

Data sheet:

## Universal FO-Interface 20mA



Article no.: 41215

**EUR 438.00**

\*Net price for commercial users

### Reliably transmit TTY over very long distances

The model 41215 Interface features a selectable active or passive 20mA interface which the converter changes into a universal optical interface for single-mode and multi-mode glass fiber optics.

### Properties

#### Interfaces:

- **1x 20mA**
  - 9-pin Sub-D plug
  - Selectable active or passive mode
  - Alternate designations: Current loop, TTY, line current interface
- **1 x single-mode / multi-mode glass fiber optics**
  - SC connector

#### Management and connectivity:

- **No re-configuration of transmission parameters required**
- **Universal 20mA interface for singlemode and multimode glass fiber optics**
- **Active/Passive mode can be set individually for both loops**
- **Noise-immune transmission over a distance of up to 20 km**
- **Galvanic isolation up to nearly any value between the connected devices**

#### Voltage supply:

- **External**
  - 12V-48V DC via plug-in screw terminal
  - Galvanically isolated power connection

#### Standards & more

- **Conforms to standards both in office and industrial environments:**
  - High noise resistance per EN 61000-6-2
  - Low noise emission per EN 55032:2015 + A1 Cl. B, EN 61000-3-2 & EN 61000-3-3
- **5 year guarantee**



Wish for something!

[Your suggestions for improvement and additions](#)

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### Worth knowing

Data transmission over long distances and in extremely noisy environments make the use of fiber optics the logical choice as a physical transmission medium.

The use of plastic fiber optics allows easy-to-install connections over relative short distances of up to 100 meters. But for distances above this limit the use of glass fiber optic cable is unavoidable.

While distances of up to 4km are easily accomplished with multimode fiber optics, greater distances are the domain of singlemode fiber optics.

It used to be that routing and assembling glass fiber optics created significant problems for the users, but today - thanks to the wider use of glass fiber technology in networking - many companies are offering this work as a service.

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## Technical data

### Connections and displays:

Serial port:	20mA interface 9-pin SUB-D adapter
Glass fiber optics port:	SC connector
Operating modes:	active or passive operation
Baud rate:	0..19,200 baud
Data format:	any format
Supported signals:	RxD, TxD
Fiber-optic medium:	Singlemode fibers 9/125µm or Multimode fibers 50/125µm or 62.5/125µm
Fiber end face:	UPC (Ultra Physical Contact)
Transmitter type:	Class 1 Laser Product
Wavelength:	1310nm
Optical output power:	Singlemode fibers: min. -12dBm, max. -8dBm Multimode fibers: max. -3dBm
Receiver sensitivity:	max. -22dBm
Maximum input power:	max. -3dBm
Optical budget:	min. 10dB
Maximum distance:	Singlemode fibers: min. 20km @0.35dB/km Multimode fibers: min. 5km @1dB/km
Minimal attenuation:	Singlemode fibers: 0dB Multimode fibers: 3dB (below this value use of an attenuation member may be required - e.g. W&T #81900)
Galvanic isolation:	Isolation voltage min. 1kV DC between supply and serial connection
Supply voltage:	12..48V DC
Current consumption:	typ. 80mA @12V DC, 40mA @24V DC
Supply connection:	Plug-in screw terminal, 5.08mm spacing Labeled "L+" and "M"
Displays:	1x LED Data 1x LED Power

### Housing and other data:

Housing:	Plastic housing for top hat rail installation 105 x 22 x 75mm (L x W x H)
Enclosure rating:	IP20
Weight:	approx. 120g
Ambient temperature:	Storage: -40..+70°C, Operation: 0..+60°C
Permissible relative humidity:	5..95% RH (non-condensing)
MTBF:	291,514h @25°C per MIL-HDBK-217
Life expectancy:	> 25 years at 25°C ambient temperature
Scope of delivery:	Universal FO-Interface 20mA Please order power supplies separately as accessories

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## Accessories

\*Net unit price for  
commercial users

### Power supplies

Plug-in power supply, 24V / 500mA DC with Euro plug	11021	21.00€	
Plug-in Power Supply, 24V / 750mA DC with Euro, US and UK plug	11026	38.00€	
Power supply for DIN rail, 24V / 630mA DC (merchandise, 2-year manufacturer's guarantee)	11080	33.00€	
<a href="#">FO-Accessories</a>			
Attenuator SC/SPC, 5dB, Singlemode	81900	37.00€	
<a href="#">Mechanical Accessories</a>			
Mounting bracket for wall mounting	58812	11.20€	
19" DIN rail	58813	21.00€	

\* Our offering is intended only for commercial users. We will be happy to refer private end customers to trading partners through whom our products can be purchased.



[We are available to you in person:](#)

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