



# NEOUSYS POC-400 Series Ultra-Compact Fanless Embedded Computer Installation Guide

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## POC-400 Series Quick Installation Guide



### Warning

- Only qualified service personnel should install and service this product to avoid injury.
- Observe all ESD procedures during installation to avoid damaging the equipment.

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## Preparing tools

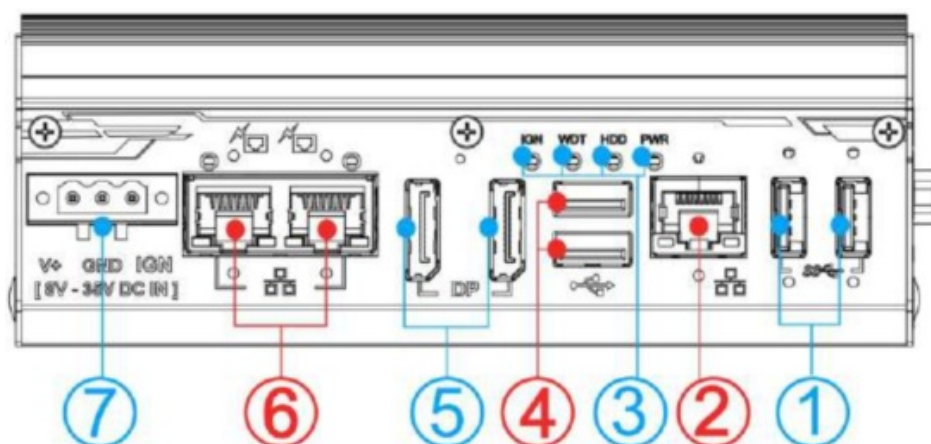
Unpack the equipment and make sure the following tools are available and the delivered contents are correct before you begin the installation procedure.

- 1-1. User-provided tools
- 1-2. Packing List

- Anti-static wrist wrap

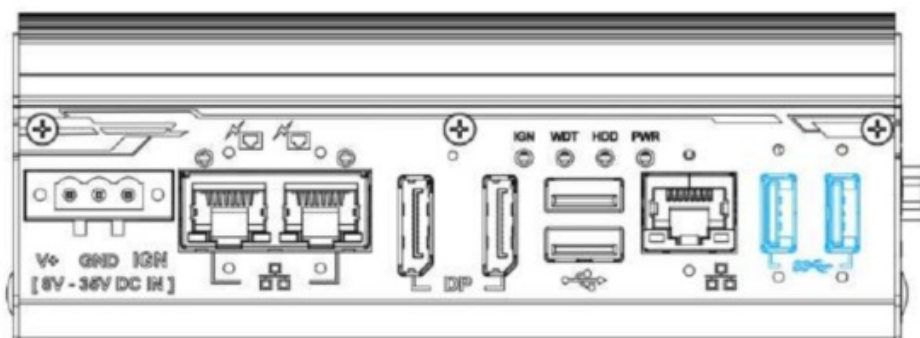
Item	Description	Quantity
1	POC-400 series system	1
2	Drivers & utility disc	1
3	3-pin pluggable terminal block	1
4	DIN-rail mount clip	1
5	Screw package	1

## POC-400 Series Front Panel



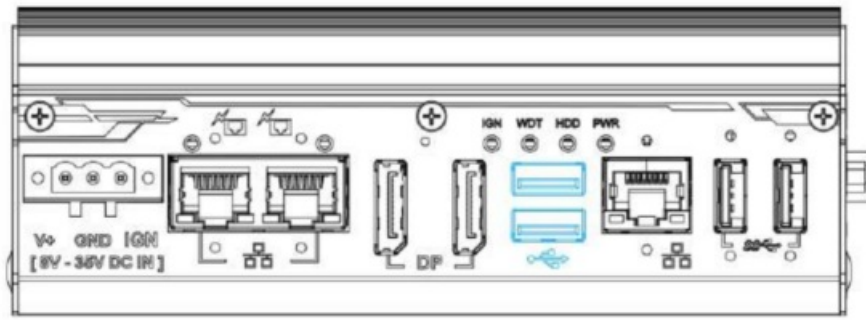
No.	Item	Description
1	USB 3.1 Gen 1 port	The USB 3.1 Gen1 ports support up to 5Gbd/s data transfer bandwidth and are backward compatible with USB 2.0/ 1.1/ 1.0.
2	2.5G Ethernet port	The Ethernet port offers up to 2.5Gb/s transfer bandwidth
3	System status LED	Four system LEDs, Power (PWR), Hard Disk Drive (HDD), Watchdog Timer (WDT), and Ignition control (IGN)
4	USB 2.0 port	The USB 2.0 ports offer up to 480Mbit/s bandwidth and are backward compatible with USB 1.1/ 1.0.
5	DisplayPort	The dual DisplayPort ports can support up to 4096 x 2160 @ 60Hz resolution each.
6	2.5G PoE+ (POC-400) 2.5G Ethernet ,mt/(PDC-410)	POC-400: 2.5Gb/s Power over Ethernet (PoE) port can provide both data and electric power to devices. POC-410: The Ethernet ports offer up to 2.5Gb/s transfer bandwidth per port.
9	3-pin terminal block (DC/ ignition input)	Compatible with DC power input from 8 to 35V, the terminal block can also be used for ignition signal input.

### USB3.1 Gen1



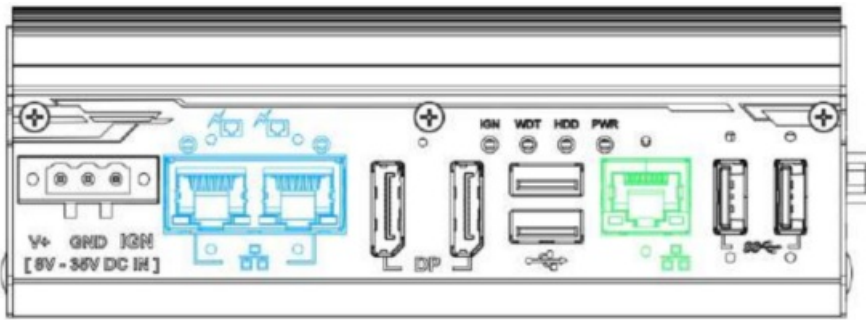
The two USB3. Gen1 ports are implemented by the native xHCI (eXtensible Host Controller Interface) controller and are backward compatible with USB 2.0, USB 1.1, and USB 1.0 devices. Legacy USB support is also provided so you can use a USB keyboard/ mouse in a DOS environment xHCI driver is supported natively in Windows 10.

### USB2.0 Port



The two USB2.0 ports are implemented via native xHCI (eXtensible Host Controller Interface) and are backward compatible with USB 1.1 and USB 1.0 devices. Legacy USB support is also provided so you can use a USB keyboard/ mouse in a DOS environment. xHCI driver is supported natively in Windows 10.

**2.5G Ethernet Port/ IEEE 802.3at Power over Ethernet**



The system offers three 2.5Gb Ethernet ports using an Intel® I225 GbE controller. From right to left, they are ports #1, #2, and #3. Ports #2 and #3 ( in blue ) also offer Power over Ethernet (PoE) connectivity. The LEDs on the RJ45 connector indicate connection status and speed. The PoE ports supply both power and data on a standard CAT-5/CAT-6 Ethernet cable. Acting as a PSE (Power Sourcing Equipment), compliant with IEEE 802.3at, each port delivers up to 25W to a Powered Device (PD). PoE automatically detects if the connected device is PoE PD or not, making it compatible with standard Ethernet devices as well.

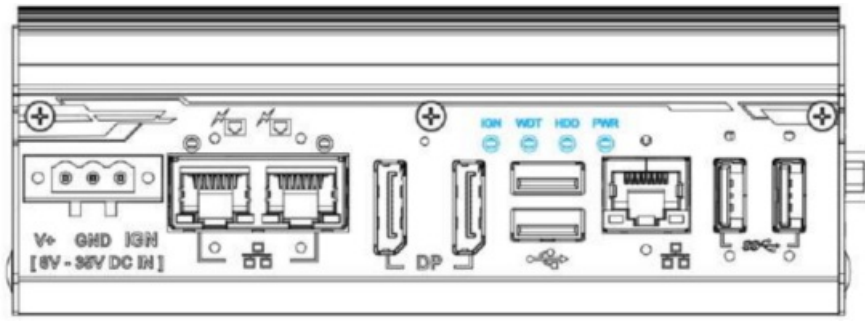
**Active/Link LED (Right)**

LED Color	Status	Description
Off or Yellow	Off	The Ethernet port is disconnected
	On	The Ethernet port is connected and no data transmission
	Flashing	The Ethernet port is connected and data is transmitting/receiving

**Sneed LED (Left)**

LED Color	Status	Description
Off, Yellow, Green, or Orange	Off	10/ 100 Mbps
	Green	1000 Mbps
	Yellow/ Orange	2500 Mbps

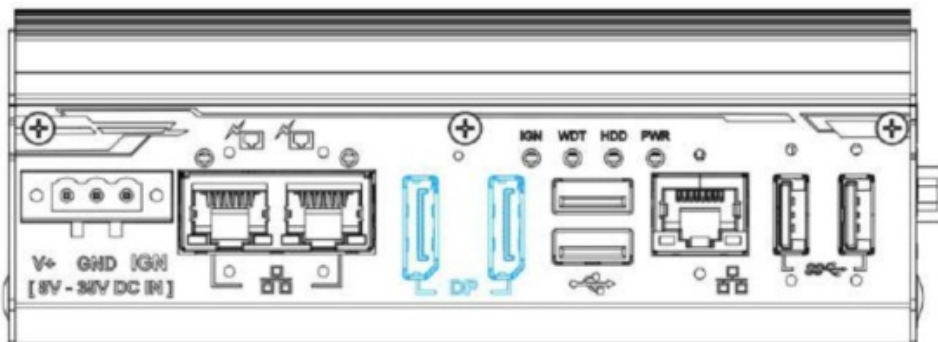
**System Status LED**



There are four LED indicators on the front panel: PWR, HDD, WDT, and IGN. The descriptions of these four LEDs are listed in the following table.

Indicator	Color	Description
PWR	Green	Power indicator, lid when the system is on
HDD	Red	Hard drive indicator, flashing when SATA HDD is active
WDT	Yellow	Watchdog timer indicator. flashing when watchdog timer has started
IGN	Yellow	The ignition option (MezIO-V20) is applied, and this LED is used to indicate ignition signal status (lid when IGN signal is applied).

## DisplayPort



The system has two DisplayPort (DP) outputs which are digital display interfaces that mainly connect video sources and carry audio to a display device. When connecting a DP, it can deliver up to 4K UHD (4096 x 2160 @ 60Hz) in resolution. The system is designed to support a passive DP adapter/ cable. You can connect to other display devices using a DP-to-HDMI cable or DP-to-DVI cable.



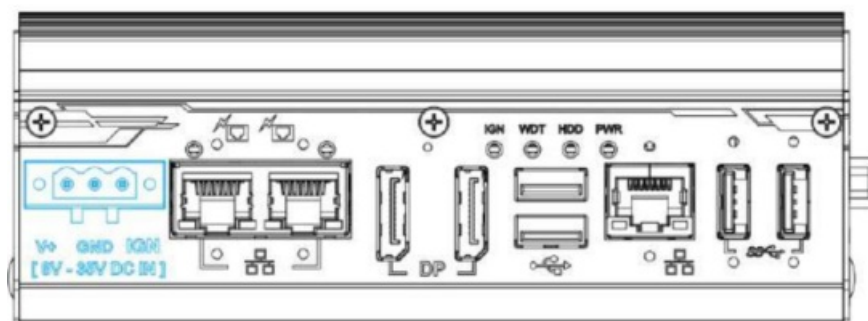
DP-to-HDMI

DP-to-DVI

The system supports dual independent display outputs by connecting display devices with DisplayPort connections. To support dual display outputs and achieve the best DisplayPort output resolution in Windows, you

need to install corresponding graphics drivers

### 3-pin Terminal Bloc

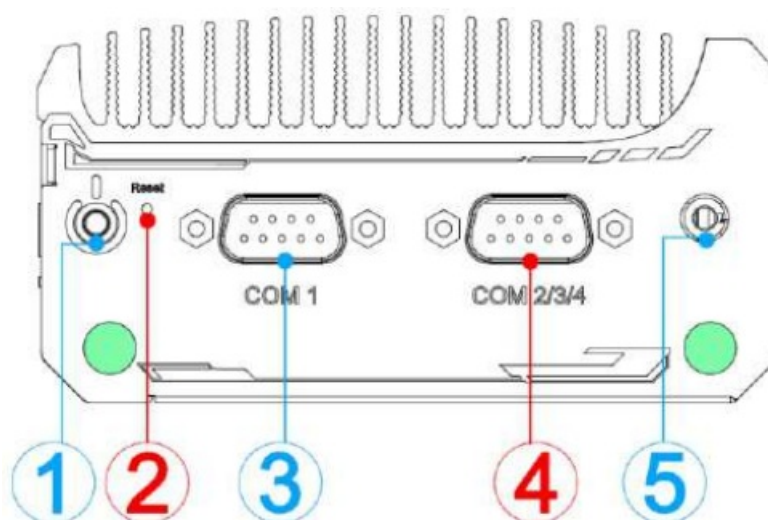


The system accepts a wide range of DC power input from 8 to 35V via a 3-pin pluggable terminal block, which is fit for field usage where DC power is usually provided. The screw clamping mechanism on the terminal block offers connection reliability when wiring DC power.

### Warning

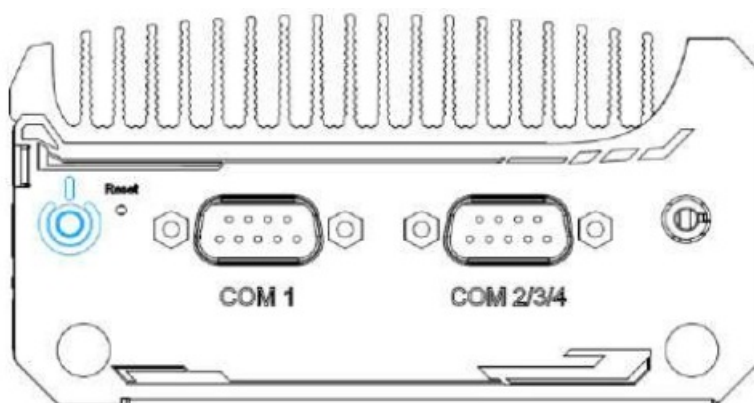
Please make sure the voltage of DC power is correct before you connect it to the system. Supplying a voltage over 35V will damage the system.

### OC-400 Series Top Panel



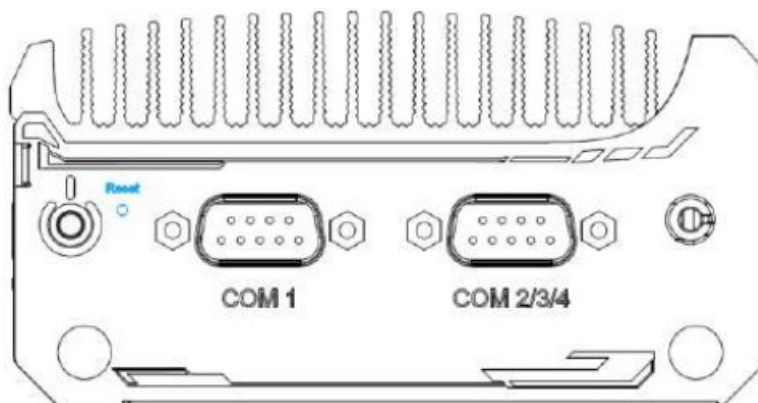
No.	Item	Description
1	Power button	Use this button to turn on or shut down the system.
2	Reset button	Use this button to manually reset the system.
3	COM port 1	Software programmable RS-232 422 485 port
4	COM port 2/ 3/4	Can be configured as: COM2: single RS-422/ 485 port COM2/ COM3/ COM4: three 3-wire RS-232 ports
5	3.5mm microphone-in/speaker-out jack	3.5mm jack for speaker-out or microphone-input.

### Power Button



The power button is a non-latched switch for ATX mode on/ off operation. Press to turn on the system, PWR LED should light up, and to turn it off, you can either issue a shutdown command in the OS, or just press the power button.

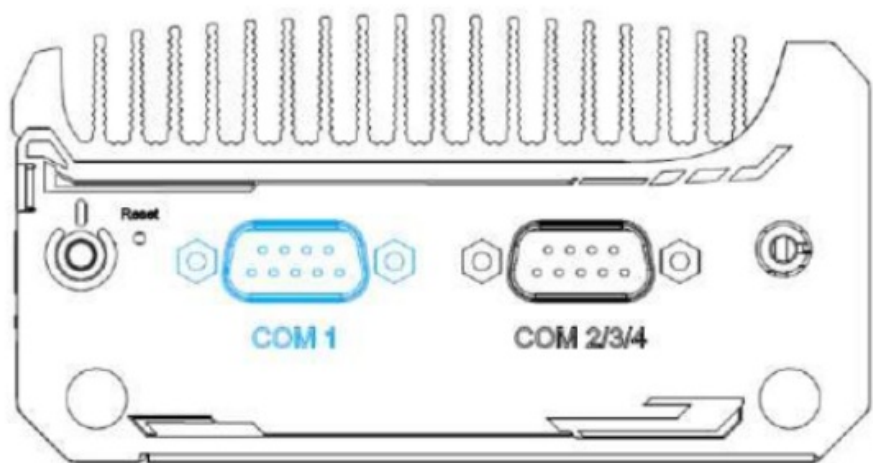
### Reset Button



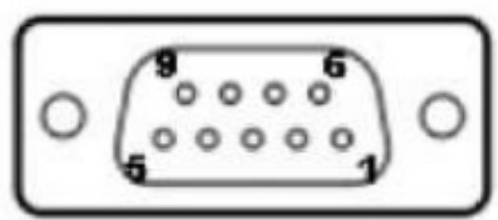
The reset button is used to manually reset the system in case of a system halt or malfunction. To avoid an unexpected reset, the button is purposely placed behind the panel. To reset, please use a pin-like object (eg. the

tip of a pen) to access the reset button.

COM1 Port



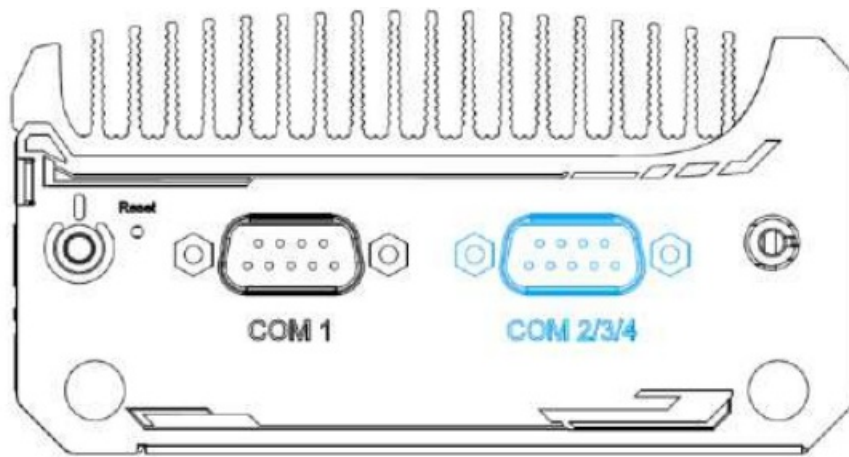
COM1 port operating mode (RS-232/ 422/ 485), slew rate, and termination can be set in the BIOS.



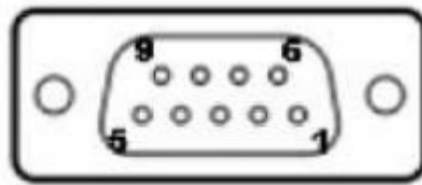
	COM1		
Pin#	RS-232 Mode	RS-422 Mode	RS-485 Mode (Two-wire 485)
1	DCD		
2	RX	422 TXD+	485 TXD+/RXD+
3	TX	422 RXD+	
4	DTR	422 RXD-	
5	GND	GND	GND
6	DSR		
7	RTS		
8	CTS	422 TXD-	485 TXD-/RXD-
9	RI		

COM2/3/4 Port





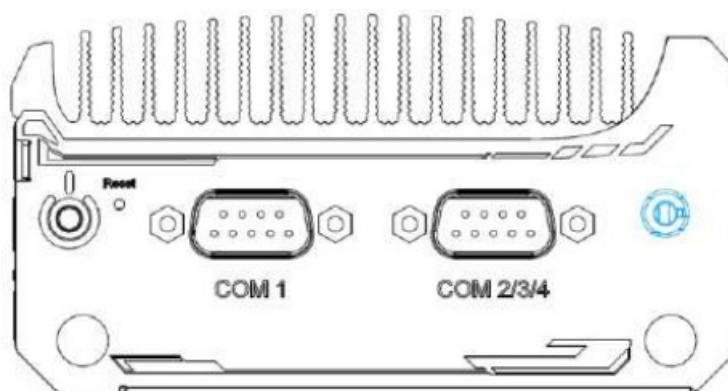
COM2/ 3/ 4 port can be configured in the BIOS as a single RS-422/ 485 port (COM2) or three 3-wire RS-232 ports (COM2/COM3/COM4).



	<b>3-port RS-232 COM2/ 3/4</b>		
Pint/	COM2	COM3	COM4
1			
2	RX		
3	TX		
4		TX	
5	GND	GND	GND
6		RX	
7			TX
8			RX
9			

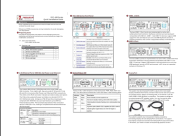
Single port RS-422/485		
Pint/	RS-422	RS-485
1		
	TxD+	TxD+/-
2		
		RxD+
3	RxD+	
4	RxD-	
5	GND	GND
6		
7		
8	TxD-	TxD-/ RxD-
9		

### 3.5mm Microphone-in/ Speaker-out Jack (Optional)



There is a single 3.5mm audio jack on the top panel. The port is used for microphone input as well as speaker output. To utilize the audio function in Windows, you need to install corresponding drivers.

### Documents / Resources

	<p><a href="#">NEOUSYS POC-400 Series Ultra-Compact Fanless Embedded Computer</a> [pdf] Installation Guide</p> <p>POC-400 Series, Ultra-Compact Fanless Embedded Computer</p>
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