epluse EE471 Temperature Sensor With Remote Probe User Manual

Contents

epluse EE471 Temperature Sensor With Remote Probe

Product Information

Specifications

- **Product Name:** Temperature Sensor with Remote Probe
- **Model:** EE471
- **Optimized for:** Reliable and accurate temperature monitoring
- **Typical Applications:** Building automation, HVAC, process control
- **Operating Class:** Class III supply (EU), Class 2 supply (NA)

Product Description

The EE471 Temperature Sensor with Remote Probe is designed for precise temperature monitoring in various applications such as building automation, HVAC, and process control. The device comes with a remote probe for flexible installation options.

Dimensions

The dimensions of the EE471 sensor are detailed below:

- EE471 Sensor: [Dimensions]

Electrical Connection

The device is intended to be connected to a Class III supply (EU) or Class 2 supply (NA) for proper operation. Ensure that the supply voltage is not applied to the RS485 data lines to prevent damage.

Product Usage Instructions

Safety Instructions

It is crucial to follow the safety instructions provided to ensure proper functioning and longevity of the device:

- Avoid unnecessary mechanical stress and improper use of the device.
- Installation, electrical connection, maintenance, and commissioning should only be done by qualified personnel.
- Use the temperature sensor as intended and adhere to all technical specifications.
- Do not supply voltage to the RS485 data lines.

Intended Use
The EE471 temperature sensor with remote probe is optimized for accurate temperature monitoring within the specified range. Follow the mounting and installation instructions provided in the user manual for optimal performance.

General Information

This user manual serves to ensure proper handling and optimal functioning of the device. The user manual shall be read before commissioning the equipment and it shall be provided to all staff involved in transport, installation, operation, maintenance and repair. E+E Elektronik Ges.m.b.H. does not accept warranty and liability claims neither upon this publication nor in case of improper treatment of the described products.
This document may contain technical inaccuracies and typographical errors. The content will be revised on a regular basis. These changes will be implemented in later versions. The described product(s) can be improved and changed at any time without prior notice.

The user manual may not be used for the purposes of competition without the written consent of E+E Elektronik Ges.m.b.H. and may not be forwarded to third parties. Copies may be made for internal purposes. All information, technical data and diagrams included in these instructions are based on the information available at the time of writing.

PLEASE NOTE
Find this document and further product information on our website at **www.epluse.com/ee471**.

Explanation of Warning Notices and Symbols

Safety precautions
Precautionary statements warn of hazards in handling the device and provide information on their prevention.

The safety instruction labeling is classified by hazard severity and is divided into the following groups:

Danger indicates hazards for persons. If the safety instruction marked in this way is not followed, the hazard will verly likely result in severe injury or death.

Warning indicates hazards for persons. If the safety instruction marked in this way is not followed, there is a risk of injury or death.

Caution indicates hazards for persons. If the safety instruction marked in this way is not followed, minor or moderate injuries may occur.

Notice signals danger to objects or data. If the notice is not observed, damage to property or data may occur.

Informational notes
Informational notes provide important information which stands out due to its relevance.

INFO
The information symbol indicates tips on handling the device or provides additional information on it. The information is useful for reaching optimal performance of the device.
The title field can deviate from “INFO” depending on the context. For instance, it may also read “PLEASE NOTE”.

Safety Instructions

General Safety Instructions

NOTICE
Improper handling of the device may result in its damage.

- Avoid any unnecessary mechanical stress and inappropriate use.
- Installation, electrical connection, maintenance and commissioning shall be performed by qualified personnel only.
- Use the temperature sensors only as intended and observe all technical specifications.
- The device is designed for operation with class III supply (EU) and class 2 supply (NA).
- Do not apply the supply voltage to the RS485 data lines.

Intended Use
The EE471 temperature sensor with remote probe is optimised for reliable and accurate temperature monitoring within the specified temperature range (refer to datasheet **www.epluse.com/ee471**).Typical applications for the sensor are building automation, HVAC and process control.

Apply the mounting and installation methods described in chapter 4 Mounting and Installation.

WARNING
The manufacturer cannot be held responsible for damages as a result of incorrect handling, installation, and maintenance of the device.

- Do not use the temperature sensors in explosive atmosphere or for measurement of aggressive gases.
- This device is not appropriate for safety, emergency stop or other critical applications where device malfunction or failure could cause injury to human beings.
- The device may not be manipulated with tools other than specifically described in this manual.

NOTICE
Failing to follow the instructions in this user manual may lead to measurement inaccuracy and device failures.

- The EE471 may only be operated under the conditions described in this user manual and within the specification included in chapter 8 Technical Data.
- Unauthorised product modification leads to loss of all warranty claims. Modification may be accomplished only with an explicit permission of E+E Elektronik Ges.m.b.H.!

Mounting, Start-up and Operation
The EE471 has been produced under state of the art manufacturing conditions, has been thoroughly tested and has left the factory after fulfilling all safety criteria. The manufacturer has taken all precautions to ensure safe operation of the device. The user must ensure that the device is set up and installed in a way that does not impair its safe use. The user is responsible for observing all applicable local and international safety guidelines for safe installation and operation of the device. This user manual contains information and warnings that must be observed by the user in order to ensure safe operation.

PLEASE NOTE
The manufacturer or his authoried agent can be only be held liable in case of willful or gross negligence.
In any case, the scope of liability is limited to the corresponding amount of the order issued to the manufacturer.
The manufacturer assumes no liability for damages incurred due to failure to comply with the applicable regulations, operating instructions or the specified operating conditions. Consequential damages are excluded from the liability.

WARNING
Non-compliance with the product documentation may cause safety risks for persons (accidents, personal injury) or damage to property (measurement installation).

- Mounting, installation, commissioning, start-up, operation and maintenance of the device may be performed by qualified staff only. Such staff must be authorized by the operator of the facility to carry out the mentioned activities.
- The qualified staff must have read and understood this user manual and must follow the instructions contained within.
- All process and electrical connections shall be thoroughly checked by authorized staff before putting the device into operation.
- Do not install or start-up a device supposed to be faulty. Make sure that such devices are not accidentally used by marking them clearly as faulty.
- A faulty device may only be investigated and possibly repaired by qualified, trained and authorized staff. A faulty device shall be removed from the process.
- Service operations other than described in this user manual may only be performed by the manufacturer.

Environmental Aspects

PLEASE NOTE
Products from E+E Elektronik Ges.m.b.H. are developed and manufactured in compliance with all relevant environmental protection requirements. Please observe local regulations for the disposal of the device.


For disposal, the individual components of the device must be separated according to local recycling regulations. The electronics shall be disposed of correctly as electronics waste.

Scope of Supply

- Temperature sensor according to ordering code
- Test report according to DIN EN10204-2.2 (for active output only)
- Quick guide (digital interface only)
- Cable gland

Product Description

General

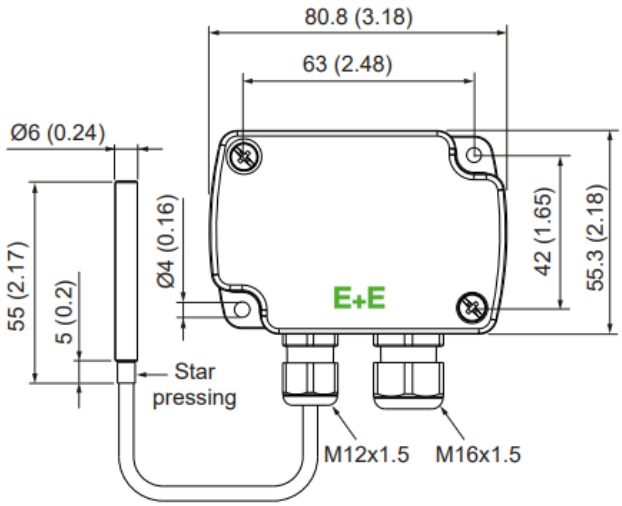
The EE471 sensor reliably measures the temperature (T) indoors and outdoors. It is optimised for building automation, HVAC and process control. The measured data is available at the voltage or current output or on the RS485 interface with Modbus RTU protocol. The analogue output can be set to °C or °F. The EE471 also features different passive temperature sensing elements.

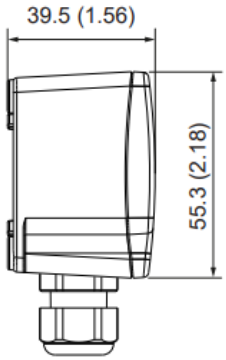
Dimensions

1. EE471

   Values in mm (inch)

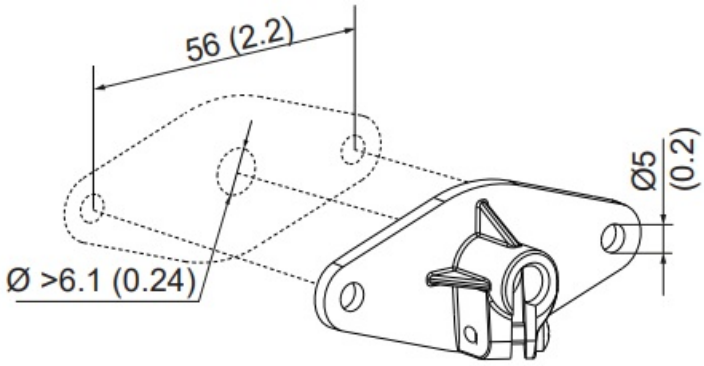
   Enclosure





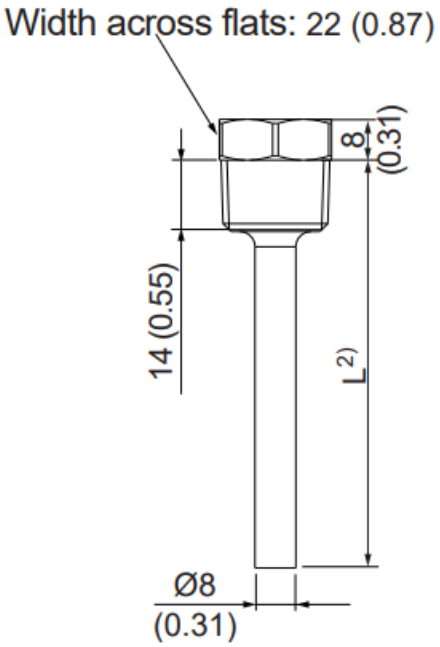
Mounting accessories

Mounting flange
(not included in the scope of supply)



Immersion well

(not included in the scope of supply)



2)	Length in mm	Length in inch
	50	1.97
	100	3.94
	135	5.31
	285	11.22

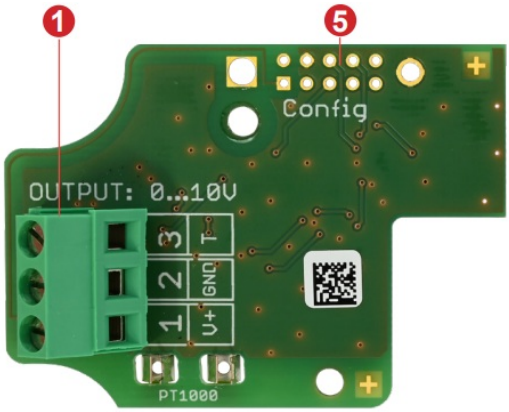
Electrical Connection
EE471 features screw terminals for connecting the power supply and the outputs. Insert the cables into the enclosure through the M16 cable gland.

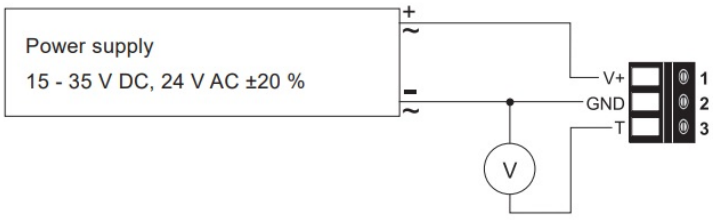
NOTICE
It is important to ensure that the cable glands are closed tightly. This is necessary to assure the IP rating of the enclosure according to EE471 specification, as well as to relief stress at the screw terminals on the EE471 board.

WARNING
Incorrect installation, wiring or power supply may cause overheating and therefore personal injuries or damage to property.
No voltage should be applied to the cables during installation or when connecting or disconnecting the product.
For correct wiring of the device, always refer to the wiring diagram for the product version used.
The manufacturer cannot be held responsible for personal injuries or damage to property as a result of incorrect handling, installation, wiring, power supply and maintenance of the device.

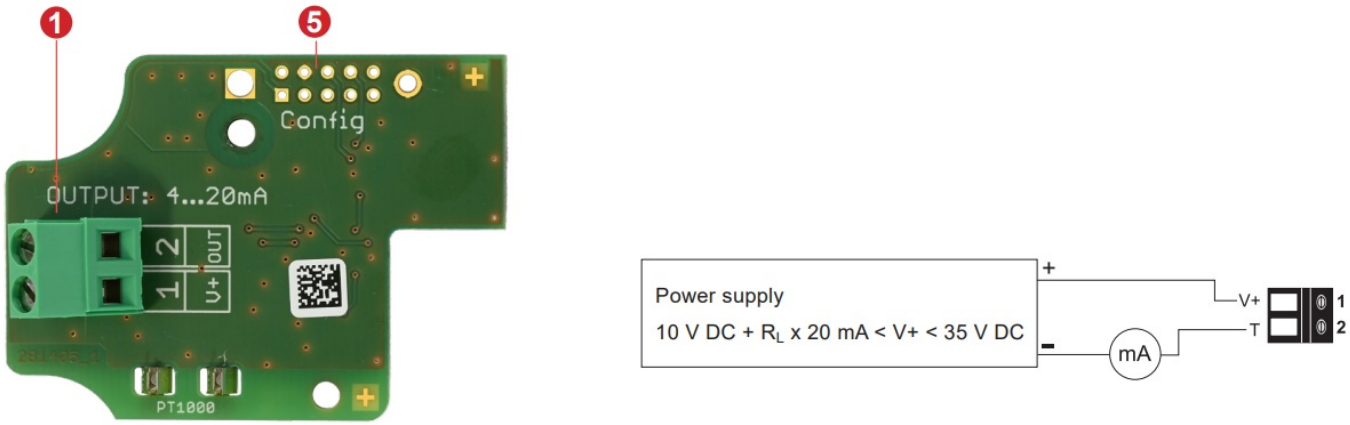
Wiring for Active Models

Models with analogue output (0 – 10V)





Models with analogue output (4 – 20mA)



Models with digital interface

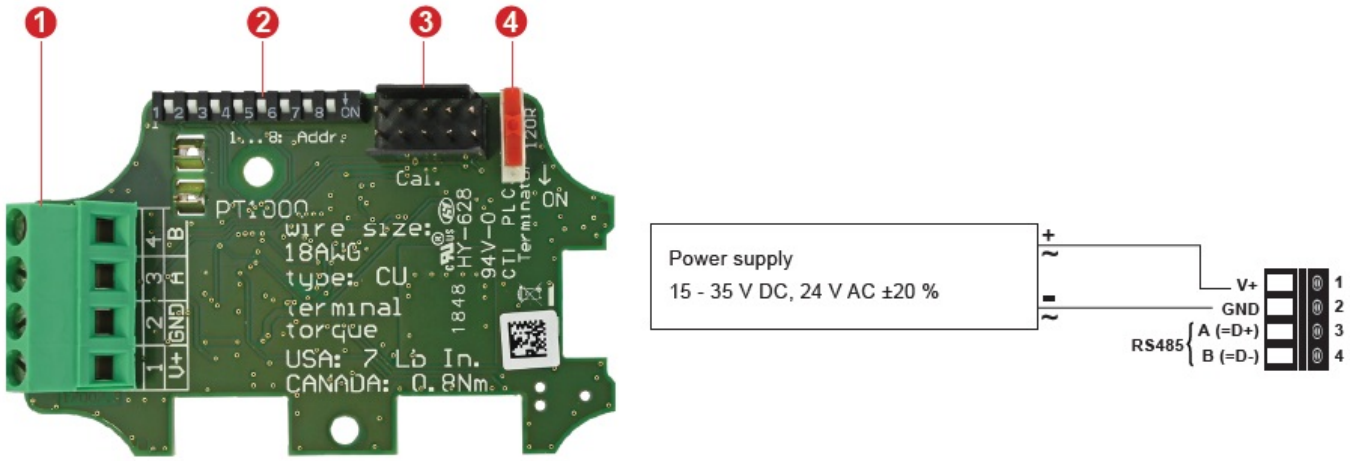


Fig. 1 Temperature sensor connection options

Tab. 1 Part of the digital temperature sensor electronics board types

No.	Function
1	Screw terminals for power supply and outputs
2	Address DIP switch for RS485 interface
3	Configuration connector (USB-C configuration stick) for RS485 interface
4	Bus termination resistor 120 Ω (jumper)
5	Configuration connector for analogue version

Wiring Diagram for Models with Passive T output
The unit wiring diagram applies to all passive types. The connections can be interchanged.

2-wire connection

Fig. 2 Temperature sensor connection for passive models

Mounting and Installation

NOTICE

- Improper handling of the device may result in its damage.
- Assembly and installation may only be carried out by qualified personnel.
- Failing to follow the instructions in this user manual may lead to measurement inaccuracy and device failures.
- The sensor may not be exposed to extreme mechanical stress.

Duct Mounting

1. Mounting with flange
    - Mount the sensor about one meter from the duct inlet
    - Mount the probe in a way, that the probe tip is placed in the middle of the duct

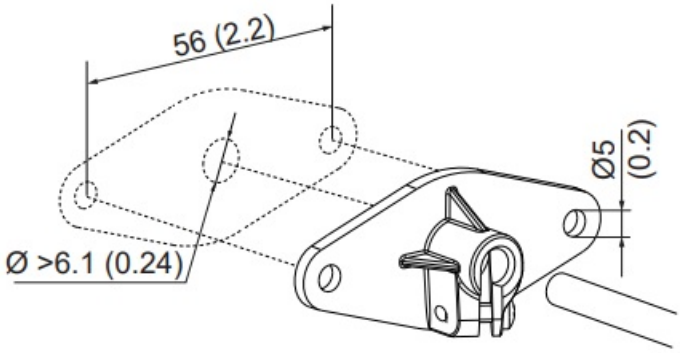


Fig. 3 Correct position of the probe in a flange

2. Minimum Immersion Depth

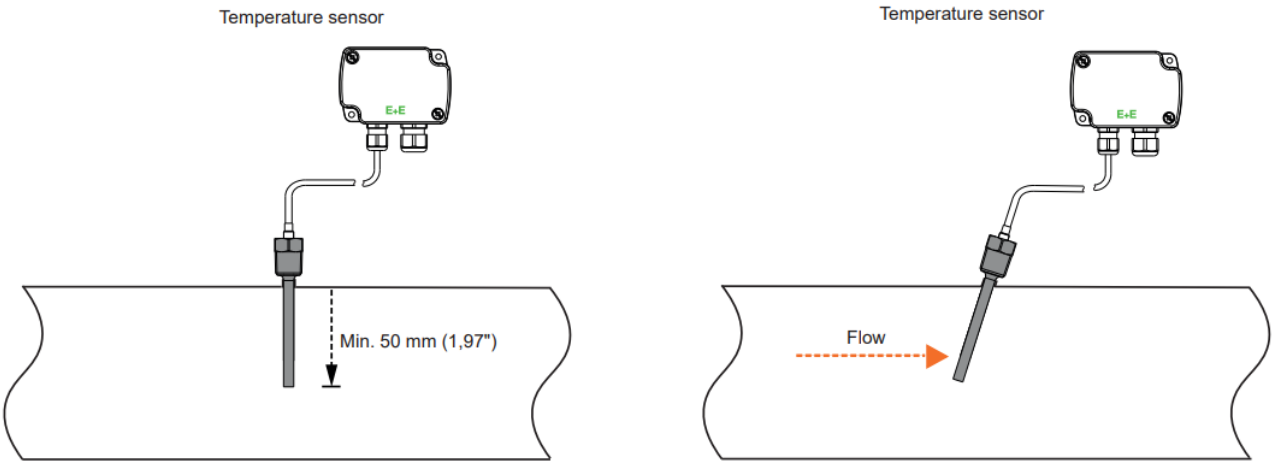


Fig. 4 Correct position in a pipe

3. Mounting with Immersion Well

Fig. 5 Handling of the immersion well

Procedure:

1. The spring inside the well must be removed and replaced by a standard M12x1.5 cable gland (not included in the scope of supply).
2. Insert the sensor and fix it by fastening the cable gland.

NOTICE
Observe the operating temperature range of the cable gland to match the process parameters.

PLEASE NOTE

- For installation avoid regions of high turbulences (e.g. after fittings)
- Mount the sensor in the opposite direction to flow (see the picture Correct Position below)

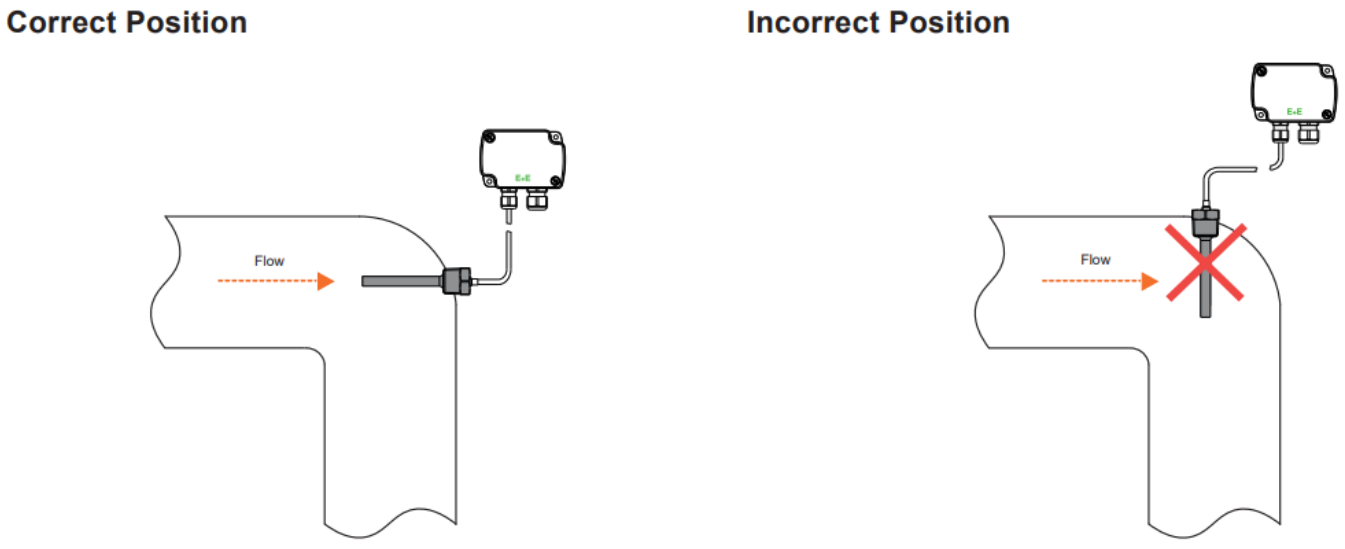


Fig. 6 Position of the probe in the pipe with immersion well

Setup and Configuration

The temperature sensor is ready to use and does not require any configuration by the user. The factory setup corresponds to the type number ordered. For ordering guide please refer to the datasheet at www.epluse.com/ee471. The user can change the factory setup with the free Product Configuration Software and corresponding accessories (see Tab. 2 Configuration accessories).

Tab. 2 Configuration accessories

Sensor Models		Configuration Software EE-PCS
Analogue 0 – 10 V / 4 – 20 mA	**EE471-M3A5 EE471-M3A6**	**EE-PCA with HA011065**
Digital version	**EE471-M3J3**	**HA011070**

Software

EE-PCS Product Configuration Software

For sensor adjustment and for changing the settings, please proceed as follows:

1. Download the EE-PCS Product Configuration Software from **www.epluse.com/configurator** and install it on the PC.
2. Connect the E+E device to the PC using the appropriate configuration adapter.
3. Start the EE-PCS software.
4. Follow the instructions on the EE-PCS opening page to scan the ports and to identify the connected device.
5. Click on the desired setup or adjustment mode from the main EE-PCS menu on the left and follow the online instructions of the EE-PCS.

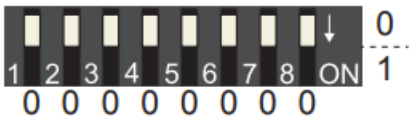
EE471 analogue with EE-PCA and HA011065
Configuration is possible with the EE-PCS and EE-PCA with the connection cable HA011065. For further details see datasheet EE-PCA (available at **www.epluse.com/ee471**).

With the EE-PCS, the output scaling and the output measuring unit (°C or °F) can be changed.
An offset adjustment (Fig. 10) and a 1- or 2-point adjustment (Fig. 11) can be performed. The temperature adjustment can be reset to the factory settings.

EE471 with RS485 Digital Interface
Use the EE-PCS and the USB-C configuration stick HA011070.
With the EE-PCS, an offset adjustment (Fig. 10) and 1- or 2-point adjustment (Fig. 11) can be performed. The temperature adjustment can be reset to the factory settings. In addition, further digital configuration settings can be made (see below).

Hardware Bus Termination
The bus termination can be implemented with 120 Ω resistor (slide switch on the board).

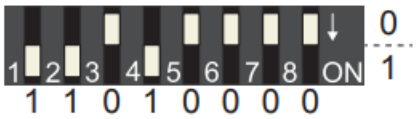
Device Address
Address Switch



Address setting via EE-PCS Product Configuration Software
All DIP switches at position 0 address has to be set via EE-PCS. (factory setting)
Modbus (slave device): Factory setting 66 (permitted values: 1…247).

Example: 0000 0000 = Address is set via configuration software.

Address Switch



Address setting via DIP switch
Modbus (slave device): Setting the DIP switches to any other address than 0,overrules the Modbus address set via EE-PCS (permitted values: 1…247).

Example: 0000 1011 binary = Address set to 11.

BACnet MS/TP Setup
Refer to PICS (Product Implementation Conformance Statement) – available on **www.epluse.com/ee471**.

BACnet MS/TP Protocol Settings

Tab. 3 BACnet protocol settings

	Factory settings	**User selectable values** **(via EE-PCS / BACnet MS/TP protocol)**
Baud rate	As per type number ordered	9 600, 19 200, 38 400, 57 600, 76 800, 115 200
Data bits	8	8
Parity	None	None
Stop bits	1	1
BACnet address	66	0…127

PLEASE NOTE
The recommended settings for multiple devices in a BACnet MS/TP network are 38 400, 8, none, 1.

The EE4x1D PICS (Product Implementation Conformance Statement) are available on the E+E website at **www.epluse.com/ee471**.

BACnet address and baud rate can be set via:

- EE-PCS Product Configuration Software and the USB-C configuration stick HA011070.
- BACnet protocol, see the PICS.

Modbus RTU Protocol Settings

Tab. 4 Modbus RTU protocol settings

	Factory settings	User selectable values (via EE-PCS / Modbus protocol)
Baud rate	As per type number ordered	9 600, 19 200, 38 400
Data bits	8	8
Parity	Even	None, odd, even
Stop bits	1	1, 2
Modbus address	66	1…247

PLEASE NOTE
The recommended settings for multiple devices in a Modbus RTU network are 9 600, 8, even, 1.

Device address, baud rate, parity and stop bits can be set via:

- EE-PCS Product Configuration Software and the USB-C configuration stick HA011070. The EE-PCS can be downloaded free of charge from **www.epluse.com/configurator**.
- Modbus protocol in the register 1 (0x00) and 2 (0x01). See Application Note Modbus AN0103 (available at **www.epluse.com/ee471**).

The measured values are saved as 32 bit float value (FLOAT32) and 16 bit signed integer (INT16). The factory setting for the Modbus address is 66 as an INT16 value.This address can be changed by the user in the register 1\ (0x00), permitted values are 1…247.

The serial number as ASCII-code is located in read-only registers 1 – 8 (0x00 – 0x07, 16 bits per register).
The firmware version is located in register 9 (0x08) (bit 15…8 = major release; bit 7…0 = minor release). The sensor name as ASCII-code is located in read-only registers 10 – 17 (0x09 – 0x11, 16 bits per register).

NOTICE
When reading the serial number or the sensor name, it is always necessary to read all 8 registers, even if the desired information requires less.

NOTICE
For obtaining the correct floating point values, both registers have to be read within the same reading cycle. The measured value can change between two Modbus requests, exponent and mantissa may get inconsistent then.

Communication settings (INT16)		
Parameter	**Register number[1] [Dec]**	**Register address[2] [Hex]**
Write register: function code 0x06		
Modbus address[3]	1	0x00
Modbus protocol settings[4]	2	0x01

Device information (INT16)

Parameter	Register number[1)] [Dec]	Register address[2)] [Hex]
Read register: function code 0x03 / 0x04		
Serial number (as ASCII)	1	0x00
Firmware version	9	0x08
Sensor name	10	0x09

1. Register number starts from 1.
2. Register address starts from 0.
3. If the address is set via DIP switch, the response will be NAK.
4. For Modbus address and protocol settings see Application Note Modbus AN0103 (available at www.epluse.com/ee471).

Tab. 5 Digital sensors' registers for device setup

Modbus Register Map
The measured data is saved as 32 bit floating point values (FLOAT32) and as 16 bit signed integer values (INT16).

FLOAT32			
Measurand	**Unit[1)]**	**Register number[2)] [DEC]**	**Register address[3)] [HEX]**
Read register: function code 0x03 / 0x04			
Temperature	°C	1003	0x3EA
Temperature	°F	1005	0x3EC
Temperature	°K	1009	0x3F0

INT16

Measurand	Unit[1)]	Scale[4)]	Register number[2)] [DEC]	Register address[3)] [HEX]
Read register: function code 0x03 / 0x04				
Temperature	°C	100	4002	0xFA1
Temperature	°F	50	4003	0xFA2
Temperature	K	50	4005	0xFA4

1. The choice of measurement units (metric or non-metric) must be done according to the ordering guide, see EE471 datasheet.
   Switching from metric to non-metric or vice versa by using the EE-PCS is not possible.
2. Register number starts from 1
3. Register address starts from 0
4. **Examples:** For scale 100, the reading of 2550 means a value of 25.5. For scale 50, the reading of 2550 means

a value of 51.

Tab. 6 FLOAT32 and INT16 measured data registers

Modbus RTU Example
Example of Modbus RTU command for reading the Temperature (float value) T = 26.953624 °C from the register 0x3EA.

Device EE471; Modbus address 66 [42 in HEX]
Reference document (chapter 6.3): **http://www.modbus.org/docs/Modbus_Application_Protocol_V1_1b.pdf**.

Read the temperature (FLOAT32) T from register address 0x3EA:

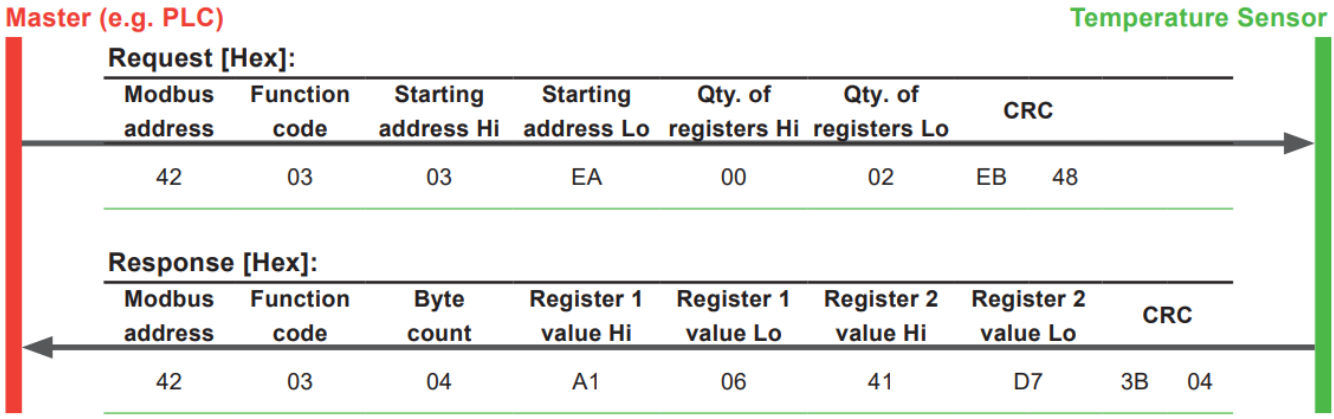


Fig. 7 Example temperature query

Decoding of floating point values:
Floating point values are stored according to IEEE754. The byte pairs 1, 2 and 3, 4 are transformed as follows (numbers taken from T reading Modbus request/response example, Fig. 7 Example temperature query):

Modbus response [Hex]

Register 1 Hi	Register 1 Lo	Register 2 Hi	Register 2 Lo
A1	06	41	D7
MMMMMMMM	MMMMMMMM	SEEEEEEE	EMMMMMMM

Fig. 8 Modbus response

IEEE754

Register 2 Hi	Register 2 Lo	Register 1 Hi	Register 1 Lo
41	D7	A1	06
0100 0001	1101 0111	1010 0001	0000 0110
SEEE EEEE	EMMM MMMM	MMMM MMMM	MMMM MMMM
Decimal value: 26.953624725341796875			

Fig. 9 Data representation according to IEEE754

Maintenance and Service

Calibration and Adjustment
The EE471 can be calibrated/adjusted with the help of the EE-PCS. For this purpose, the probe needs to be connected to a PC via a Modbus configuration adapter.

Definitions

- Calibration documents the accuracy of a measurement device. The device under test (specimen) is compared with the reference and the deviations are documented in a calibration certificate. During the calibration, the specimen is not changed or improved in any way.
- Adjustment improves the measurement accuracy of a device. The specimen is compared with the reference and brought in line with it. An adjustment can be followed by a calibration which documents the accuracy of the adjusted specimen.

Temperature Calibration and Adjustment
Depending on the application and the requirements of certain industries, there might arise the need for periodical temperature calibration or adjustment.

Calibration and Adjustment at E+E Elektronik
Calibration and/or adjustment can be performed in the E+E Elektronik calibration laboratory. For information on the E+E capabilities in ISO or accredited calibration please see **www.eplusecal.com**.

Calibration and Adjustment by the User

Depending on the level of accuracy required, the temperature reference can be:

- Liquid bath calibrator
- Dry block calibrator
- Climate chamber
- Handheld device (e.g. Omniport 40), please see **www.epluse.com/omniport40**.

Perform offset and 1- or 2-point adjustment via the E+E Product Configuration Software (see below).

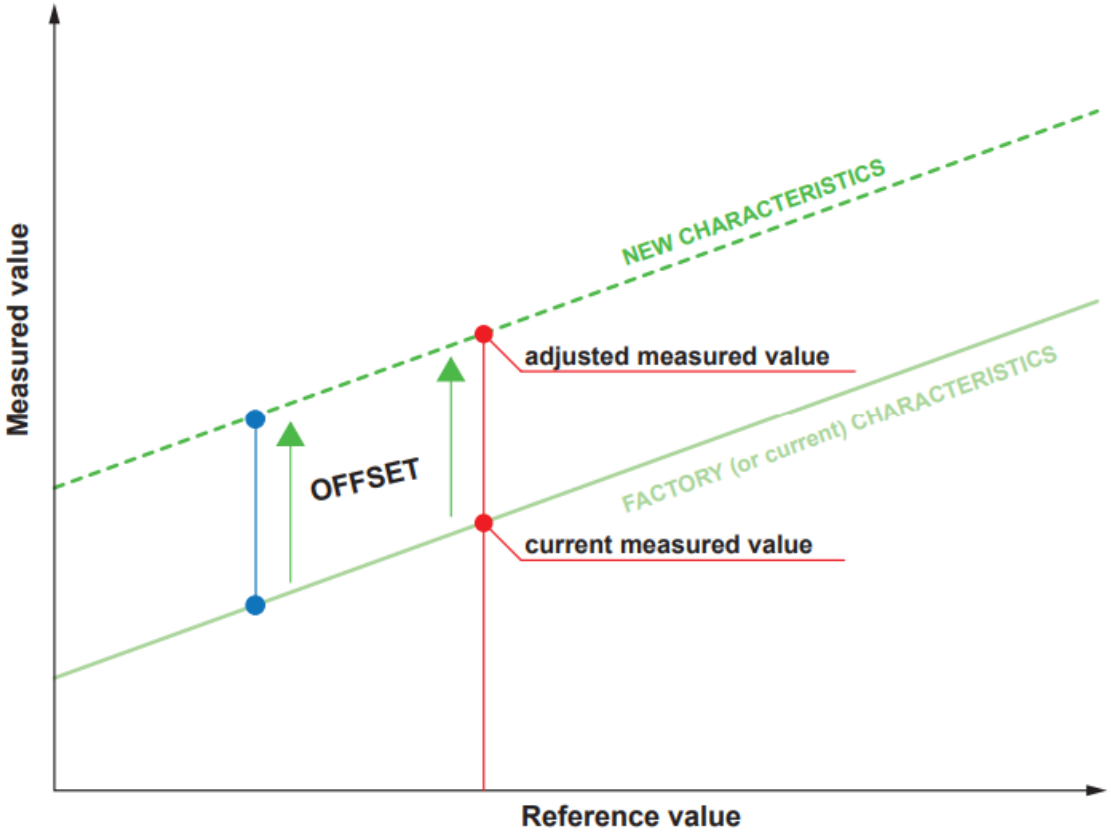


Fig. 10 Offset adjustment

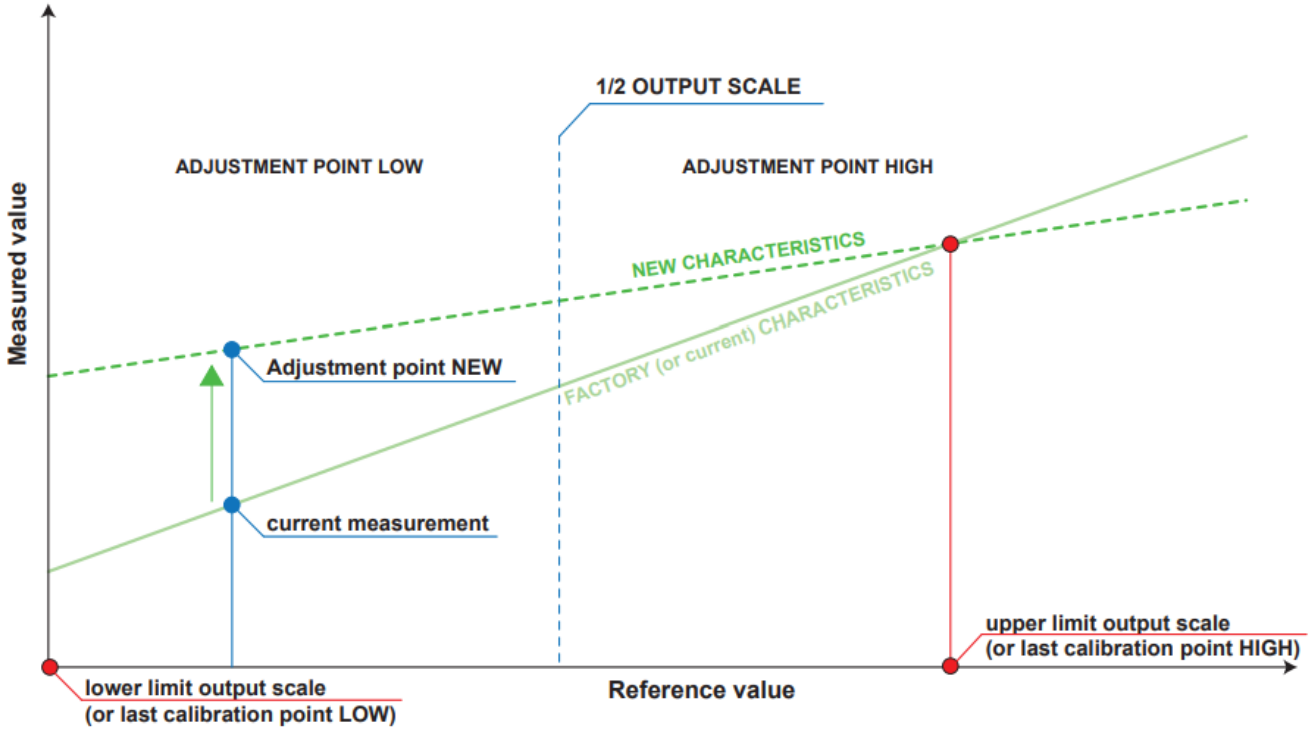


Fig. 11 1- or 2-point adjustment

Repairs

PLEASE NOTE
Repairs may be carried out by the manufacturer only. The attempt of unauthorised repair will invalidate any warranty claims.

Accessories

For further information see datasheet **Accessories**.

Description	Code
Product configuration adapter for EE471 with analogue output	**HA011065**
USB-C configuration stick for digital output	**HA011070**
E+E Product Configuration Software for digital output (Free download: **www.epluse.com/configurator)**	**EE-PCS**
Power supply adapter	**V03**
Conduit Adapter, M16x1.5 auf 1/2″	**HA011110**

Technical Data

Measurands

Temperature (T) – Active	
Measuring range Remote probe	-30 °C…+105 °C (-22…+221 °F)
Accuracy @ 20 °C (68 °F)	±0,3 °C (±0.54 °F)

Temperature (T) – Passive

Measuring range		-30 °C…+105 °C (-22…+221 °F)		
Sensor type		**Nominal resistance**	**Sensitivity**	**Standard**
	Pt100 DIN B	R_0: 100 Ω	TC: 3,850 x 10^{-3}/°C	DIN EN 60751
	Pt1000 DIN B	R_0: 1 000 Ω	TC: 3,850 x 10^{-3}/°C	DIN EN 60751

Outputs

Analogue	
Analogue output	0 – 10 V 0 < I_L < 1 mA I_L = load current 4 – 20 mA (2-wire) R_L ≤ 500 Ω R_L = load resistance

Digital	
Digital interface	RS485 (EE471 = 1 Unit Load)
Protocol Factory settings **Supported Baud rates Measured dat a types**	Modbus RTU Baud rate see order information, parity even, 1 stop bit, Modbus addr ess 66 9 600, 19 200 and 38 400 FLOAT32 and INT16

T Sensor Passive	
Sensor connection	2-wire connection, wire resistance see section “Additional Information ”
Measuring current, typ.	<1 mA (according to technical data of the specific T sensing element)

General

Power supply class III USA & Canada: Class 2 supply necess ary, max. voltage 30 V DC **for output RS485 and 0 – 10 V** **for output 4 – 20 mA**		15 – 35 V DC or 24 V AC ±20 % 10 V DC + R_L x 20 mA < V+ < 35 V DC		R_L = load resis tance
Current consumption, typ.	**Analogue** **RS485**	5 mA (DC) / 12 mA_{rms} (AC) 3.5 mA (DC) / 12 mA_{rms} (AC)		
Electrical connection		Screw terminals 2x max. 2.5 mm^2 (AWG14)		
Cable glands		M16x1.5 / M12x1.5 / UL94 V-2		
Insulation resistance (remote probe) @20 °C (68 °F)		>100 MΩ		
Response time t_{63} **Duct sensor at 3 m/s (590 ft/min) air velocity Immersion sensor in liquid water bath**		<1 min <30 s		
Humidity working range		5…95 %RH, non-condensing		

Temperature working range	**Remote probe Electronics**	-30 °C…+105 °C (-22…+221 °F) -30 °C…+70 °C (-22…+158 °F)		
Storage conditions		-30 °C…+70 °C (-22…+158 °F) 5…95 %RH, non-condensing		
Material	**Enclosure** **Cable Sensor sleeve**	Polycarbonate (PC), UL94 V-0 approved Polyvinylchloride (PVC) Stainless steel (1.4571 / 316Ti)		
Protection rating	**Enclosure** **Remote probe**	IP65 / NEMA 4X IP67 / NEMA 4		
Electromagnetic compatibility		EN 61326-1 EN 61326-2-3 FCC Part15 Class B ICES-003 Class B	Industrial environment	
Conformity		CE UKCA		

Additional Information

Wire Resistance / Temperature Offset
(only relevant for passive output EE471-M7)

Probe cable length	Wire resistance	Temperature offset for Pt100*)
0.5 m (1.64 ft)	0.086 Ω	0.22 °C (0.396 °F)
2 m (6.56 ft)	0.344 Ω	0.88 °C (1.584 °F)
3 m (9.84 ft)	0.516 Ω	1.32 °C (2.376 °F)
5 m (16.4 ft)	0.860 Ω	2.2 °C (3.960 °F)
10 m (32.8 ft)	1.72 Ω	4.4 °C (7.920 °F)

For high-resistance T sensors (R ≥ 1000 Ω) the temperature offset is negligible.

Conformity

Declarations of Conformity
E+E Elektronik Ges.m.b.H. hereby declares that the product complies with the respective regulations listed below:

European directives and standards and UK statutory instruments and designated standards.
Please refer to the product pages at **www.epluse.com/ee471** for the Declarations of Conformity.

Electromagnetic Compatibility
EMC for industrial environment.

Our sensors are group 1 devices and correspond to class B.

FCC Part 15 Compliance Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the installation manual, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which thereceiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

ICES-003 Compliance Statement
This Class B digital apparatus complies with Canadian ICES-003.
Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

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BA_EE471 | Version v1.0 | 01-2025

FAQ

Q: What is the typical application of the EE471 temperature sensor?
A: The EE471 sensor is commonly used in building automation,HVAC systems, and process control for reliable temperature monitoring.

Documents / Resources

	epluse EE471 Temperature Sensor With Remote Probe [pdf] User Manual EE471, EE471 Temperature Sensor With Remote Probe, EE471, Temperature Sensor With Remote Probe, Remote Probe, Probe

References

- User Manual