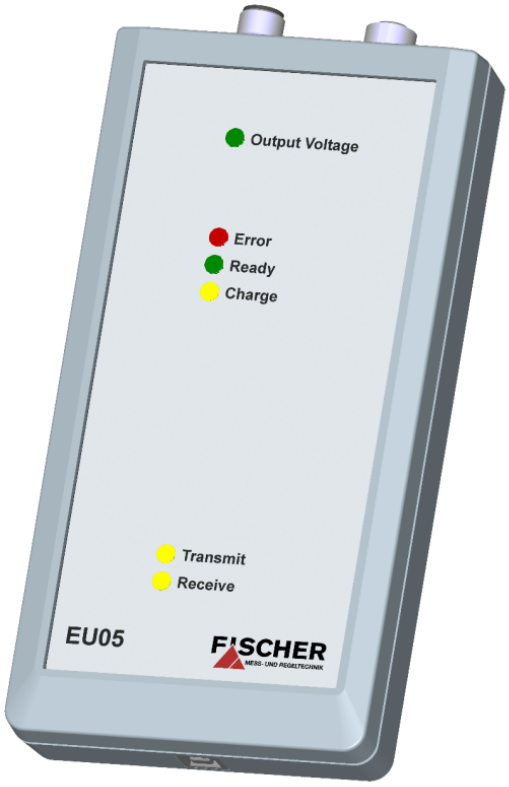
developing solutions

FISCHER
MESS- UND REGELTECHNIK

CE

RoHS II
COMPLIANT



Operating manual

EU05

Transmitter PC Interface

09005821 BA_EN_EU05 ST4-A 11/15

Masthead

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Version history

Rev. ST4-A 11/15	Version 1 (first edition)

Table of Content

1 Safety guidelines

1.1 General

⚠ WARNING

This operating manual contains instructions fundamental to the installation, operation and maintenance of the device that must be observed unconditionally. It must be read by the assembler, operator and the specialized personnel in charge of the instrument before it is installed and put into operation.

This operating manual is an integral part of the product and therefore needs to be kept close to the instrument in a place that is accessible at all times to the responsible personnel.

The following sections, in particular instructions about the assembly, commissioning and maintenance, contain important information, non-observance of which could pose a threat to humans, animals, the environment and property.

The instrument described in these operating instructions is designed and manufactured in line with the state of the art and good engineering practice.

1.2 Personnel Qualification

The instrument may only be installed and commissioned by specialized personnel familiar with the installation, commissioning and operation of this product.

Specialized personnel are persons who can assess the work they have been assigned and recognize potential dangers by virtue of their specialized training, their skills and experience and their knowledge of the pertinent standards.

1.3 Risks due to Non-Observance of Safety Instructions

Non-observance of these safety instructions, the intended use of the device or the limit values given in the technical specifications can be hazardous or cause harm to persons, the environment or the plant itself.

The supplier of the equipment will not be liable for damage claims if this should happen.

1.4 Safety Instructions for the Operating Company and the Operator

The safety instructions governing correct operation of the instrument must be observed. The operating company must make them available to the installation, maintenance, inspection and operating personnel.

Dangers arising from electrical components, energy discharged by the medium, escaping medium and incorrect installation of the device must be eliminated. See the information in the applicable national and international regulations.

Please observe the information about certification and approvals in the Technical Data section.

1.5 Unauthorised Modification

Modifications of or other technical alterations to the instrument by the customer are not permitted. This also applies to replacement parts. Only the manufacturer is authorised to make any modifications or changes.

1.6 Inadmissible Modes of Operation

The operational safety of this instrument can only be guaranteed if it is used as intended. The instrument model must be suitable for the medium used in the system. The limit values given in the technical data may not be exceeded.

The manufacturer is not liable for damage resulting from improper or incorrect use.

1.7 Safe working practices for maintenance and installation work

The safety instructions given in this operating manual, any nationally applicable regulations on accident prevention and any of the operating company's internal work, operating and safety guidelines must be observed.

The operating company is responsible for ensuring that all required maintenance, inspection and installation work is carried out by qualified specialized personnel.

1.8 Pictogram explanation

⚠ DANGER

Type and source of danger

This indicates a **direct** dangerous situation that could lead to death or **serious injury** (highest danger level).

a) Avoid danger by observing the valid safety regulations.

⚠ WARNING

Type and source of danger

This indicates a **potentially** dangerous situation that could lead to death or **serious injury** (medium danger level).

a) Avoid danger by observing the valid safety regulations.

⚠ CAUTION

Type and source of danger

This indicates a **potentially** dangerous situation that could lead to slight or serious injury, damage or **environmental pollution** (low danger level).

a) Avoid danger by observing the valid safety regulations.

NOTICE

Note / advice

This indicates useful information of advice for efficient and smooth operation.

2 Product and functional description

2.1 Delivery scope

- Transmitter PC Interface EU05
- Programming cable
- USB cable
- Plug power supply unit
- CD ROM with PC software
  - FernPara
  - TransPara
  - Transmitter Programmer
- Operating Instructions

2.2 Product overview

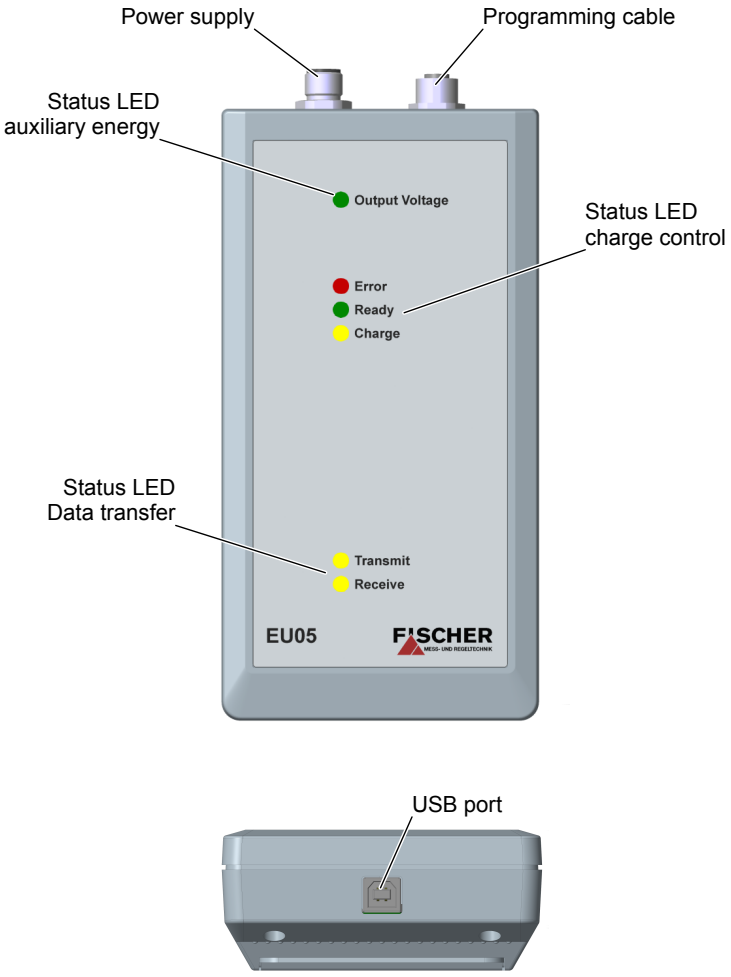


Illustration 1: Product overview

2.3 Use as intended

The EU05 unit is a Transmitter PC Interface that allows comunication between various devices (transmitters) of the company FISCHER Mess- und Regeltechnik GmbH and a conventional PC. It is designed for use in industrial environments.

The following units from the company FISCHER Mess- und Regeltechnik GmbH can be connected to the EU05. The list is sorted according to unit type and required PC software.

Units with LED displays and FernPara software

DE31	Digital differential pressure transmitter / switch
DE38	Digital differential pressure transmitter / switch
DE39	Digital differential pressure transmitter
DE44	Digital two-channel differential pressure switch / transmitter
DE45	Digital differential pressure switch / transmitter
DE46	Digital differential pressure switch / transmitter
EA14D	Differential pressure analysis unit
EA14M	Pressure analysis unit
EA14F	Filling level analysis unit

Units with LC displays and TransPara software

DE24	Digital differential pressure switch / transmitter for panel installation
DE39	Digital differential pressure transmitter
DE44	Digital two-channel differential pressure switch / transmitter
DE45	Digital differential pressure switch / transmitter
DE46	Digital differential pressure switch / transmitter
EA14A	Measuring value display for panel installation
EA14D	Differential pressure analysis unit
EA14M	Pressure analysis unit
EA14F	Filling level analysis unit
FT61	Moisture and temperature transmitter

3 Commissioning

3.1 Design and mode of operation

The EU05 unit is a Transmitter PC Interface that allows communication between transmitters[1] and PCs. It is connected to the PC via the USB interface. The transmitter is connected via the M12 programming cable.

There are several ways of supplying power to the EU05:

1. For transmitters with a 3-wire connection, the power comes from the system power supply. A special adapter cable (see accessories) is required for some transmitters.
2. Optionally, the EU05 can be supplied with an installed NiMH battery that supply power to the unit. In this way, the unit can also be used in a mobile 'on-site' manner.
3. A power supply unit with a plug included in the delivery can be used for the power supply to the EU05. This also serves as a charger for the optionally installed NiMH battery.

The power is supplied to the connected transmitter via the EU05 and only when connected to an USB interface.

The 'remote' configuration of the connected transmitter is realised with a special PC software depending on the type. Please see the list in the section 'Intended use'' [▷ 7] for the software required for your transmitter type. You can download the latest software for free from our website (www.fischermesstechnik.de).

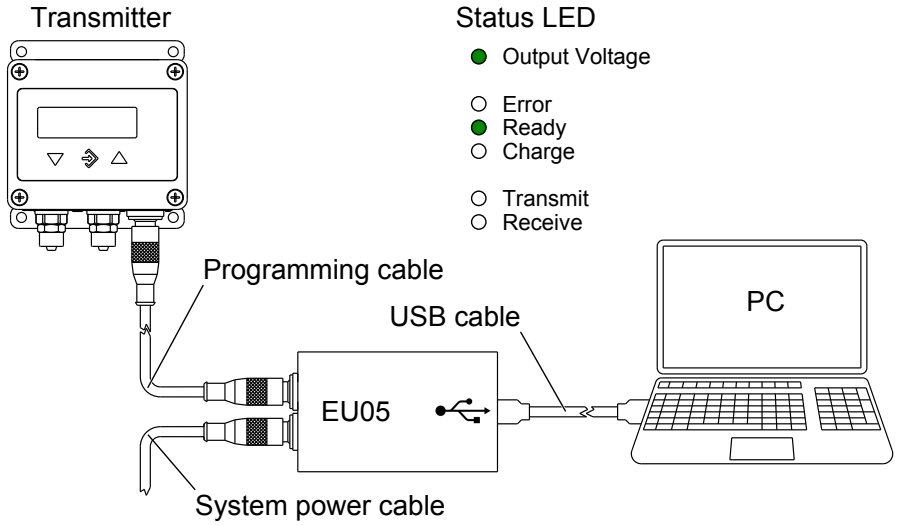
3.2 Electrical connection

The unit is connected to the power supply as shown in the following illustrations. Proceed as follows:

a) Disconnect the system power cable on the transmitter (plug 1).
b) Connect the programming cable here.
c) Connect the power supply to the EU05 (not applicable if batteries are used).
d) Connect the EU05 to the USB interface of the PC.

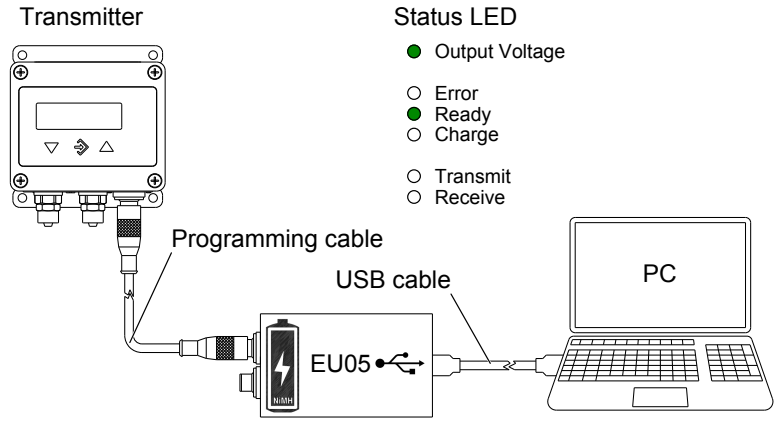
⇨ The status LEDs shine as shown below and the unit is operational.

System power supply

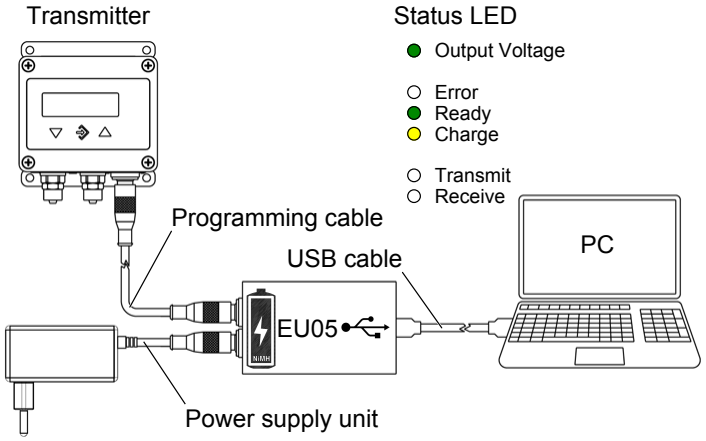


[1] In the following, the term 'transmitter' is used for all FISCHER units that can be connected to the EU05 for the intended purpose.

Battery power supply



Power supply unit



NOTICE

Charge battery

If the EU05 is supplied via a power supply unit with a plug, the battery is charged. This is shown on the status LED 'Charge'. The charging process is also started, if the unit is not connected to other units.

3.3 Operation

The 'remote' configuration of the connected transmitter is realised with a special PC software depending on the type. Please see the list in the section 'Intended use'' [▷ 7] for the software required for your transmitter type. All software is on the supplied CD. You can download the latest software for free from our website (www.fischermesstechnik.de). For information about the supported operating systems, please see the Technical data [▷ 11].

After you have installed the required software on your PC, you will find detailed descriptions about how to configure transmitters in the **Help**. A data connection to the transmitter always needs to be created first. You will find the respective sub-menus for the necessary settings under the menu item **Options**.

◯ Transmit

◯ Receive

Check the connection by exporting the parameters. You will find the required function in the menu **Data transfer**. An active data transfer is indicated by the status LED 'Transmit' and 'Receive'. Save the received data so you can restore the original configuration if necessary. For a description of the parameters, please see the user manual of your transmitter.

4 Servicing

4.1 Maintenance

The instrument is maintenance-free. We recommend the following regular inspection to guarantee reliable operation and a long service life:

- Check the function in combination with downstream components.
- Check the electrical connections.

The exact test cycles need to be adapted to the operating and environmental conditions. In combination with other devices, the operating instructions for the other devices also need to be observed.

4.2 Transport

The measuring device must be protected against impacts. It should be transported in the original packaging or a suitable transport container.

4.3 Service

All defective or faulty devices should be sent directly to our repair department. Please coordinate all shipments with our sales department.

Return the device in the original packaging or a suitable transport container.

4.4 Disposal

⚠ WARNING

Incorrect disposal may pose a risk to the environment.

NOTICE! Take-back of old units with batteries

According to the Directive 2006/66/EC batteries may not be disposed of in household waste. The battery is permanently installed in the unit and cannot be replaced. Recycling is carried out by the manufacturer After the end of the service life, return the unit to the manufacturer for this purpose.

Please help to protect the environment by always disposing of the work pieces and packaging materials in compliance with the valid national waste and recycling guidelines or reuse them.

5 Technical data

5.1 Auxiliary energy

The following data refers to the power supply via a power supply unit. However, power can be supplied via an USB interface.

Rated Voltage	24 V AC/DC
Admissible operating voltage U_b	12 … 30 V AC/DC
Power consumption	≤ 4 W
Electrical plug	M12 flanged connector 5-pin coded
Optional NiMH battery	2200 mAh
Runtime in battery mode (+)	approx. 4 hours.

(+) The runtime depends on the connected transmitter type.

5.2 Application conditions

Ambient temperature range	0 … +40 °C
Storage temperature range	-10 … +50 °C
Max. humidity	80% rel. hum.
Protection class IP	IP20

Supported operating systems	Windows XP 32 Bit Windows Vista 32 Bit Windows 7 32/64 Bit

EMC Directive	2004/108/EC
DIN EN 61000-6-2 Correction 1:2011-06	EMC Part 6-2: Generic standards - Immunity for industrial environments
DIN EN 61000-6-3 Correction 1:2012-11	EMC Part 6-3: Generic standards - Emissions for residential, commercial and light industry

RoHS Directive	2011/65/EU
DIN EN 50581:2013-02	Technical documentation for assessment of electronic and electrical units with respect to limitation of dangerous substances

5.3 Interfaces

PC interface	USB 2.0
Electrical plug	USB bush type B

Transmitter connection	
Electrical plug	M12 coupling

5.4 Construction design

Installation position	User-defined
Dimensions (W x L x H)	101 x 195 x 44 mm
Weight	approx. 450g

Materials	
Housing	ABS

5.4.1 Dimensional drawings

All dimensions in mm unless otherwise stated

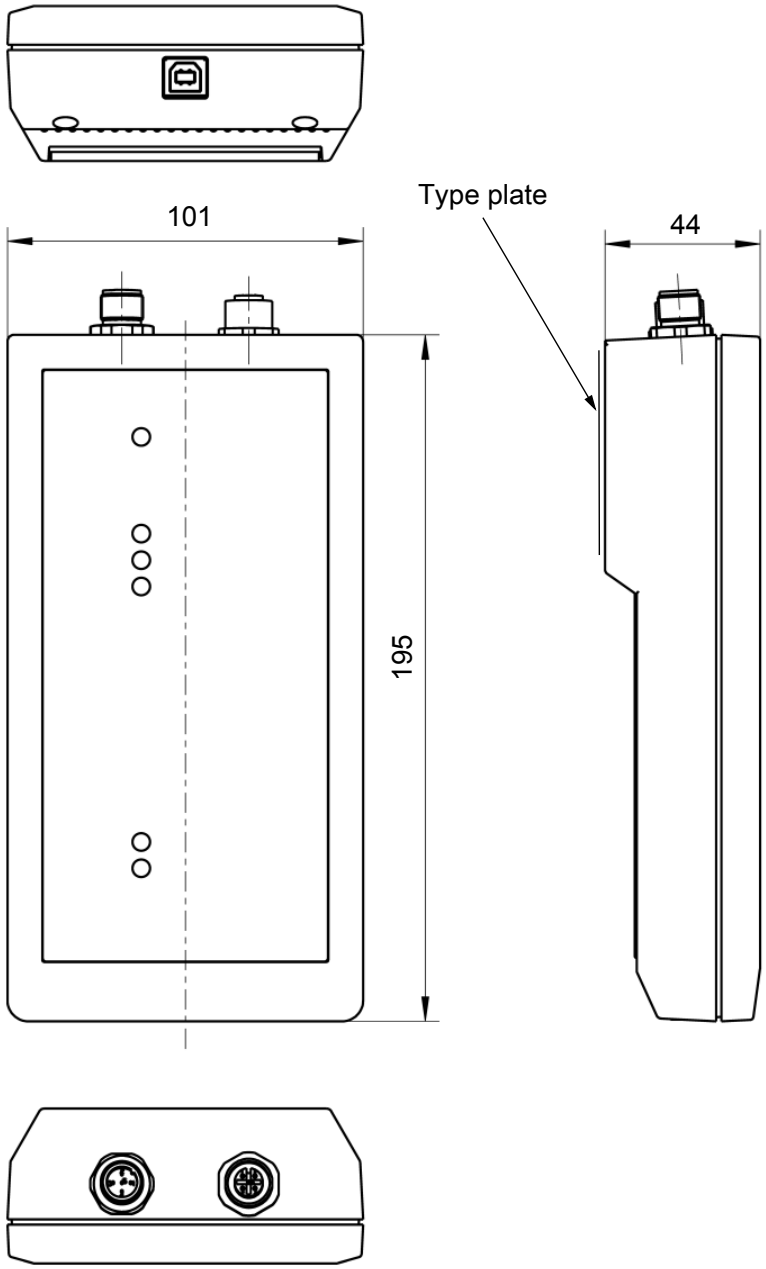
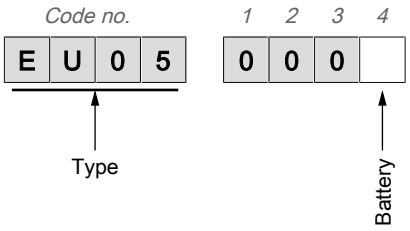


Illustration 2: Dimensional picture

6 Order Codes



[4]	←code
0	Without battery
1	With battery

6.1 Accessories

Order no.	Description		
06405132	Plug power supply unit		
06411148	Programming cable (coupling / connector)	5-pin M12	1 m
04491089	USB 2.0 cable	Type A/B	2 m
09005805	Transmitter configuration software	CD ROM	

7 Attachments

7.1 EC Declarations of conformity

FISCHER MESS- UND REGELTECHNIK

CE

EC Declaration of Conformity

(Translation)

For the product described as follows

Product designation **Transmitter PC Interface**

Type designation **EU05**

it is hereby declared that it corresponds with the basic requirements specified in the following designated directives:

2004/108/EG	*EMC Directive*
2011/65/EU	*RoHS Directive*

The products were tested in compliance with the following standards.

Electromagnetic compatibility (EMC)

EN 61000-6-2:2005 + CENELEC-Cor. :2005	*Electromagnetic compatibility (EMC) - Part 6-2: Generic standards - Immunity for industrial environments (IEC 61000-6-2:2005); German version EN 61000-6-2:2005, Corrigendum to DIN EN 61000-6-2 (VDE 0839-6-2):2006-03; German version CENELEC-Cor. :2005 to EN 61000-6-2:2005*
EN 61000-6-3:2007 +A1:2011+AC:2012	*Electromagnetic compatibility (EMC) - Part 6-3: Generic standards - Emission standard for residential, commercial and light-industrial environments (IEC 61000-6-3:2006 + A1:2010); German version EN 61000-6-3:2007 + A1:2011, Corrigendum to DIN EN 61000-6-3 (VDE 0839-6-3):2011-09; German version EN 61000-6-3:2007/A1:2011/AC:2012*

RoHS

EN 50581:2012	*Technical documentation for the assessment of electrical and electronic products with respect to the restriction of hazardous substances*

Also they were subjected to the conformity assessment procedure „**Internal production control**".

The object of the declaration described above is in conformity with Directive 2011/65/EU of the European Parliament and of the Council of 8 June 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment.

Sole responsibility for the issue of this declaration of conformity in relation to fulfilment of the fundamental requirements and the production of the technical documents is with the manufacturer.

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Dipl. Ing.
General Manager R & D

The devices bear the following marking: CE

Bad Salzuflen, 2015-03-30

S.Richter
General Manager R & D

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Illustration 3: CE_DE_EU05