

Programming unit

For temperature transmitters and resistance thermometers

Model PU-548

WIKA data sheet AC 80.18

For further approvals,
see page 4

Applications

- For easy configuration of digital temperature transmitters and compact thermometers with integrated transmitter
- For use with the WIKAsoft-TT configuration software

Special features

- Easy to use
- LED status display
- Compact design
- No additional voltage supply required
- No driver installation needed (Windows® standard drivers are used)



Programming unit model PU-548 with magWIK

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Description

With this model PU-548 programming unit, digital temperature transmitters and compact thermometers with integrated transmitter using the WIKA-internal protocol can be configured quickly and very easily.

The programming unit provides a clear status/diagnostic display and checks, for each contact, the connection from programming unit to PC and the transmitter.

A bright LED in the transparent case indicates to the user the current status of the connection. This ensures that faulty connections are recognised immediately.

The programming unit needs no additional voltage supply. The required voltage is taken entirely from the USB interface.

Together with the WIKAsoftTT configuration software, a perfect tool is available with which the temperature transmitters or compact thermometers can be configured very easily and exceptionally quickly.

The connection of the terminals for the configuration of the temperature transmitters is made in the head-mounted versions with the magWIK quick connector (patent, property right registered under no. 102009044676.1).

For the connection to the compact thermometers with coupler connectors, suitable adapter cables are available.

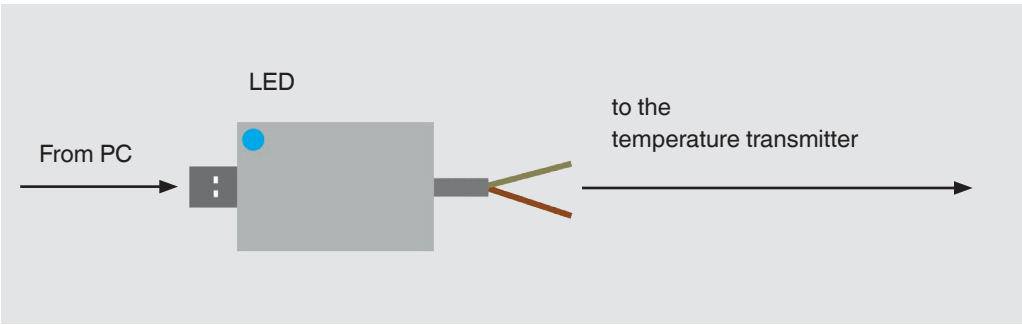
Specifications

Basic information	
Communication	
Interface	USB connector type A
Connection to computer	USB connector
Connection to transmitter	2 x Ø 2 mm [0.08 x Ø 0.08 in] banana plugs (with magWIK quick connector) Adapter cable for M12 connector Adapter cable for angular DIN connector, form A
Voltage supply	The PU-548 and therefore also the connected transmitters/thermometers are powered through the USB port. Thus no additional voltage supply is needed.
Output voltage	Max. 30 V
Output parameters	$U_0 = \text{DC } 27.5 \text{ V}$, $I_0 = 29.05 \text{ mA}$, $P_0 \leq 800 \text{ mW}$
Operating conditions	
Operating temperature	5 ... 50 °C [41 ... 122 °F]
Storage temperature	-20 ... +70 °C [-4 ... +158 °F]
Humidity	10 ... 90 % relative humidity
Condensation	Non-condensing
Electromagnetic compatibility	EN 61326 emission (group 1, class B) immunity (industrial application)
Dimensions	
Case	50 x 25 x 15.5 mm [1.97 x 0.68 x 0.61 in], ABS industrial case
Test clip cable	Approx. 80 cm [31.5 in] (2-wire)

LED diagnostics

The model PU-548 programming unit is fitted with an LED for clear status display. Through different light and flashing behaviour, detailed status diagnostics are enabled.

LED behaviour			Status
Off	To	Flashing	
x	-	-	Current loop not active
-	x	-	Current loop active
-	-	x (fast)	Data transmission
-	-	x (slowly)	Connection to the PC and instrument is ready for operation



Connecting the PU-548 programming unit

Temperature transmitter

- Head-mounted version: magWIK quick connector
- Rail-mounted version: Connection via flush sockets

Connection PU-548 to temperature transmitter
Quick connector magWIK on request



Compact thermometer

Adapter cable for M12 connector

Connection PU-548 to adapter cable with M12 connection



Use with Ex instruments

No galvanic isolation

With the PU-548, a galvanic isolation is dispensed with. As long as it is connected to a commercial notebook, there is normally no galvanic connection with ground. However, if an earth fault of the current loop takes place, the voltage supply is interrupted by the integrated short-circuit monitoring in the PU-548. In the event of a fault, only the PU-548 will be affected; the transmitter will remain functional.

Short-circuit-proof current loop

This switch interrupts the power supply of the current loop as soon as a current of 30 mA is detected. Through the quick response of this circuit, it is ensured that, despite an overload of the current loop, only the requested power is obtained via the USB interface. The PU-548 signals this fault through a red current loop LED.

Current limitation

In addition to the voltage limitation, a current limitation is also integrated in the PU-548, which reliably limits the current on the loop to I_{Max} in the event of a fault, so that no Ex-relevant protection components are damaged in the connected transmitter.

Approvals

Logo	Description	Region
	EU declaration of conformity	European Union
	EMC Directive	
	RoHS directive	

Order number

Products	Order number
Programming unit PU-548 incl. magWIK	14231581
Quick connector magWIK incl. banana plug	14026893
Adapter cable for M12 connector	14003193
Adapter cable for angular DIN connector, form A	14005324
Software WIKAsoft-TT	Free download from: www.wika.de/Download Configuration of all temperature transmitters with WIKA-internal protocol

Windows® is a registered trademark of Microsoft Corporation in the United States and other countries.

Ordering information

To order the described product, the order number is sufficient.

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