Ethernet module - FL PD 1001 T GT - 2891042

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Factoryline Power over Ethernet splitter (PD) for separating power and data according to IEEE 802.3af and at, no configuration required, can be used with 10, 100, 1000 Mbps networks, 24 V DC output voltage

Product Description

Power over Ethernet splitter (PD) for separating power and data according to IEEE 802.3af and IEEE 802.3at. The Power over Ethernet splitter, which is suitable for industrial applications, enables the decoupling of Ethernet data with up to 1000 Mbps of the transmitted energy. The 24 V DC voltage is supplied to the PoE splitter in line with the application. Depending on the type of connected PoE supply (802.3af/802.3at), 10.5 W or 21.5 W are available to the terminal device on the splitter. This means that terminal devices without PoE interface such as WLAN or Bluetooth access points, IP phones or IP cameras can be easily connected to a PoE interface.

Why buy this product

- Compact housing
- IEEE 802.3af, at

Key Commercial Data

Packing unit	1 STK
GTIN	4 046356 076036
GTIN	4046356076036
Weight per Piece (excluding packing)	460.000 g
Custom tariff number	85176200
Country of origin	Germany

Technical data

Note

Utilization restriction	EMC: class A product, see manufacturer's declaration in the download area

Dimensions

Width	40 mm
Height	100 mm
Depth	109 mm

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Technical data

Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	-40 °C ... 70 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Permissible humidity (operation)	10 % ... 95 % (non-condensing)
Permissible humidity (storage/transport)	10 % ... 95 % (non-condensing)
Air pressure (operation)	86 kPa ... 108 kPa
Air pressure (storage/transport)	66 kPa ... 108 kPa (3500 m above sea level)

Interfaces

Interface 1	Ethernet
No. of ports	1 (Ethernet port)
Transmission physics	Copper
Transmission speed	10/100/1000 Mbps
Transmission length	up to 100 m (Total)
Interface 3	Ethernet
No. of ports	1
Connection method	RJ45
Transmission speed	10/100/1000 Mbps
Transmission length	up to 100 m (complete system)

Function

Basic functions	PD, conforms to IEEE 802.3af/at
Status and diagnostic indicators	LEDs: POE, 24 V DC

Network expansion parameters

Maximum conductor length (twisted pair)	100 m

Supply voltage

Supply voltage	48 V DC (via PoE)
Supply voltage range	44 V DC ... 57 V DC

General

Mounting type	DIN rail
Type AX	Stand-alone
Net weight	320 g
Housing material	Metal
MTTF	1344.41 Years (SN 29500 standard, temperature 25 °C, operating cycle 21 % (5 days a week, 8 hours a day))
	520.19 Years (SN 29500 standard, temperature 40 °C, operating cycle 34.25 % (5 days a week, 12 hours a day))

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Technical data

General

	52.81 Years (SN 29500 standard, temperature 70 °C, operating cycle 100 % (7 days a week, 24 hours a day))

Connection data

Conductor cross section	0.14 mm² ... 1.5 mm²
Connection cross section AWG	24 ... 12

Standards and Regulations

Electromagnetic compatibility	Conformance with EMC Directive 2014/30/EU
Type of test	Shock in acc. with EN 60068-2-27/IEC 60068-2-27
Test result	30g
Type of test	Free fall in acc. with IEC 60068-2-32
Noise emission	EN 61000-6-4
Noise immunity	EN 61000-6-2:2005
Vibration (storage/transport)	5g, 150 Hz, in acc. with IEC 60068-2-6
Vibration (operation)	in acc. with IEC 60068-2-6: 5g, 150 Hz

Environmental Product Compliance

REACh SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50
	For details about hazardous substances go to tab “Downloads”, Category “Manufacturer's declaration”

Drawings

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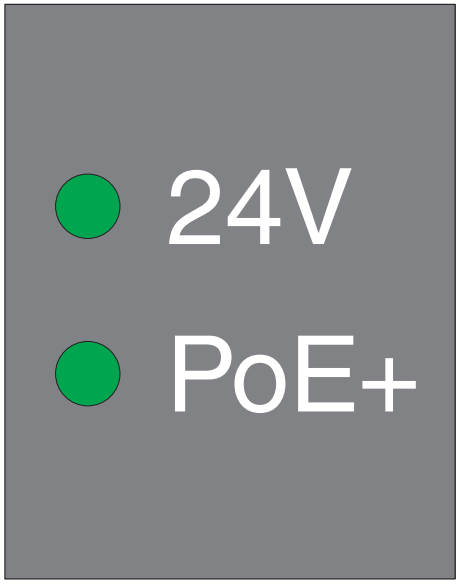
Block diagram

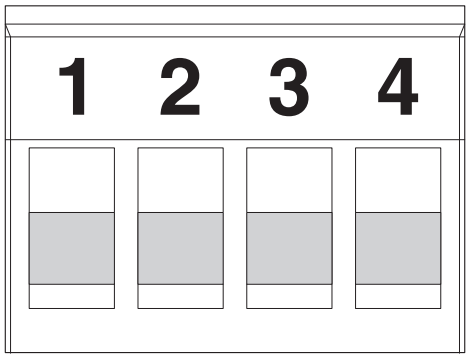
PoE splitter
1) Power Sourcing Equipment (PSE)
2) Power over Ethernet connection
3) PoE splitter (PD)
4) Data
5) Voltage
6) Termination device

Schematic diagram



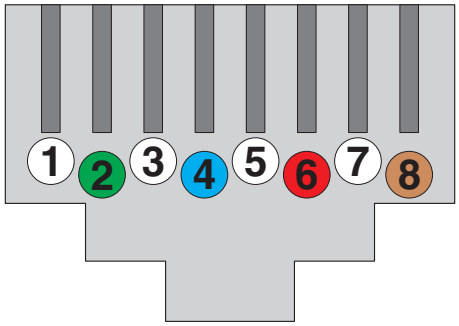
24 V status and output voltage indicator (green)
on: 24 V output voltage available
off: 24 V output voltage not available
PoE+: Types of the connected PSE signal (green/orange)
Green: Type 1 PSE, i.e., min. 12.95 W available at the input
Orange: Type 2 PSE, i.e., min. 25.50 W available at the input

Schematic diagram



Voltage output
1 24 V DC
2 GND
3 24 V DC
4 GND

Schematic diagram



Assignment of the LAN sockets:

Pin assignment, 10/100 Mbit
1 TD+ (transmit)
2 TD- (transmit)
3 RD+ (receive)
4 -
5 -
6 RD- (receive)
7 -

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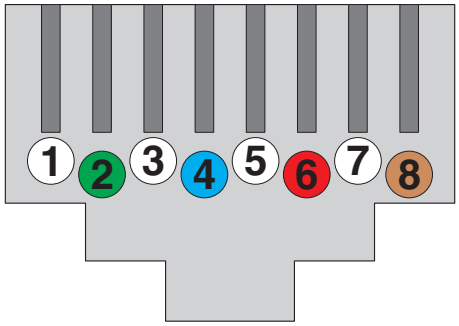
8 -

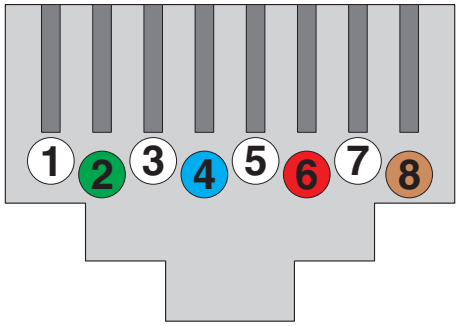
Schematic diagram



Assignment of the LAN sockets:

Pin assignment, 1000 Mbit
1 DA+ (bidirectional)
2 DA- (bidirectional)
3 DB+ (bidirectional)
4 DC+ (bidirectional)
5 DC- (bidirectional)
6 DB- (bidirectional)
7 DD+ (bidirectional)
8 DD- (bidirectional)

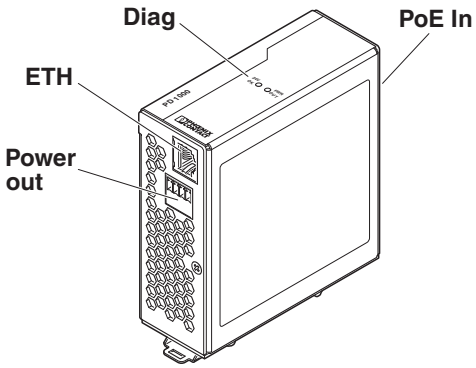
Schematic diagram



Assignment of the LAN sockets:

Pin PoE / PoE+
1 +/- (alt. A)
2 +/- (alt. A)
3 +/- (alt. A)
4 +/- (alt. B)
5 +/- (alt. B)
6 +/- (alt. A)
7 +/- (alt. B)
8 +/- (alt. B)

Schematic diagram



Device connections

Classifications

eCl@ss

eCl@ss 4.0	27250501
eCl@ss 4.1	27250501
eCl@ss 5.0	27250501

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Classifications

eCl@ss

eCl@ss 7.0	19170106
eCl@ss 8.0	19170106
eCl@ss 9.0	19170106

ETIM

ETIM 2.0	EC000731
ETIM 3.0	EC000731
ETIM 4.0	EC001128
ETIM 5.0	EC000734
ETIM 6.0	EC000734

UNSPSC

UNSPSC 6.01	43172015
UNSPSC 7.0901	43201404
UNSPSC 11	43172015
UNSPSC 12.01	43201410
UNSPSC 13.2	43222612

Accessories

Accessories

End block

End clamp - E/NS 35 N - 0800886

End clamp, width: 9.5 mm, color: gray

Mounting rail adapter

DIN rail adapter - FL DIN RA - 2891053

The FL DIN RA is installed in a standard, 19-inch rack (EIA-310-D, IEC 60297-3-100) to allow DIN rail mounted equipment to be rack mounted.

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Accessories

Patch cable

Patch cable - FL CAT5 PATCH 0,3 - 2832250

Patch cable, CAT5, assembled, 0.3 m