIC Controller

▶ Industrial Controls

► Engineering SW

▶ SIMIT Simulation

► IOT2000

- ▶ Distributed IOs
- ► Operator control & monitoring
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- ▶ Industrial Communication
- ▶ Industrial Identification
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- ► SinuTrain SW
- ▶ PLM Software
- ▶ WorldSkills
- ► Ordering Inform.



1x M12 Cable connector



1 x 50 meter, GP 2X2 TP Installation cable



2x SIMATIC NET, Industrial ETHERNET

Overview I Graphic

## **FASTCONNECT** cable set

1 x FastConnect stripping tool

ΙX	FastCorniect stripping tool	0GK1901-1GA00
2 x	SIMATIC NET IE FC RJ45 plug connector (10/100MBPS) with rugged metal housing and FC connecting method for IE FC cable 2x2, 180 degree cable outlet, 1 pack = 10 pcs	6GK1901-1BB10-2AB0
4 x	SIMATIC NET IE FC RJ45 Plug 90 2x2, RJ45 plug connector (10/100 MBPS) with rugged metal housing and FC connecting method for IE FC cable 2X2 90 degree cable outlet, 1 pack = 1 pcs	6GK1901-1BB20-2AA0
1 x	SIMATIC NET IE FC M12 Plug Pro M12 plug connector with axial cable outlet 1 pack = 8 pcs for SCALANCE X208 PRO and ET 200 PRO PN	6GK1901-0DB20-6AA8
1 x	M12 cable connection per socket for connection of SCALANCE W-700/X208PRO for 24 V DC voltage supply, 3 pcs.	6GK1907-0DC10-6AA3
1 x	50 m flexible cable, GP 2x2 TP installation cable with flexible strand, PROFINET Type B, 4-wire	6XV1870-2B
2 x	SIMATIC NET Industrial ETHERNET, TP XP Cord RJ45/RJ45, CAT 6 A, crossed TP cable 4x2, length 6 m	6XV1870-3RH60

Sales note: Schools, colleges and universities, for in-house vocational training departments

Technical note: None available

Order number: 6GK1950-0BB00

► IOT2000

6GK1901-1GA00

- ► Industrial Controls
- ► Engineering SW
- ▶ SIMIT Simulation
- ▶ Basic Automation
- ► SIMATIC Controller
- ▶ Distributed IOs
- Operator control & monitoring
- ► Process Automation
- Industrial Communication
- ► Industrial Identification
- Drive Technology
- ► SinuTrain SW
- ▶ PLM Software
- ▶ WorldSkills
- ▶ Ordering Inform.



## IE SCALANCE switch XC208/SIMATIC NET

#### 1 x SCALANCE XC208

SCALANCE XC208 managed layer 2 IE switch; 8x 10/100 Mbps RJ45 ports; 1x console port; diagnostics LED; redundant power supply; temperature range -40 °C to +70 °C; mounting: DIN rail/S7 mounting rail/wall Office redundancy functions features (RSTP, VLAN,...); PROFINET IO device ETHERNET/IP-compliant C-plug slot

#### 6GK5208-0BA00-2AC2



6GK1900-0AB00

#### 1 x SIMATIC NET, C-PLUG

Removable data storage medium for simple device replacement in case of fault. for recording configuration or configuration and application data

#### Recommended accessories

6XV1870-3RH60

Industrial Ethernet TP XP Cord RJ45/RJ45, CAT 6A, crossed TP cable 4x2, pre-assembled with 2 RJ45 connectors, length 6 m

#### 6GK5 980-3BB00-0AA5

Serial cable RJ11/RS232; pre-assembled serial cable with RJ11 and RS232 connector; length 3 m; 1 pack = 1 unit spare part

#### 6GK1950-0BB00

Trainer Package: FastConnect cable set



System requirements: WIN10 (64-bit) Prof. 1909, 2004, 20H2/Enterprise 1909, 2004, 20H2/IoT

Enterprise 2016 LTSB / 2019 LTSC

Schools, colleges and universities, for in-house vocational training departments Sales note:

Technical note: None available

Order number: 6GK1950-0BB12 Core product World Cup Industrial Control 7



- ► IOT2000
- Industrial Controls
- Engineering SW
- SIMIT Simulation
- Basic Automation
- ▶ SIMATIC Controller
- Distributed IOs
- ▶ Operator control & monitoring
- **Process Automation**
- Industrial Communication
- Industrial Identification
- Drive Technology
- ▶ SinuTrain SW
- PLM Software
- ▶ WorldSkills
- ▶ Ordering Inform.

SIEMFNS



## SIMATIC NET Industrial Security Switch Technologies – IE SCALANCE S615 with SINEMA RC basic software

#### 1 x SIMATIC NET SCALANCE S615 LAN ROUTER

For protection of devices/networks in automation technology and for protection of industrial communication by VPN and firewall; additional functions: address conversion (NAT/NAPT), connection to SINEMA RC, 5-port switch, 1 x digital input, 1 x digital output

- 1 x SINEMA Remote Connect Virtual Appliance; basic software package for 4 VPN connections. User, device, group management; certificate management; autoconfiguration interface SINEMA RC client: for 1 installation. Software, documentation on DVD; license key on USB flash drive; 2 languages (de, en)
- 1 x SINEMA RC Client V3 for 8 installations; Software, documentation on DVD, license key for server; 3 languages (de, en, zh), Windows 10 Pro, Windows Server 2008, 2012 R2, 2016, 2019 (64-bit)
- 1 x SINEMA RC Upgrade 64 Upgrade by 64 VPN connections, only license
- 1 x **KEY-PLUG SINEMA RC**, Removable data storage medium for enabling the connection to SINEMA Remote Connect for S615 and SCALANCE M for simple device replacement in the event of a fault and for recording configuration data
- 1 x SIMATIC NET Industrial ETHERNET, TP XP Cord RJ45/RJ45, CAT 6 A, crossed TP cable 4X2, length 6 m



6GK5615-0AA00-2AA2

6GK1720-1AH01-0BV0



6GK1721-1XG03-4AB1



6XV1870-3RH60

- ► IOT2000
- Industrial Controls
- ► Engineering SW
- SIMIT Simulation
- Basic Automation
- ► SIMATIC Controller
- Distributed IOs
- ▶ Operator control & monitoring
- Process Automation
- Industrial Communication
- Industrial Identification
- Drive Technology
- ► SinuTrain SW
- PLM Software
- ▶ WorldSkills
- ▶ Ordering Inform.



System requirements: WIN10 (64-bit) Prof. 1909, 2004, 20H2/Enterprise 1909, 2004, 20H2/IoT Enterprise 2016 LTSB / 2019 LTSC

Sales note: Schools, colleges and universities, for in-house vocational training departments

Technical note: None available

6GK1950-0BB13 Order number:

# SIMATIC NET Industrial Security Switch Technologies – IE SCALANCE S615 LAN router

#### 2 x SIMATIC NET SCALANCE S615 LAN ROUTER

SCALANCE S615 LAN router; for protection of devices/networks in automation technology and for protection of industrial communication by VPN and firewall; additional functions: address conversion (NAT/NAPT), connection to SINEMA RC, 5-port switch, 1 x digital input, 1 x digital output

2 x KEY-PLUG SINEMA RC, removable data storage medium for enabling the connection to SINEMA Remote Connect for S615 and SCALANCE M for simple device replacement in the event of fault and for recording configuration data



6GK5615-0AA00-2AA2

6GK5908-0PB00

- ► IOT2000
- ▶ Industrial Controls
- ▶ Engineering SW
- SIMIT Simulation
- Basic Automation
- ► SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Process Automation
- Industrial Communication
- Industrial Identification
- Drive Technology
- ► SinuTrain SW
- ▶ PLM Software
- ▶ WorldSkills
- Ordering Inform.

System requirements: WIN10 (64-bit) Prof. 1909, 2004, 20H2/Enterprise 1909, 2004, 20H2/IoT Enterprise 2016 LTSB / 2019 LTSC

Sales note: Schools, colleges and universities, for in-house vocational training departments

Technical note: None available

Order number: 6GK1950-0BB23

1 x EK-ERTEC 200P PN IO evaluation kit for PN IO, device based on ERTEC 200P Evaluation Board EB 200P, example software. documentation

6ES7195-3BE00-0YA0

1 x PROFINET driver for controller, development package for PROFINET IO controller V2.1, on CD-ROM, source code with example implementation, IRT controller in connection with CP1625 Dev. (to be ordered separately)

6ES7195-3AA00-0YA0

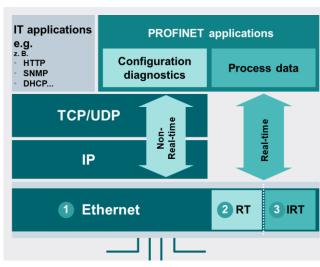
1 x PROFIsafe starter kit V3.5 according to PROFIsafe profile V2.6.1

6ES7195-3BF03-0YA0

1 x SIMATIC NET Industrial ETHERNET, TP XP Cord RJ45/RJ45, CAT 6 A, crossed TP cable 4x2, length 6 m

6XV1870-3RH60





- Sales note: Schools, colleges and universities, for in-house vocational training departments
- Support by ComDeC Communication, Development & Certification Technical note:

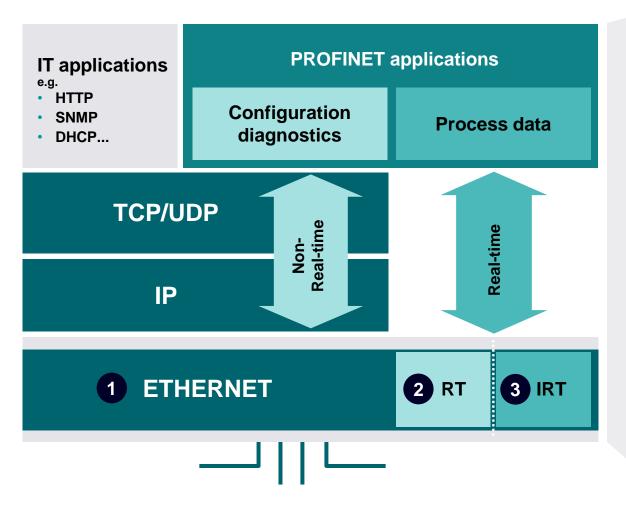
Order number: 6ES7195-3BE00-4AB1

- ► IOT2000
- Industrial Controls
- ▶ Engineering SW
- SIMIT Simulation
- ▶ Basic Automation
- ▶ SIMATIC Controller
- Distributed IOs
- ▶ Operator control & monitoring
- **Process Automation**
- Industrial Communication
- Industrial Identification
- Drive Technology
- ► SinuTrain SW
- PLM Software
- ▶ WorldSkills
- ▶ Ordering Inform.



7 ComDeC

## **Development Kit – PROFINET & PROFISAFE** The PROFINET stack



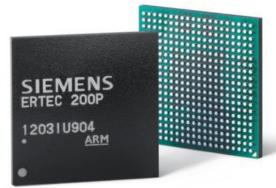
- **TCP/IP (IEEE802.3)** 
  - Parameter assignment and configuration
  - Diagnostic data
  - Send authorization for user data channel
- Real-time (RT)
  - Cyclic high-performance transfer (up to 1 ms cycle time) of user data
  - Event-dependent messages/warnings
- **Isochronous real-time (IRT)** 
  - Cyclic synchronous transfer of user data
  - Hardware support from ERTEC
  - Jitter < 1 µsec</li>

- ► IOT2000
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- ▶ Engineering SW
- ► SIMIT Simulation
- ▶ Basic Automation
- ► SIMATIC Controller
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- ▶ Operator control & monitoring
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- ▶ PLM Software
- ▶ WorldSkills
- ▶ Ordering Inform.



## Evaluation Kit for ERTEC 200P-2





## High speed with the ERTEC 200P-2

- Support of performance upgrade from PROFINET according to specification V2.3
  - → Cycle times as fast as 31.25 μs achievable
    (Eval Kit V4.5 enables 125 μs)
- Isochronous connection of applications to PROFINET
- ARM 926 with 250 MHz for demanding applications

## Fast start in development with Evaluation Kit

- Complete PROFINET stack in source code
- Evaluation board for ERTEC 200P-2 (EB 200P)
- Application examples based on ERTEC 200P-2
- License-free development tools an real-time operating system eCos

- ► IOT2000
- ▶ Industrial Controls
- ► Engineering SW
- ▶ SIMIT Simulation
- ▶ Basic Automation
- ► SIMATIC Controller
- ▶ Distributed IOs
- Operator control & monitoring
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- Industrial Identification
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- ▶ SinuTrain SW
- ▶ PLM Software
- ▶ WorldSkills
- ▶ Ordering Inform.



# PROFIsafe Starter Kit



## **Advantages**

- The Development Kit supports the development of a PROFIsafe field device based on PROFINET
- The PROFIsafe Starter Kit V3.5 complies with V2.6.1 of the PROFIsafe profile, specified in IEC 61784-3.
- Meets a range of user requirements such as signal-specific passivation and watchdog expansion for configuration in run

#### **Contents**

- Current PROFIsafe specification
- PROFIsafe driver software (PSD) with PROFIsafe certificate
- CRC calculation tools

- iPar Server function block (software and instructions)
- Verify code
- Programming manual and PROFIsafe manual
- Sample application

- ► IOT2000
- ► Industrial Controls
- ▶ Engineering SW
- ▶ SIMIT Simulation
- ▶ Basic Automation
- ► SIMATIC Controller
- Distributed IOs
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- Industrial Communication
- Industrial Identification
- Drive Technology
- ► SinuTrain SW
- ▶ PLM Software
- ▶ WorldSkills
- ▶ Ordering Inform.



## The PROFINET Driver for controllers



## **Key features**

- Support of PROFINET with RT (cycle time down to 1 ms)
   when using a real-time operating system
- Example implementation for Windows (cycle time down to 32 ms)
- Example implementation for SIMATIC IPC hardware
- XML interface for configuration

## **Scope of delivery**

#### **Product CD**

- Source code of the PROFINET driver for controllers on CD
- Documentation

### **Customer Support Portal**

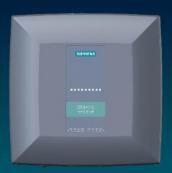
- HSP for TIA Portal
- Further tools for development tools (a.o. trace)

- ▶ IOT2000
- ► Industrial Controls
- ► Engineering SW
- ▶ SIMIT Simulation
- ▶ Basic Automation
- ► SIMATIC Controller
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- Industrial Identification
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- ► SinuTrain SW
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- ▶ WorldSkills
- ▶ Ordering Inform.



# **Industrial identification** Overview





Product	HW sets	Licenses SW version	Order number (MLFB)	Note
SIMATIC MV540 S code reader PROFINET – no shape recognition	1		6GF3500-1TP03	NEW O
SIMATIC RF200 RFID system PROFINET	1		6GT2096-3AA00-0AA1	NEW O
SIMATIC RF200 RFID system IO-Link	1		6GT2096-5AA00-0AA0	0
SIMATIC RF300 RFID system PROFINET	1		6GT2096-1AA00-0AA1	NEW O
SIMATIC RF600 RFID system PROFINET	1		6GT2811-6CC10-0XB0	NEW O

• Relevant Information: <a href="https://support.industry.siemens.com/cs/de/en/view/65601780">https://support.industry.siemens.com/cs/de/en/view/65601780</a>



## **SIMATIC MV540 HR optical reader PROFINET**



1 x MV440 optical reader



1 x Lens 25 mm



Built-in ring light



1 x Text-Genius Plus **OCR License** Note: Licenses can only

be used from mid-2023



1 x PAT-Genius License Note: Licenses can only be used from mid-2023

- ► IOT2000
- ▶ Industrial Controls
- ▶ Engineering SW
- ▶ SIMIT Simulation
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- ► SIMATIC Controller
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- ▶ Industrial Communication
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- ▶ PLM Software
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1 x Mounting plate



1 x Protection tube for lens



1 x Power data cable



1 x IE cable

## SIMATIC MV540 S HR optical reader PROFINET

1 x SIMATIC MV540 H optical reader; resolution: 800 x 600 pixels; function: 1D/2D code reading; Image field and distance: variable, (depends on lens); PoE; IP67 with 6GF3540-8ADxx; delivery: Reader and SD card adapter	6GF3540-0CD10
1 x MV440-MV500 mounting plate; material: stainless steel (4 mm), versatile use	6GF3440-8CA
1 x MINI-CX lens 25 mm, E-focus for MV500 devices	6GF3540-8EA03-0LL0
1 x D65 lens protection metal glass, degree of protection IP67 for MV440 and MV540 devices	6GF3440-8AC11
1 x Built-in ring light MV540 red multi for MV540 devices; incl. cross-polarization filter; lighting range up to 120 cm	6GF3540-8DA13
1 x Power-IO-DATA cable MV500 10 m for MV540 devices; M12 – 12-pin socket pre-assembled at one end, 10 m	6GF3500-8BA21
1x IE connecting cable M12-90/IE FastConnect RJ45 plug 145, length 10 m	6XV1870-8GN10
1 x IE FastConnect RJ45 plug 90 2x2, RJ45 plug connector (10/100 Mbps) with rugged metal enclosure and FC connection system for IE FC cable 2x 2; 180° cable outlet	6GK1901-1BB10-2AA0
1 x OCR license for MV440/MV540 code reading systems; Single license	6GF3400-1SL01 *)
1 x Pat-Genius; object detection license for MV500 and MV400, single license	6GF3400-0SL03 *)
*) Licenses can	only be used from mid-2023

▶ Basic Automation

▶ IOT2000

► SIMATIC Controller

▶ Industrial Controls

▶ Engineering SW

▶ SIMIT Simulation

- ▶ Distributed IOs
- ► Operator control & monitoring
- ▶ Process Automation
- Industrial Communication
- Industrial Identification
- ▶ Drive Technology
- ► SinuTrain SW
- ▶ PLM Software
- ▶ WorldSkills
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Parameter assignment with Web-based user interface, browser (as of IE5.5), JAVA-VM (MS, SUN)

Schools, colleges and universities, for in-house vocational training departments

6GF3500-1TP03

Sales note:

Technical note:

Order number:

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# **SIMATIC RF200 RFID system PROFINET**



2 x RF200 Reader RF240R



1 x RFID Communication Module RF186CI



1 x Power M12 cable connector



1 x IE Connecting cable M12-180/IE FC RJ45

- ► IOT2000
- ▶ Industrial Controls
- ► Engineering SW
- ▶ SIMIT Simulation
- ▶ Basic Automation
- ► SIMATIC Controller
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2 x SIMATIC RF, MV connecting cable



5 x Transponder MDS D428 for RF200/RF300



## **SIMATIC RF200 RFID system PROFINET**

2 x SIMATIC RF200 reader RF240R; RS422 interface (3964R); IP67, -25 to +70 °C; 50x 50x 30 mm; with integrated antenna

6GT2821-4AC10

- 1 x RFID communication module RF186CI for PROFINET; ETHERNET, 2 readers can be connected; DI/DO interface 6GT2002-0JE50
- 1 x Power M12 cable connector PRO axial cable outlet for field assembly, socket insert L-coded (socket) 6GK1906-0EB00
- 1 x IE connecting cable M12-180/IE FC RJ45 Plug-145; IE FC trailing cable GP pre-assembled with M12 connector 6XV1871-5TH20 (D-coded) and IE FC RJ45 plug; length 2.0 m
- 2 x SIMATIC RF, MV plug-in cable, assembled, between ASM 456, RF160C, RF170C, RF18XC and reader or extension cable for ASM 456, RF160C, RF170C, RF18XC with RF, MV, MOBY PUR, trailing, length 2 m
- 5 x Transponder MDS D428 for RF200/RF300 ISO/MOBY D Screw transponder M8 long; ISO 15693, Chip type 6GT2600-4AK00-0AX0 FUJITSU MB89R118, 2000 byte FRAM user memory 24x 20 mm (DxH); SW22

System requirements: WIN10 (64-bit) Prof. 1909, 2004, 20H2/Enterprise 1909, 2004, 20H2/IoT Enterprise 2016 LTSB / 2019 LTSC

Sales note: Schools, colleges and universities, for in-house vocational training departments

Technical note: None available

Order number: 6GT2096-3AA00-0AA1

- ► IOT2000
- Industrial Controls
- Engineering SW
- ▶ SIMIT Simulation
- Basic Automation
- ► SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
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- ▶ PLM Software
- ▶ WorldSkills
- Ordering Inform.



# **SIMATIC RF200 RFID system IO-Link**

2 x SIMATIC RF200 reader RF210R IO-Link interface V1.1; IP67, -25 to +70 °C; M18x 83 mm; with integrated antenna 32 bytes IO; 230 Kbps

6GT2821-1BC32

2 x SIMATIC RF IO-Link connecting cable, assembled, between IO-Link master and reader, M12 4-pin and open end, 6GT2891-4LH50 PUR, length 5m

5 x Transponder MDS D428 for RF200/RF300 ISO/MOBY D screw transponder M8 long; ISO 15693, chip type FUJITSU MB89R118, 2000 byte FRAM user memory 24x 20 mm (DxH); SW22

6GT2600-4AK00-0AX0



2 x SIMATIC RF200 reader RF210R IO-Link interface



2 x Connecting cable SIMATIC RF IO-Link



5 x Transponder MDS D428

System requirements: WIN10 (64-bit) Prof. 1909, 2004, 20H2/Enterprise 1909, 2004, 20H2/IoT Enterprise 2016 LTSB / 2019 LTSC

Schools, colleges and universities, for in-house vocational training departments Sales note:

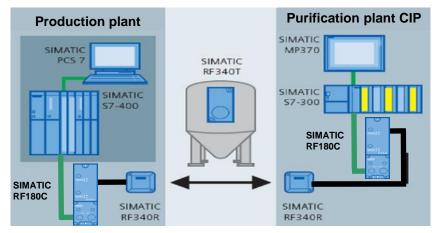
Technical note: None available

Order number: 6GT2096-5AA00-0AA0

- ► IOT2000
- Industrial Controls
- ▶ Engineering SW
- SIMIT Simulation
- ▶ Basic Automation
- ► SIMATIC Controller
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- PLM Software
- ▶ WorldSkills
- ▶ Ordering Inform.



## **SIMATIC RF300 RFID system PROFINET**



Tank monitoring by RFID nameplates, documentation of process data



1 x RFID Communication Module RF186CI for PROFINET/ETHERNET



2 x SIMATIC RF. MV plug-in cable



1 x Power M12 cable connector



1 x IE connecting cable M12-180/IE FC RJ45



2 x SIMATIC RF300; Reader RF310R (GEN2)



5 x SIMATIC RF300 Transponder RF340T

- ▶ IOT2000
- ► Industrial Controls
- ► Engineering SW
- ▶ SIMIT Simulation
- ▶ Basic Automation
- ► SIMATIC Controller
- ▶ Distributed IOs
- ▶ Operator control & monitoring
- **Process Automation**
- ▶ Industrial Communication
- Industrial Identification
- ▶ Drive Technology
- ► SinuTrain SW
- ▶ PLM Software
- ▶ WorldSkills
- ▶ Ordering Inform.



# **SIMATIC RF300 RFID system PROFINET**

1 x	RFID communication module RF186CI for PROFINET; ETHERNET, 2 readers can be connected; DI/DO interface	6GT2002-0JE50
	SIMATIC RF, MV plug-in cable, assembled, between ASM 456, RF160C, RF170C, RF18XC and reader or extension cable for ASM 456, RF160C, RF170C, RF18XC with RF, MV, MOBY PUR, trailing, length 2 m	6GT2891-4FH20
1 x	Power M12 cable connector PRO axial cable outlet for field assembly, socket insert, L-coded (socket)	6GK1906-0EB00
	IE connecting cable M12-180/IE FC RJ45 Plug-145; IE FC trailing cable GP pre-assembled with M12 connector (D-coded) and IE FC RJ45 plug; Length 2.0 m	6XV1871-5TH20
	SIMATIC RF300; reader RF310R (GEN2); RS422 interface (3964R); IP6725 to +70 °C, 55x 75x 30 mm, with integrated antenna	6GT2801-1BA10
5 x	SIMATIC RF300 transponder RF340T 8 KB FRAM, IP67/X9K, -25 to +85 °C, 48x2 5x 15 mm	6GT2800-4BB00

System requirements: WIN10 (64-bit) Prof. 1909, 2004, 20H2/Enterprise 1909, 2004, 20H2/IoT Enterprise 2016 LTSB / 2019 LTSC

Sales note: Schools, colleges and universities, for in-house vocational training departments

Technical note: None available

Order number: 6GT2096-1AA00-0AA1

- ► IOT2000
- ► Industrial Controls
- ▶ Engineering SW
- ▶ SIMIT Simulation
- ▶ Basic Automation
- ► SIMATIC Controller
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- ▶ Process Automation
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- ▶ WorldSkills
- ▶ Ordering Inform.

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## **SIMATIC RF600 RFID system PROFINET**



2 x SIMATIC RF615R Reader 133x155x45mm with internal antenna



2 x SIMATIC RF642A Antenna 185x185x47mm



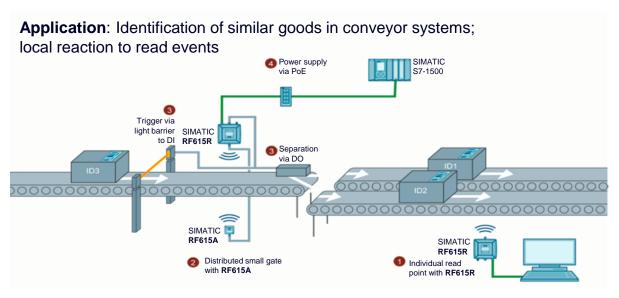
20 x SIMATIC RF645T Transponder with mounting cover



1 x Wide-range power supply for connecting up to 2 readers, EU power cable



2 x Power supply cable to reader, 24 V, 5 m 2 x Industrial ETHERNET cable, 5 m 2 x Antenna cable, 5 m



- ▶ IOT2000
- ► Industrial Controls
- ▶ Engineering SW
- ► SIMIT Simulation
- ▶ Basic Automation
- ► SIMATIC Controller
- Distributed IOs
- ▶ Operator control & monitoring
- **Process Automation**
- Industrial Communication
- Industrial Identification
- ▶ Drive Technology
- ► SinuTrain SW
- ▶ PLM Software
- ▶ WorldSkills
- ▶ Ordering Inform.



# **SIMATIC RF600 RFID system PROFINET**

2 x	UHF RFID reader RF615R ETSI with internal antenna	6GT2811-6CC10-0AA0
2 x	UHF RFID antenna RF642A	6GT2812-1GA08
4 x	Mounting for RF600 readers and antennas	6GT2890-2AB10
1 x	Wide-range power supply for connecting 2 RF600 readers	6GT2898-0AC81
1 x	Power cable for wide-range power supply	6GT2898-0AC01
2 x	Power supply cable for RF600 reader, 24 V, 5 m	6GT2891-0PH50
2 x	Industrial ETHERNET line, M12, RJ45, 5 m	6XV1871-5TH50
2 x	Antenna cable UHF RFID, 5 m, trailing	6GT2815-2BH50
20 >	CUHF RFID transponder RF645T, mountable directly on metal	6GT2810-2HC05
20 >	Mounting cover for RF645T	6GT2898-5AA00

System requirements: WIN10 (64-bit) Prof. 1909, 2004, 20H2/Enterprise 1909, 2004, 20H2/IoT Enterprise 2016 LTSB / 2019 LTSC

Sales note: Schools, colleges and universities, for in-house vocational training departments

Technical note: None available

Order number: 6GT2811-6CC10-0XB0

- ► IOT2000
- ► Industrial Controls
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**SIEMENS** 





# **Drive technology** Overview

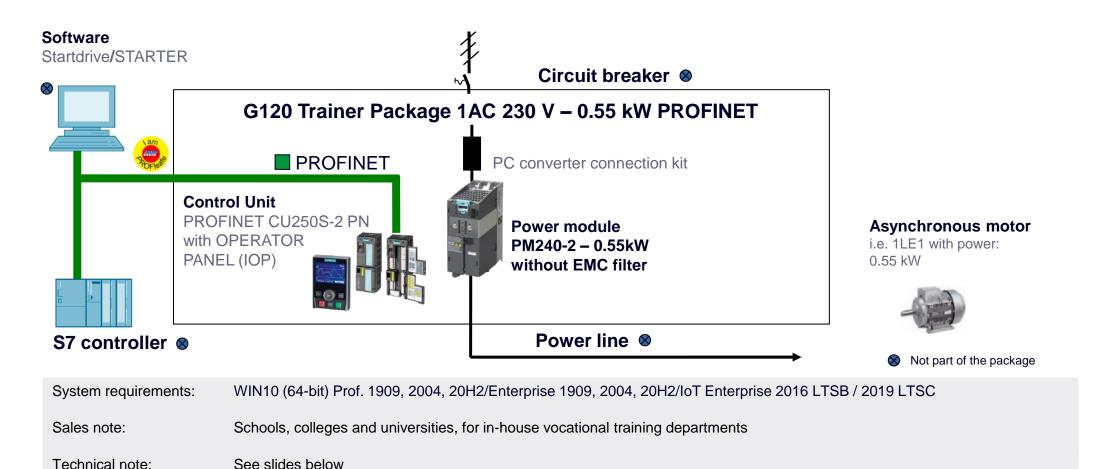


Product	HW sets	Licenses SW version	Order number (MLFB)	Note
SINAMICS S210 servo drive for 1AC 200 - 240V with PROFINET, S7-1500 recommended because of PN-IRT	1		6SL3080-8BB00-0AA0	NEW O
SINAMICS S210 servo drive for 3AC 380 - 480V with PROFINET, S7-1500 recommended because of PN-IRT	1		6SL3080-8BE00-0AA0	NEW O
SINAMICS G120 standard drive for 230V AC single-phase with PROFINET	1		6SL3200-3AX00-0UL1	•
SINAMICS G120 standard drive for 400V AC three-phase with PROFINET	1		6SL3200-3AX00-0UL2	•
SINAMICS S120 servo drive for 230 V AC single-phase with PROFINET	1		6SL3080-8AB01-0AA0	•
SINAMICS S120 servo drive for 400 V AC three-phase with PROFINET	1		6SL3080-8AE01-0AA0	0

• Relevant Information: <a href="https://support.industry.siemens.com/cs/de/en/view/65601780">https://support.industry.siemens.com/cs/de/en/view/65601780</a>



## SINAMICS G120 standard drive 1 AC 230 V



- ► IOT2000
- Industrial Controls
- ▶ Engineering SW
- SIMIT Simulation
- ▶ Basic Automation
- ▶ SIMATIC Controller
- Distributed IOs
- ▶ Operator control & monitoring
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- Industrial Identification
- Drive Technology
- ► SinuTrain SW
- PLM Software
- ▶ WorldSkills
- ▶ Ordering Inform.

Note: Your local technical consultant will support you in selecting a motor

Order number:

6SL3200-3AX00-0UL1

## SINAMICS G120 standard drive 1 AC 230 V

1 x	SINAMICS power module PM240-2 unfiltered with integrated braking chopper 200-240 V 1/3AC+10/-10% 47-63Hz power high overload: 0.55kW at 200% 3 s, 150% 57 s, 100% 240 s; Ambient temperature -10 to +50 °C; power low overload: 0.75kW at 150% 3 s, 110% 57 s, 100% 240 s; Ambient temperature -10 to +40 °C 196x 73x 165 (HxWxD), FSA degree of protection IP20 without control unit and operating unit released as of CU firmware V4.6	6SL3210-1PB13-8UL0
1 x	SINAMICS G120 Control Unit CU250S-2 PN integrated; PROFINET support of vector control, easy positioning EPOS via extended function license; 4 configurable DI/DQ, 6 DI (3 F-DI), 5 DI, 3 DQ (1 F-DQ), 2 AI, 2 AQ; Safety Integrated STO, SBC, SS1 further safety functions via extended safety license encoder: D-CLIQ + HTL/TTL/SSI, resolver/HTL VIA terminal protection IP20 USB and SD/MMC interface	6SL3246-0BA22-1FA0
1 x	SINAMICS SD CARD 512 MB empty	6SL3054-4AG00-2AA0
1 x	SINAMICS G120 shield connection kit 4 incl. shield plate and mounting elements for control units CU250S-2 variant: USS, CAN, DP, PN	6SL3264-1EA00-0LA0
1 x	SINAMICS G Intelligent Operator Panel IOP-2 for SINAMICS G120, G120P G110M, G110D, G120D, G120C ET 200PRO FC-2	6SL3255-0AA00-4JA2
1 x	SINAMICS G120 PC inverter connection kit 2 3 m USB cable for control units CU230P-2, CU240B-2, CU240E-2, CU250S-2 G110M and SINAMICS G120C	6SL3255-0AA00-2CA0
1 x	SINAMICS License Safety Integrated extended functions for memory card	6SL3074-0AA10-0AA0
1 x	SINAMICS G120 license extended functions for CU250S-2 VECTOR memory card for functionality: EPos	6SL3074-7AA04-0AA0

- ► IOT2000
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- ▶ Ordering Inform.



## SINAMICS G120 standard drive 1 AC 230 V

## Optional motors

#### SIMOTICS GP Low-voltage motor without encoder

SIMOTICS GP motor type: 1AV3082B Low-voltage motor, IEC squirrel-cage rotor, self-ventilated, IP55, temp. class 155(F) to 130(B), aluminum housing, premium efficiency, 4-pin, \* FS80M \* 0.55kW (50Hz) 0.63kW (60Hz) 3 AC 50Hz 230VD/400VY \* 3 AC 60Hz 460VY IM B 3, motor protection, 1 PTC thermistors for shutdown, terminal box at top

#### 1LE1003-0DB22-2AB4

1LE1003-0DB22-2AB4-Z

1LE1003-0DB22-2AB4-Z

- ► IOT2000
- Industrial Controls
- ► Engineering SW
- SIMIT Simulation
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- ▶ Ordering Inform.

SIFMFNS

#### SIMOTICS GP Low-voltage motor with HTL encoder

SIMOTICS GP motor type: 1AV3082B low-voltage motor, IEC squirrel-cage rotor, self-cooled, IP55 temperature class G11 155(F) according to 130(B); aluminum enclosure; premium efficiency, 4-pin \* frame size 80M \* 0.55 kW (50 Hz) 0.63 kW (60 Hz), if no order code is specified for selecting another color. 3 AC 50 Hz 230 VD/400 VY \* 3 AC 60 Hz 460 VY IM B 3, Motor protection with 1 PTC thermistors for shutdown terminal box at top G11=Built-on encoder 1XP8012-10 (HTL) 1024 pulses, with external fan (F70) 1XP8032-10 is used

#### SIMOTICS GP Low-voltage motor with TTL encoder

SIMOTICS GP motor type: 1AV3082B low-voltage motor, IEC squirrel-cage rotor, self-cooled, IP55 temperature class G12 155(F) according to 130(B) aluminum enclosure premium efficiency, 4-pin \* frame size 80M \* 0.55 kW (50 Hz) 0.63 kW (60 Hz) 3 AC 50 Hz 230 VD/400 VY \* 3 AC 60 Hz 460 VY IM B 3, Motor protection with 1 PTC thermistors for shutdown Terminal box at top G12=Built-on encoder 1XP8012-20 (TTL) 1024 pulses, with external fan (F70) 1XP8032-20 is used

# SINAMICS G120 standard drive 1 AC 230 V Optional software

**STARTER** 6SL3072-0AA00-0AG0

Commissioning tool for SINAMICS and MICROMASTER version V5.4 SP2

**STARTDRIVE** 6SL3072-4FA02-0XA0

Engineering and commissioning tool for SINAMICS version 17

SIZER 6SL3070-0AA00-0AG0

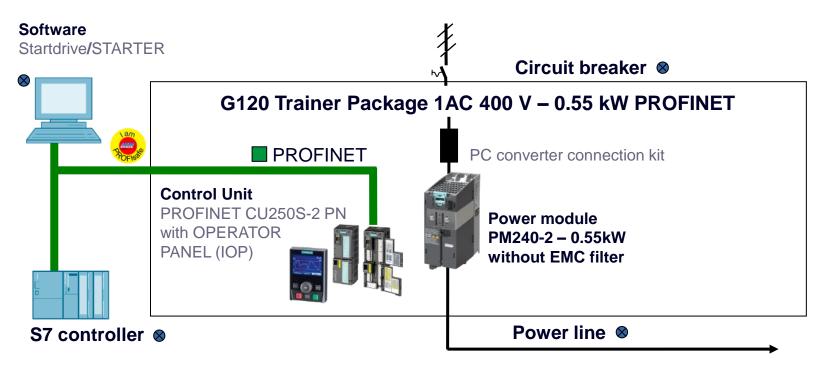
Note: STARTDRIVE is contained in the Trainer Package SIMATIC STEP 7 Professional Software for Training, see ->

- ▶ IOT2000
- ► Industrial Controls
- ▶ Engineering SW
- ► SIMIT Simulation
- ▶ Basic Automation
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- ▶ Ordering Inform.



Configuration tool for Siemens drives

## SINAMICS G120 standard drive 3 AC 400 V



**Asynchronous motor** i.e. 1LE1 with power: 0.55 kW



Not part of the package

System requirements: WIN10 (64-bit) Prof. 1909, 2004, 20H2/Enterprise 1909, 2004, 20H2/IoT Enterprise 2016 LTSB / 2019 LTSC

Sales note: Schools, colleges and universities, for in-house vocational training departments

Technical note: See slides below

Order number: 6SL3200-3AX00-0UL2 Note: Your local technical consultant will support you in selecting a motor

- ► IOT2000
- Industrial Controls
- ▶ Engineering SW
- SIMIT Simulation
- ▶ Basic Automation
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- PLM Software
- ▶ WorldSkills
- ▶ Ordering Inform.

## SINAMICS G120 standard drive 3 AC 400 V

1 x	SINAMICS Power Module PM240-2 unfiltered with integrated braking chopper 380-480 V 3 AC +10/-10% 47-63 Hz power high overload: 0.55kW at 200% 3 s, 150% 57 s, 100% 240 s; Ambient temperature -10 to +50 °C; power low overload: 0.75kW at 150% 3 s, 110% 57 s, 100% 240 s; Ambient temperature -10 to +40 °C 196x 73x 165 (HxWxD), FSA degree of protection IP20 without control unit and operating unit released as of CU firmware version V4.6	6SL3210-1PE12-3UL1
1 x	SINAMICS G120 Control Unit CU250S-2 PN, integrated PROFINET supports vector control, basic positioner EPos via Extended Function license, 4 configurable DI/DO, 6 DI (3 F-DI), 5 DI, 3 DO (1 F-DQ), 2 AI, 2 AO Safety Integrated STO, SBC, SS1, further safety functions via Extended Function license, encoder: D-CLiQ + HTL/TTL/SSI, resolver/HTL via terminal protection IP20, USB and SD/MMC interface	6SL3246-0BA22-1FA0
1 x	SINAMICS SD CARD 512 MB empty	6SL3054-4AG00-2AA0
1 x	SINAMICS G120 shield connection kit 4 incl. shield plate and mounting elements for control units CU250S-2 variant: USS, CAN, DP, PN	6SL3264-1EA00-0LA0
1 x	SINAMICS G Intelligent Operator Panel IOP-2 for SINAMICS G120, G120P G110M, G110D, G120D, G120C ET 200PRO FC-2	6SL3255-0AA00-4JA2
1 x	SINAMICS G120 PC inverter connection kit 2 3 m USB cable for control units CU230P-2 CU240B-2, CU240E-2, CU250S-2 G110M and SINAMICS G120C	6SL3255-0AA00-2CA0
1 x	SINAMICS License Safety Integrated extended functions for memory card	6SL3074-0AA10-0AA0
1 x	SINAMICS G120 license extended functions for CU250S-2 Vector memory card for functionality: EPos	6SL3074-7AA04-0AA0

- ► IOT2000
- ► Industrial Controls
- ► Engineering SW
- ► SIMIT Simulation
- ▶ Basic Automation
- ► SIMATIC Controller
- ▶ Distributed IOs
- Operator control & monitoring
- ► Process Automation
- Industrial Communication
- Industrial Identification
- ▶ Drive Technology
- ▶ SinuTrain SW
- ▶ PLM Software
- ▶ WorldSkills
- ▶ Ordering Inform.



# SINAMICS G120 standard drive 3 AC 400 V

## Optional motors

#### SIMOTICS GP Low-voltage motor without encoder

SIMOTICS GP motor type: 1AV3082B Low-voltage motor, IEC squirrel-cage rotor, self-ventilated, IP55, temp. class 155(F) to 130(B), aluminum housing, premium efficiency, 4-pin, \* FS80M \* 0.55kW (50Hz) 0.63kW (60Hz) 3 AC 50Hz 230VD/400VY \* 3 AC 60Hz 460VY IM B 3, motor protection, 1 PTC thermistors for shutdown, terminal box at top

1LE1003-0DB22-2AB4

#### ► IOT2000

- ▶ Industrial Controls
- ► Engineering SW
- SIMIT Simulation
- Basic Automation
- ► SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Process Automation
- IndustrialCommunication
- Industrial Identification
- Drive Technology
- ► SinuTrain SW
- PLM Software
- ▶ WorldSkills
- ► Ordering Inform.

#### SIMOTICS GP Low-voltage motor with HTL encoder

Z= G01 with HTL encoder SIMOTICS GP motor type: 1AV3082B low-voltage motor, IEC squirrel-cage rotor, self-cooled, IP55 temperature class 155(F) according to 130(B); aluminum enclosure; premium efficiency, 4-pin \* frame size 80M \* 0.55 kW (50 Hz) 0.63 kW (60 Hz), 3 AC 50 Hz 230 VD/400 VY \* 3 AC 60 Hz 460 VY IM B 3, Motor protection with 1 PTC thermistors for shutdown, G01 = Built-on encoder 1XP8012-10 (HTL) 1024 pulses, with external fan (F70) 1XP8032-10 is used

#### SIMOTICS GP Low-voltage motor with TTL encoder

SIMOTICS GP motor type: 1AV3082B low-voltage motor, IEC squirrel-cage rotor, self-cooled, IP55 temperature class G12 155(F) according to 130(B) aluminum enclosure premium efficiency, 4-pin \* frame size 80M \* 0.55 kW (50 Hz) 0.63 kW (60 Hz), 3 AC 50 Hz 230 VD/400 VY \* 3 AC 60 Hz 460 VY IM B 3, Motor protection with 1 PTC thermistors for shutdown, terminal box at top G02=Built-on encoder 1XP8012-20 (TTL) 1024 pulses, with external fan (F70) 1XP8032-20 is used

1LE1003-0DB22-2AB4-Z

1LE1003-0DB22-2AB4-Z

G11

# SINAMICS G120 standard drive 3 AC 400 V **Optional motors**

STARTER	6SL3072-0AA00-0AG0
SIARIER	651 3U/ Z-UA AUU-UA(-1)

Commissioning tool for SINAMICS and MICROMASTER version V5.4 SP2

**STARTDRIVE** 6SL3072-4FA02-0XA0

Engineering and commissioning tool for SINAMICS version 17

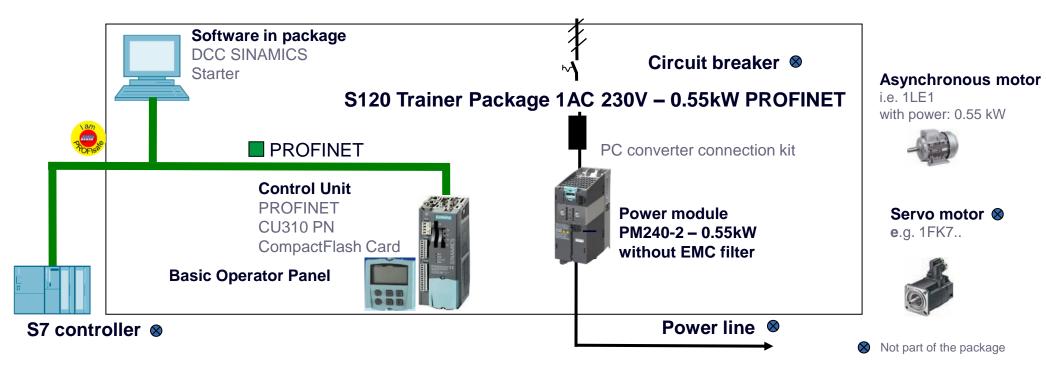
Configuration tool for Siemens drives

**SIZER** 6SL3070-0AA00-0AG0

Note: STARTDRIVE is contained in the Trainer Package SIMATIC STEP 7 Professional Software for Training, see ->

- ▶ IOT2000
- ▶ Industrial Controls
- ▶ Engineering SW
- ► SIMIT Simulation
- ▶ Basic Automation
- ► SIMATIC Controller
- Distributed IOs
- ▶ Operator control & monitoring
- Process Automation
- Industrial Communication
- Industrial Identification
- Drive Technology
- ► SinuTrain SW
- ▶ PLM Software
- ▶ WorldSkills
- ▶ Ordering Inform.

## SINAMICS S120 servo drive 1 AC 230 V



System requirements: WIN10 (64-bit) Prof. 1909, 2004, 20H2/Enterprise 1909, 2004, 20H2/IoT Enterprise 2016 LTSB / 2019 LTSC

Sales note: Schools, colleges and universities, for in-house vocational training departments

Technical note: None available

Order number: 6SL3080-8AB01-0AA0 Note: Your local technical consultant will support you in selecting a motor

- ► IOT2000
- Industrial Controls
- ▶ Engineering SW
- SIMIT Simulation
- ▶ Basic Automation
- ► SIMATIC Controller
- Distributed IOs
- ▶ Operator control & monitoring
- Process Automation
- Industrial Communication
- Industrial Identification
- Drive Technology
- ► SinuTrain SW
- PLM Software
- ▶ WorldSkills
- ▶ Ordering Inform.

## SINAMICS S120 servo drive 1 AC 230 V

1	Ιx	SINAMICS power module PM240-2 unfiltered with integrated braking chopper 200-240 V 1/3AC+10/-10% 47-63Hz power high overload: 0.55kW at 200% 3 s, 150% 57 s, 100% 240 s; Ambient temperature -10 to +50 °C; power low overload: 0.75kW at 150% 3 s, 110% 57 s, 100% 240 s; Ambient temperature -10 to +40 °C 196x 73x 165 (HxWxD), FSA degree of protection IP20 without control unit and operating unit, released as of CU firmware V4.6	6SL3210-1PB13-8UL0
1	Ιx	SINAMICS S120 Control Unit CU310-2 PN with PN interface without CompactFlash card	6SL3040-1LA01-0AA0
1	Ιx	SINAMICS S120 CompactFlash card without performance extension including Certificate of License V5.1 F01: 1 x License Safety Integrated extended functions	6SL3054-0FB00-1BA0- Z:F01
1	Ιχ	SINAMICS S120 Basic Operator Panel BOP20 for electronic controls,	6SL3055-0AA00-4BA0

- 1 x Software on DVD: STARTER commissioning tool for SINAMICS and MICROMASTER 6SL3072-0AA00-0AG0 V5.1 SP1 DVD for Windows Server 2008 R2 SP1 (64-bit), Windows 10 pro/Enterprise (64-bit),
  - Windows 7 (64-bit) Windows 10 Enterprise 2016 LTSB, 2019 LTSC de, en, es, fr and it also includes all the SSP released SSPs

6 keys for parameter setting and diagnostic information, suitable for control units CU305, CU310, CU320

1 x SINAMICS Engineering System SINAMICS DCC V3.1 SP1, full license DCC for SINAMICS option for 6AU1810-1HA31-1XA0 STARTER V5.1 SP1, delivery on DVD, incl. floating license

- ► IOT2000
- ► Industrial Controls
- ▶ Engineering SW
- SIMIT Simulation
- ▶ Basic Automation
- ► SIMATIC Controller
- Distributed IOs
- ▶ Operator control & monitoring
- Process Automation
- Industrial Communication
- Industrial Identification
- Drive Technology
- ► SinuTrain SW
- PLM Software
- ▶ WorldSkills

7 TIA Portal

▶ Ordering Inform.



## SINAMICS S120 servo drive 1 AC 230 V

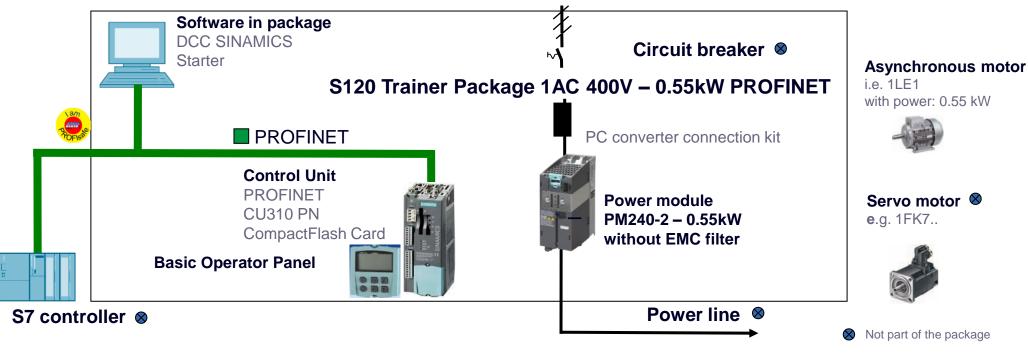
# Optional hardware and software

Power supply SITOP PSU6200 24 V/20 A stabilized power supply input: 120 - 230 V AC (110 - 240 V DC) output: 24 V DC/20 A	6EP3336-7SB00-3AX0	► IOT2000
with diagnostic interface		Industrial Controls
		► Engineering SW
Cable	6XV1870-3RH60	► SIMIT Simulation
SIMATIC NET Industrial ETHERNET, TP XP Cord RJ45/RJ45, CAT 6 A, crossed TP cable 4x2, length 6 m		► Basic Automation
		► SIMATIC Controller
Terminal module TM31 IO expansion For the SINAMICS S120; 12 DI, 2 DQ, 2 AI, 2 AQ	6SL3055-0AA00-3AA1	▶ Distributed IOs
		<ul><li>Operator control &amp; monitoring</li></ul>
Terminal module TM54F Safety IO For devices S120; fail-safe digital inputs and outputs	6SL3055-0AA00-3BA0	► Process Automation
		<ul><li>Industrial Communication</li></ul>
Signal line DRIVE-CLiQ cable IP20/IP20 length: 0.95 meters	6SL3060-4AA10-0AA0	<ul><li>Industrial Identification</li></ul>
CIZED		▶ Drive Technology
SIZER Configuration tool for Siemens drives	6SL3070-0AA00-0AG0	► SinuTrain SW
Comiguration too for Clomene anvec		► PLM Software
		▶ WorldSkills



► Ordering Inform.

## SINAMICS S120 servo drive 3 AC 400 V



System requirements: WIN10 (64-bit) Prof. 1909, 2004, 20H2/Enterprise 1909, 2004, 20H2/IoT Enterprise 2016 LTSB / 2019 LTSC

Sales note: Schools, colleges and universities, for in-house vocational training departments

Technical note: None available

Order number: 6SL3080-8AE01-0AA0

Note: Your local technical consultant will support you in selecting a motor

- ► IOT2000
- Industrial Controls
- ▶ Engineering SW
- SIMIT Simulation
- ▶ Basic Automation
- ► SIMATIC Controller
- Distributed IOs
- ▶ Operator control & monitoring
- Process Automation
- Industrial Communication
- Industrial Identification
- Drive Technology
- ► SinuTrain SW
- PLM Software
- ▶ WorldSkills
- ▶ Ordering Inform.

## SINAMICS S120 servo drive 3 AC 400 V

1 x	SINAMICS power module PM240-2 unfiltered with integrated braking chopper 380-480 V 3 AC +10/-10% 47-63 Hz power high overload: 0.55kW at 200% 3 s, 150% 57 s, 100% 240 s; Ambient temperature -10 to +50 °C power low overload: 0.75kW at 150% 3 s, 110% 57 s, 100% 240 s; Ambient temperature -10 to +40 °C 196x 73x 165 (HxWxD), FSA degree of protection IP20, without control unit and operating unit, released as of CU firmware V4.6	6SL3210-1PE12-3UL1
1 x	SINAMICS S120 Control Unit CU310-2 PN with PN interface without CompactFlash card	6SL3040-1LA01-0AA0
1 x	SINAMICS S120 CompactFlash card without performance extension including Certificate of License V5.1 F01: 1 x License Safety Integrated extended functions	6SL3054-0FB00-1BA0- Z:F01
1 x	SINAMICS S120 Basic Operator Panel BOP20 for electronic controls, two-line display, 6 keys for parameter setting and diagnostic information, suitable for control units CU305, CU310, CU320	6SL3055-0AA00-4BA0
1 x	Software on DL-DVD: STARTER commissioning tool for SINAMICS and MICROMASTER V5.1 SP2 HF1 DL-DVD for Windows Server 2016, 2019 (64-bit) Windows 10 pro/Enterprise (64-bit) Windows 10 Enterprise 2016 LTSB, 2019 LTSC de, en, es, fr and it also includes all SSPs released by the SSP	6SL3072-0AA00-0AG0

- ▶ IOT2000
- ► Industrial Controls
- ▶ Engineering SW
- ▶ SIMIT Simulation
- ▶ Basic Automation
- ► SIMATIC Controller
- ▶ Distributed IOs
- ► Operator control & monitoring
- ▶ Process Automation
- Industrial Communication
- ▶ Industrial Identification

6AU1810-1HA31-1XA0

**7** TIA Portal

- ▶ Drive Technology
- ► SinuTrain SW
- ▶ PLM Software
- ▶ WorldSkills
- ▶ Ordering Inform.



1 x SINAMICS Engineering System SINAMICS DCC V3.1 SP1, full license DCC for SINAMICS, option for

STARTER V5.1 SP1, delivery on DVD, including floating license

## SINAMICS S120 servo drive 3 AC 400 V

# Optional hardware and software

Power supply SITOP PSU6200 24 V/20 A stabilized power supply input: 120 - 230 V AC (110 - 240 V DC) output: 24 V DC/20 A	6EP3336-7SB00-3AX0	► IOT2000
with diagnostic interface		<ul><li>Industrial Controls</li></ul>
		Engineering SW
Cable	6XV1870-3RH60	<ul><li>SIMIT Simulation</li></ul>
MATIC NET Industrial ETHERNET, TP XP Cord RJ45/RJ45, CAT 6 A, crossed TP cable 4x2, length 6 m		Basic Automation
Tamping Laboratory and the TMOA IO and any income		► SIMATIC Controller
<b>Terminal module TM31 IO expansion</b> For the SINAMICS S120; 12 DI, 2 DQ, 2 AI, 2 AQ	6SL3055-0AA00-3AA1	▶ Distributed IOs
		<ul><li>Operator control &amp; monitoring</li></ul>
Terminal module TM54F Safety IO For devices S120; fail-safe digital inputs and outputs	6SL3055-0AA00-3BA0	▶ Process Automation
		<ul><li>Industrial Communication</li></ul>
Signal line DRIVE-CLiQ cable IP20/IP20 length: 0.95 meters	6SL3060-4AA10-0AA0	<ul><li>Industrial Identification</li></ul>
SIZER		Drive Technology
Configuration tool for Siemens drives	6SL3070-0AA00-0AG0	► SinuTrain SW
		► PLM Software
		▶ WorldSkills



► Ordering Inform.

### SINAMICS S210 servo drive 1 AC 230 V

- 1 x SINAMICS S210 SD card 512 MB incl. licensing (Certificate of License) V5.2 HF7 F01: 1 X Safety license DBSI
- 1 x Single cable connection prefabricated 4G0.75+2x0.5+4x0.2 C Speed connect connector; M17 cores with end sleeve; Data cable with IX connector UL/CSA DESINA MOTION-CONNECT 500 Dmax=10.5 mm, length(m) = 0 + 0 + 2 + 0
- 1 x SIMOTICS S-1FK2 HD servo motor M0=1.27 Nm; PN = 0.6 kW at nN=6000 rpm (380-480 V); PN = 0.4 kW at nN=3000 rpm (200-240 V); with holding brake; degree of protection IP64; shaft D19x40 mm with feather key; absolute encoder 22-bit + 12-bit multi-turn (encoder AM22DQC); with OCC interface; Connector size M17, rotatable:
- 1 x SINAMICS S210 input voltage: 200-240V 1AC; -10%/+10%; 5.0A; 45-66Hz; output voltage: 0-input V; 2.4A; 0-550 Hz; motor: 0.4 kW; degree of protection: IP20; frame size B; 55 x 170 x 170 (WxHxD)









6SL3054-4FC00-2BA0-Z F01

6FX5002-8QN08-1AC0

1FK2104-4AK10-1MA0

6SL3210-5HB10-4UF0

- WIN10 (64-bit) Prof. 1909, 2004, 20H2/Enterprise 1909, 2004, System requirements:
  - 20H2/IoT Enterprise 2016 LTSB / 2019 LTSC

Sales note: Schools, colleges and universities, for in-house vocational training departments

Order number: 6SL3080-8AB01-0AA0





- ► IOT2000
- Industrial Controls
- ► Engineering SW
- SIMIT Simulation
- Basic Automation
- ► SIMATIC Controller
- Distributed IOs
- ▶ Operator control & monitoring
- Process Automation
- Industrial Communication
- Industrial Identification
- Drive Technology
- ► SinuTrain SW
- ▶ PLM Software
- ▶ WorldSkills
- ▶ Ordering Inform.



### SINAMICS S210 servo drive 1 AC 230 V

- 1 x SINAMICS S210 SD card 512 MB incl. licensing (Certificate of License) V5.2 HF7 F01: 1 X SAFETY LICENSE DBSI:
- 6SL3054-4FC00-2BA0-Z F01
- 1 x Single cable connection prefabricated 4G0.75+2x0.5+4x0.2 C SPEED-CONNECT connector; M17 cores with end sleeve; data cable with IX connector; UL/CSA DESINA MOTION-CONNECT 500 Dmax=10.5 mm, length(m) = 0 + 0 + 2 + 0

6FX5002-8QN08-1AC0

1 x SIMOTICS S-1FK2 HD servo motor M0=1.27 Nm; PN = 0.6 kW at nN=6000 rpm (380-480 V); PN = 0.4 kW At nN=3000 rpm (200-240 V); With holding brake; Degree of protection IP64; Shaft D19x40 mm with feather key; Absolute encoder 22-bit + 12-bit multi-turn (encoder AM22DQC); With OCC interface; Connector size M17, rotatable:

SIMIT Simulation 1FK2104-4AK10-1MA0

1 x SINAMICS S210 input voltage: 200-480 V 3AC; -10%/+10%; 1.6 A; 45-66 Hz; output voltage: 0-input V 1.2 A; 6SL3210-5HE10-4UF0 0-550 Hz; motor: 0.4 kW; degree of protection: IP20; frame size A; 50 x 270 x 220 (WxHxD)

Distributed IOs

Industrial

Industrial Identification

► IOT2000

Industrial Controls

► Engineering SW

Basic Automation

► SIMATIC Controller

▶ Operator control & monitoring

Process Automation







System requirements: WIN10 (64-bit) Prof. 1909, 2004, 20H2/Enterprise 1909, 2004,

20H2/IoT Enterprise 2016 LTSB / 2019 LTSC

Sales note: Schools, colleges and universities, for in-house vocational training departments

Order number: 6SL3080-8AE01-0AA0 Drive Technology

Communication

- ► SinuTrain SW
- PLM Software
- ▶ WorldSkills
- ▶ Ordering Inform.

# **SinuTrain software** Overview



Product	HW sets	Licenses S	SW version	Order number (MLFB)	Note
SinuTrain SINUMERIK Operate V4.5/V4.7/V4.8/V4.9 siemens.com/sinutrain-downloads		Basic version		No time limit	NEW
SinuTrain Trainer Package for SINUMERIK Operate		6+40	V4.9	MCS5370 / 6FC5870-1TC46-0YA0	NEW ★
SinuTrain student licenses for SINUMERIK Operate – 300 hours		20	V4.9	MCS5360 / 6FC5870-1SC46-0YA0	NEW ★
SinuTrain Trainer Package for SINUMERIK Operate		6+40	V4.8	MCS40552 / 6FC5870-1TC45-0YA0	NEW ★
SinuTrain student licenses for SINUMERIK Operate – 300 hours		20	V4.8	MCS40573 / 6FC5870-1SC45-0YA0	NEW ★
SinuTrain Trainer Package for SINUMERIK Operate		6+40	V4.7	MCS4055 / 6FC5870-1TC43-0YA0	NEW ★
SinuTrain student licenses for SINUMERIK Operate – 300 hours		20	V4.7	MCS4057 / 6FC5870-1SC43-3YA0	NEW ★
SinuTrain Trainer Package for SINUMERIK Operate		6+40	V4.5	MCS40551 / 6FC5870-1TC41-0YA0	NEW ★
SinuTrain student licenses for SINUMERIK Operate – 300 hours		20	V4.5	MCS40571 / 6FC5870-1SC41-0YA0	NEW ★

#### SinuTrain software

- In Sales by SISW MC Sales only with Maintenance. Order no. MCS\*\*\*\* → Requests for offers should be sent to: mcmts.software.plm@siemens.com
- In Sales by Siemens Sales without Maintenance. Article number 6FC5870-1 → Requests for offers should be sent to Standard Siemens Sales
- ★ Only for schools, colleges and universities



## **Download**

## SinuTrain for SINUMERIK Operate V4.5/V4.7/V4.8/V4.9 – Basic

The SinuTrain offline programming station brings SINUMERIK Operate, including animated machine control panel, to the PC to create a training situation that is very similar to reality thus facilitating easy transition from a training environment to a practical environment. This powerful tool allows NC programs to be programmed offline on a PC in an environment that is close to reality; these NC programs can then be directly transferred to the CNC.

Using SINUMERIK Operate and the original SINUMERIK CNC kernel, all operating and programming operations can be used and CNC programs executed without any restrictions. SinuTrain for SINUMERIK Operate V4.5/V4.7/V4.8/V4.9 - Basic is based on the respective SINUMERIK CNC firmware.

The control-identical NC programming station – as a basic version with no time limit –



- ► IOT2000
- Industrial Controls
- ▶ Engineering SW
- SIMIT Simulation
- ▶ Basic Automation
- ▶ SIMATIC Controller
- Distributed IOs
- ▶ Operator control & monitoring
- **Process Automation**
- Industrial Communication
- Industrial Identification
- Drive Technology
- ► SinuTrain SW
- PLM Software
- ▶ WorldSkills
- ▶ Ordering Inform.

available as a free download.

System requirements: See siemens.com/sinutrain-downloads

Schools, colleges and universities, not for in-house vocational training departments Sales note:

Technical note: Basic version – with no time limit

Order number: Download siemens.com/sinutrain-downloads

# Academic Bundle – SinuTrain for SINUMERIK Operate V4.9

6 x license for SinuTrain Operate V4.9

 $2 \times 20$  license for SinuTrain Student Package Operate V4.9 – for students

Software subject to time limit of 300 hours with authorization

The packages contain only the licenses. The software itself must be downloaded as demo version – see siemens.com/sinutrain-downloads – and the licenses must then be installed



1 Package Full Licenses



2 Packages Student Licenses MCS5360/ 6FC5870-1SC46-0YA0

- ► IOT2000
- ▶ Industrial Controls
- ► Engineering SW
- ▶ SIMIT Simulation
- Basic Automation
- ▶ SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Process Automation
- Industrial Communication
- Industrial Identification
- Drive Technology
- ▶ SinuTrain SW
- PLM Software
- WorldSkills
- ► Ordering Inform.

#### Maintenance

Basic maintenance services. The software maintenance services include software updates and phone support for the software. The costs are incurred annually.

System requirements: Windows 10 (64-bit; Mobile and Mobile Enterprise are not supported)

Sales note: Schools, colleges and universities, not for in-house vocational training departments

Depending on the country, the package is sold only with Maintenance (currently in DE, AT, CN, US, IT, TW)

or only without Maintenance

For quotation requests in general, send email to: mcmts.software.plm@siemens.com

Technical note: Suitable for use with SINUMERIK 840D SL, SINUMERIK 828D/828D BASIC with CNC software V4.8

Order number: MCS5370 (incl. Maintenance) 6FC5870-1TC46-0YA0 (without Maintenance)

# Academic Bundle – Student Package for SinuTrain SINUMERIK Operate V4.9

1 x 20 license for **SinuTrain Operate V4.9** – **for students**Software subject to time limit of 300 hours with authorization



1 Package Student Licenses ► IOT2000

Industrial Controls

► Engineering SW

▶ SIMIT Simulation

Basic Automation

► SIMATIC Controller

Distributed IOs

Operator control & monitoring

▶ Process Automation

Industrial Communication

Industrial Identification

Drive Technology

▶ SinuTrain SW

PLM Software

▶ WorldSkills

► Ordering Inform.

The packages contain only the licenses. The software itself must be downloaded as demo version – see siemens.com/sinutrain-downloads – and the licenses must then be installed

#### **Maintenance**

Basic maintenance services. The software maintenance services include software updates and phone support for the software. The costs are incurred annually.

System requirements: Windows 10 (64-bit; Mobile and Mobile Enterprise are not supported)

Sales note: Schools, colleges and universities, not for in-house vocational training departments

Depending on the country, the package is sold only with Maintenance (currently in DE, AT, CN, US, IT, TW)

or only without Maintenance

For quotation requests in general, send email to: <a href="mailto:mcmts.software.plm@siemens.com">mcmts.software.plm@siemens.com</a>

Technical note: Suitable for use with SINUMERIK 840D SL, SINUMERIK 828D/828D BASIC with CNC software V4.8

Order number: MCS5360 (incl. Maintenance) 6FC5870-1SC46-0YA0 (without Maintenance)

# **Academic Bundle –**SinuTrain for SINUMERIK Operate V4.8

6 x license for SinuTrain Operate V4.8

1 x 20 license for **Operate V4.8** – **for students**Software subject to time limit of 300 hours with authorization

The packages contain only the licenses. The software itself must be downloaded as demo version – see siemens.com/sinutrain-downloads – and the licenses must then be installed



1 Package Full Licenses



2 Packages Student Licenses MCS40573/ 6FC5870-1SC45-0YA0

- ► IOT2000
- ▶ Industrial Controls
- ► Engineering SW
- ▶ SIMIT Simulation
- Basic Automation
- ▶ SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Process Automation
- Industrial Communication
- Industrial Identification
- Drive Technology
- ▶ SinuTrain SW
- PLM Software
- ▶ WorldSkills
- ▶ Ordering Inform.

#### Maintenance

Basic maintenance services. The software maintenance services include software updates and phone support for the software. The costs are incurred annually.

System requirements: Windows 7 SP1 (32-bit and 64-bit; Starter, Web Edition and Embedded are not supported)

Windows 8.1 (32-bit and 64-bit; RT Edition is not supported)

Windows 10 (64-bit; Mobile and Mobile Enterprise are not supported)

Sales note: Schools, colleges and universities, not for in-house vocational training departments

Depending on the country, the package is sold only with Maintenance (currently in DE, AT, CH, US, IT, TW)

or only without Maintenance

For quotation requests in general, send email to: <a href="mailto:mcmts.software.plm@siemens.com">mcmts.software.plm@siemens.com</a>

Technical note: Suitable for use with SINUMERIK 840D SL, SINUMERIK 828D/828D BASIC with CNC software V4.8

Order number: MCS40552 (incl. Maintenance) 6FC5870-1SC45-0YA0 (without Maintenance)

# Academic Bundle – Student Package for SinuTrain SINUMERIK Operate V4.8

1 x 20 license for **SinuTrain Operate V4.8** – **for students** Software subject to time limit of 300 hours with authorization

6FC5870-1SC45-0YA0



1 Package Student Licenses ► IOT2000

▶ Industrial Controls

► Engineering SW

► SIMIT Simulation

Basic Automation

► SIMATIC Controller

Distributed IOs

Operator control & monitoring

Process Automation

Industrial Communication

Industrial Identification

Drive Technology

▶ SinuTrain SW

PLM Software

▶ WorldSkills

► Ordering Inform.

The packages contain only the licenses. The software itself must be downloaded as demo version – see siemens.com/sinutrain-downloads – and the licenses must then be installed

#### Maintenance

Basic maintenance services. The software maintenance services include software updates and phone support for the software. The costs are incurred annually.

System requirements: Windows 7 SP1 (32-bit and 64-bit; Starter, Web Edition and Embedded are not supported)

Windows 8.1 (32-bit and 64-bit; RT Edition is not supported)

Windows 10 (64-bit; Mobile and Mobile Enterprise are not supported)

Sales note: Schools, colleges and universities, not for in-house vocational training departments

Depending on the country, the package is sold only with Maintenance (currently in DE, AT, CN, US, IT, TW)

or only without Maintenance

For quotation requests in general, send email to: <a href="mailto:mcmts.software.plm@siemens.com">mcmts.software.plm@siemens.com</a>

Technical note: Suitable for use with SINUMERIK 840D SL, SINUMERIK 828D/828D BASIC with CNC software V4.8

Order number: MCS40573 (incl. Maintenance) 6FC5870-1SC45-0YA0 (without Maintenance)

# Academic Bundle – SinuTrain for SINUMERIK Operate V4.7

6 x license for SinuTrain Operate V4.7

2 x 20 license for SinuTrain Operate V4.7 – for students

Software subject to time limit of 300 hours with authorization

The packages contain only the licenses. The software itself must be downloaded as demo version – see siemens.com/sinutrain-downloads – and the licenses must then be installed



1 Package Full Licenses



2 Packages Student Licenses MCS4057/ 6FC5870-1SC43-0YA0

- ► IOT2000
- ▶ Industrial Controls
- ► Engineering SW
- ▶ SIMIT Simulation
- Basic Automation
- ▶ SIMATIC Controller
- Distributed IOs
- Operator control & monitoring
- Process Automation
- Industrial Communication
- Industrial Identification
- Drive Technology
- ▶ SinuTrain SW
- PLM Software
- WorldSkills
- Ordering Inform.

#### Maintenance

Basic maintenance services. The software maintenance services include software updates and phone support for the software. The costs are incurred annually.

System requirements: Windows 7 SP1 (32-bit and 64-bit; Starter, Web Edition and Embedded are not supported)

Windows 8.1 (32-bit and 64-bit; RT Edition is not supported)

Windows 10 (64-bit; Mobile and Mobile Enterprise are not supported)

Sales note: Schools, colleges and universities, not for in-house vocational training departments

Depending on the country, the package is sold only with Maintenance (currently in DE, AT, CN, US, IT, TW)

or only without Maintenance

For quotation requests in general, send email to: <a href="mailto:mcmts.software.plm@siemens.com">mcmts.software.plm@siemens.com</a>

Technical note: Suitable for use with SINUMERIK 840D SL, SINUMERIK 828D/828D BASIC with CNC software V4.7 SP4

Order number: MCS4055 (incl. Maintenance) 6FC5870-1TC43-0YA0 (without Maintenance)

# Academic Bundle – Student Package for SinuTrain SINUMERIK Operate V4.7

1 x 20 license for **SinuTrain Operate V4.7** – **for students** Software subject to time limit of 300 hours with authorization

6FC5870-1SC43-3YA0



1 Package Student Licenses ► IOT2000

▶ Industrial Controls

► Engineering SW

▶ SIMIT Simulation

Basic Automation

► SIMATIC Controller

Distributed IOs

Operator control & monitoring

Process Automation

Industrial Communication

Industrial Identification

Drive Technology

▶ SinuTrain SW

PLM Software

WorldSkills

► Ordering Inform.

The packages contain only the licenses. The software itself must be downloaded as demo version – see siemens.com/sinutrain-downloads – and the licenses must then be installed

#### Maintenance

Basic maintenance services. The software maintenance services include software updates and phone support for the software. The costs are incurred annually.

System requirements: Windows 7 SP1 (32-bit and 64-bit; Starter, Web Edition and Embedded are not supported)

Windows 8.1 (32-bit and 64-bit; RT Edition is not supported)

Windows 10 (64-bit; Mobile and Mobile Enterprise are not supported)

Sales note: Schools, colleges and universities, not for in-house vocational training departments

Depending on the country, the package is sold only with Maintenance (currently in DE, AT, CN, US, IT, TW)

or only without Maintenance

For quotation requests in general, send email to: <a href="mailto:mcmts.software.plm@siemens.com">mcmts.software.plm@siemens.com</a>

Technical note: Suitable for use with SINUMERIK 840D SL, SINUMERIK 828D/828D BASIC with CNC software V4.7 SP4

Order number: MCS4057 (incl. Maintenance) 6FC5870-1SC43-3YA0 (without Maintenance)

# Academic Bundle – SinuTrain for SINUMERIK Operate V4.5

6 x license for SinuTrain Operate V4.5

2 x 20 license for SinuTrain Operate V4.5 – for students

Software subject to time limit of 300 hours with authorization

The packages contain only the licenses. The software itself must be downloaded as demo version – see siemens.com/sinutrain-downloads - and the licenses must then be installed



1 Package Full Licenses



2 Packages Student Licenses MCS40571/ 6FC5870-1SC41-0YA0

- ► IOT2000
- Industrial Controls
- Engineering SW
- SIMIT Simulation
- Basic Automation
- ▶ SIMATIC Controller
- Distributed IOs
- ▶ Operator control & monitoring
- **Process Automation**
- Industrial Communication
- Industrial Identification
- Drive Technology
- ▶ SinuTrain SW
- PLM Software
- ▶ WorldSkills
- ▶ Ordering Inform.

#### Maintenance

Basic maintenance services. The software maintenance services include software updates and phone support for the software. The costs are incurred annually.

Windows 7 SP1 (32-bit and 64-bit; Starter, Web Edition and Embedded are not supported) System requirements:

Windows 8.1 (32-bit and 64-bit; RT Edition is not supported)

Windows 10 (64-bit; Mobile and Mobile Enterprise are not supported)

Schools, colleges and universities, not for in-house vocational training departments Sales note:

Depending on the country, the package is sold only with Maintenance (currently in DE, AT, CN, US, IT, TW)

or only without Maintenance

For quotation requests in general, send email to: mcmts.software.plm@siemens.com

Technical note: Suitable for use with SINUMERIK 840D SL, SINUMERIK 828D/828D BASIC with CNC software V4.5

Order number: MCS40551 (incl. Maintenance) 6FC5870-1TC41-0YA0 (without Maintenance)

# Academic Bundle – Student Package for SinuTrain SINUMERIK Operate V4.5

1 x 20 license for **SinuTrain Operate V4.5** – **for students** Software subject to time limit of 300 hours with authorization

6FC5870-1SC41-0YA0



1 Package Student Licenses ► IOT2000

▶ Industrial Controls

► Engineering SW

▶ SIMIT Simulation

Basic Automation

► SIMATIC Controller

Distributed IOs

Operator control & monitoring

Process Automation

Industrial Communication

Industrial Identification

Drive Technology

▶ SinuTrain SW

PLM Software

▶ WorldSkills

► Ordering Inform.

The packages contain only the licenses. The software itself must be downloaded as demo version – see siemens.com/sinutrain-downloads – and the licenses must then be installed

#### **Maintenance**

Basic maintenance services. The software maintenance services include software updates and phone support for the software. The costs are incurred annually.

System requirements: Windows 7 SP1 (32-bit and 64-bit; Starter, Web Edition and Embedded are not supported)

Windows 8.1 (32-bit and 64-bit; RT Edition is not supported)

Windows 10 (64-bit; Mobile and Mobile Enterprise are not supported)

Sales note: Schools, colleges and universities, not for in-house vocational training departments

Depending on the country, the package is sold only with Maintenance (currently in DE, AT, CN, US, IT, TW)

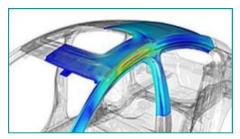
or only without Maintenance

For quotation requests in general, send email to: <a href="mailto:mcmts.software.plm@siemens.com">mcmts.software.plm@siemens.com</a>

Technical note: Suitable for use with SINUMERIK 840D SL, SINUMERIK 828D/828D BASIC with CNC software V4.5

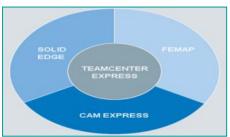
Order number: MCS40571 (incl. Maintenance) 6FC5870-1SC41-0YA0 (without Maintenance)

## Siemens Product Lifecycle Management (PLM) Software









### **PLM** software

NX, offers modern tools and technologies for product development. The latest version contains functions for increasing productivity in design, simulation and manufacturing.

**Technomatix**, software for the "Digital factory", offers highly functional solutions for the entire scope of the life cycle of your products with which companies can quickly find the best strategies for increasing productivity and reducing costs in manufacturing.

Teamcenter, supports bringing increasingly complex products to the market throughout the entire product life cycle, with simultaneous increases in productivity and optimized worldwide cooperation.

**Velocity Series**, a family of modular, pre-integrated software solutions for product life cycle management in small and medium-sized manufacturing companies.

The 2D/3D CAD software Solid Edge is a component of this software.

Solid Edge Highschool 
 Solid Edge students 
 Solid Edge Academic 
 Solid

#### **Contact partner**

NX MCD software - In DE/AT/CH contact mediation via SCE promoters

All other countries: www.siemens.com/plm/gaf

- ► IOT2000
- Industrial Controls
- ► Engineering SW
- SIMIT Simulation
- ▶ Basic Automation
- ► SIMATIC Controller
- Distributed IOs
- ▶ Operator control & monitoring
- **Process Automation**
- Industrial Communication
- Industrial Identification
- Drive Technology
- ► SinuTrain SW
- PLM Software
- ▶ WorldSkills
- ▶ Ordering Inform.



## **Partnership with WorldSkills**

## WorldSkills (WS) has been increasing the quality of vocational training for > 60 years





Since 2010, Siemens has been a global industry partner and product sponsor and provides the competitors for the WorldSkills competitions disciplines industrial control, electrical installations, polymechanics/automation and manufacturing team challenge with automation products, such as SIMATIC S7-1500 and LOGO!.

Core product for vocational World Cup Industrial Control 7



Siemens supports the world championships as well as selected continental/regional competitions.

Global Industry **Partner** 



Every two years, a world championship with > 1,000 competitors and > 200,000 visitors takes place.

London 2011, Leipzig 2013, São Paulo 2015, Abu Dhabi 2017, Kazan 2019, Shanghai 2022 ...

→ WorldSkills

Overview I Graphic

Industrial Communication

► IOT2000

► Industrial Controls

▶ Engineering SW

SIMIT Simulation

▶ Basic Automation

Distributed IOs

monitoring

► SIMATIC Controller

▶ Operator control &

Process Automation

- Industrial Identification
- Drive Technology
- ► SinuTrain SW
- PLM Software
- ▶ WorldSkills
- ▶ Ordering Inform.



## Important ordering information





#### A specific end use agreement is required to purchase Trainer Packages

This additional supplementary agreement for classroom use of SIMATIC software at research, development and training institutions must be signed by the respective educational institution and sent to Siemens.

Trainer Packages are released for delivery by SIEMENS AG, SCE Team global: fax: 49 (0)911-958-29105, email Siemens contact partners can find this declaration on the SCE Intranet Additional agreement.

#### A separate release/ordering process applies to the following products:

#### SinuTrain:.

- Sold only with Maintenance in DE/AT/CN/US/IT/TW → Order number MCS405... To request a quotation – send email to: <a href="mcmts.software.plm@siemens.com">mcmts.software.plm@siemens.com</a>
- Sold without Maintenance in all other countries → Order number 6FC5870-1... To request a quotation – contact Siemens Standard Sales

#### The following Trainer Packages can only be ordered from schools, colleges and universities:

- STEP 7 Professional and WinCC Advanced V17 SW for students 6ES7822-1AC07-4YA5
- SIMATIC CFC software for students 6ES7658-1EX58-0YS6
- SIMOTION SCOUT SW for students 6AU1810-1BE5 -1YA5 in preparation

6FC5870-1T.../MCS405...

6FC5870-1S.../MCS405...

- SinuTrain Operate
- SinuTrain Operate for students

- ► IOT2000
- Industrial Controls
- Engineering SW
- SIMIT Simulation
- Basic Automation
- ► SIMATIC Controller
- Distributed IOs
- ▶ Operator control & monitoring
- **Process Automation**
- Industrial Communication
- Industrial Identification
- Drive Technology
- ► SinuTrain SW
- PLM Software
- ▶ WorldSkills
- ▶ Ordering Inform.

SIFMFNS



## You can find additional information at SCE on the Internet

## **Siemens Automation Cooperates with Education** (SCE)



Teach and learn what matters! The digital transformation is in full swing. SCE provides educators with a comprehensive offering to convey industry 4.0/automation knowledge for academia and in-house vocational training, which can also be used by learners for self-study.

> For educators in industrial automation

> > SCE Support Finder



#### All SCE offers for trainees and students at a glance

Are you an trainee or student wanting to improve your knowledge on automation and Industry 4.0, and are you looking for an exciting traineeship, internship or job (alongside your studies)? Then we have just what you need - on our "Trainees and Students" page, you will find everything you require to delve deeper into the industrial world of tomorrow:

- · Learning material for targeted improvement of training- or study-relevant knowledge
- Industrial software for trying out and for practical exercises
- · Offers for jobs and internships alongside your training or studies

Take a look and expand your knowledge or apply!

Find out more



#### Learning & Training Documents

- Guided tour
- What's new?





Media Support

Products

Trainer Packages

SIMATIC IOT2000

#### WorldSkills

Cooperation



• Brochure - Magazine -

Trainees & Students

- Overview · Jobs & Caree
- Application Tips



Comprehensive support for educators and students on

the way to Industry 4.0

**Learning Systems** 



- **Technical Support**
- · Trial software / firmware Getting Started / WBT
- Products & System



Contact partner Overview

Subject to changes and errors. The information given in this document only contains general descriptions and/or performance features which may not always specifically reflect those described, or which may undergo modification in the course of further development of the products. The requested performance features are binding only when they are expressly agreed upon in the concluded contract.

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