

# Ethernet module - FL PD 1001 T GT - 2891042

Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)



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.

## Your advantages

- Compact housing
- IEEE 802.3af, at



## Key Commercial Data

|              |               |
|--------------|---------------|
| Packing unit | 1 pc          |
| GTIN         |               |
| GTIN         | 4046356076036 |

## 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 |

### Ambient conditions

|                                 |                  |
|---------------------------------|------------------|
| Degree of protection            | IP20             |
| Ambient temperature (operation) | -40 °C ... 70 °C |

# Ethernet module - FL PD 1001 T GT - 2891042

## Technical data

### Ambient conditions

|  |   |
|--|---|
| 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            | Ethernet (RJ45)               |
| No. of ports         | 1 (RJ45 ports)                |
| Transmission physics | Copper                        |
| Transmission speed   | 10/100/1000 Mbps              |
| Transmission length  | 100 m (Total)                 |
| Interface            | Ethernet                      |
| No. of ports         | 1 (RJ45 ports)                |
| 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%)   |
|                  | 520.19 Years (SN 29500 standard, temperature 40°C, operating cycle 34.25%) |
|                  | 52.81 Years (SN 29500 standard, temperature 70°C, operating cycle 100%)    |

### Connection data

|                              |  |
|------------------------------|--|
| Conductor cross section      | 0.14 mm <sup>2</sup> ... 1.5 mm <sup>2</sup> |
| Connection cross section AWG | 24 ... 12                                    |

### Standards and Regulations

## Ethernet module - FL PD 1001 T GT - 2891042

### Technical data

#### 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 years  |
|            | For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration" |

### Drawings

# Ethernet module - FL PD 1001 T GT - 2891042

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

Block diagram



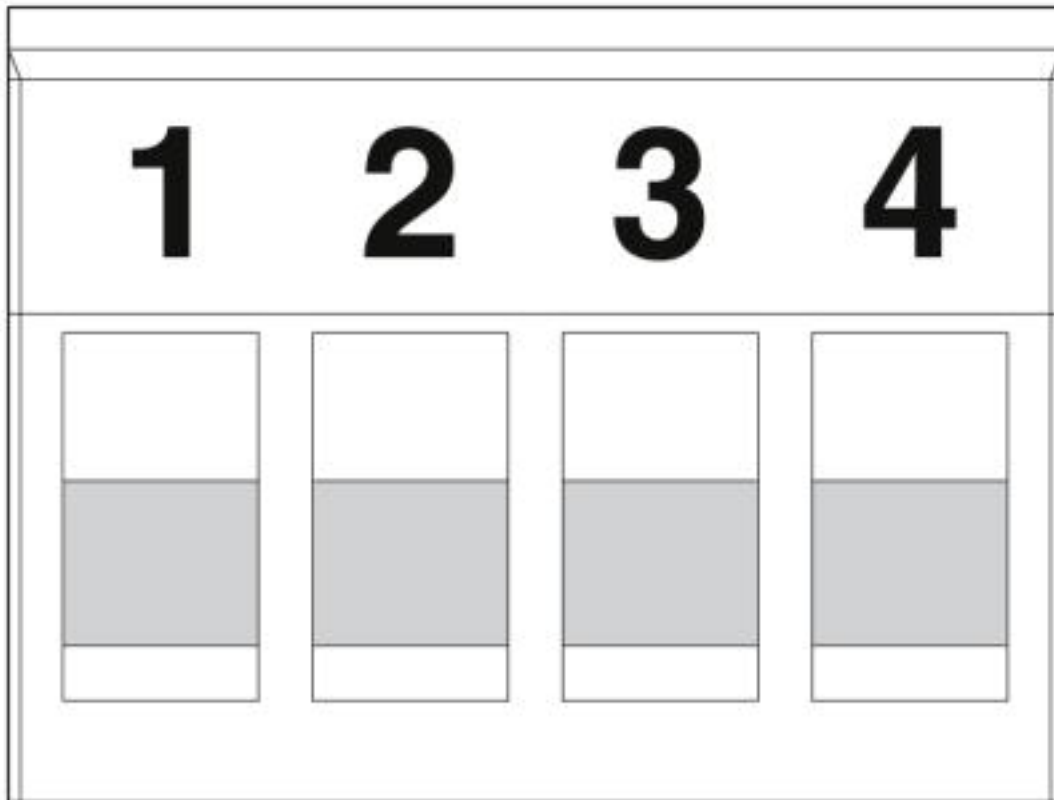
PoE splitter

1) Power Sourcing Equipment (PSE)

## Ethernet module - FL PD 1001 T GT - 2891042

- 2) Power over Ethernet connection
- 3) PoE splitter (PD)
- 4) Data
- 5) Voltage
- 6) Termination device

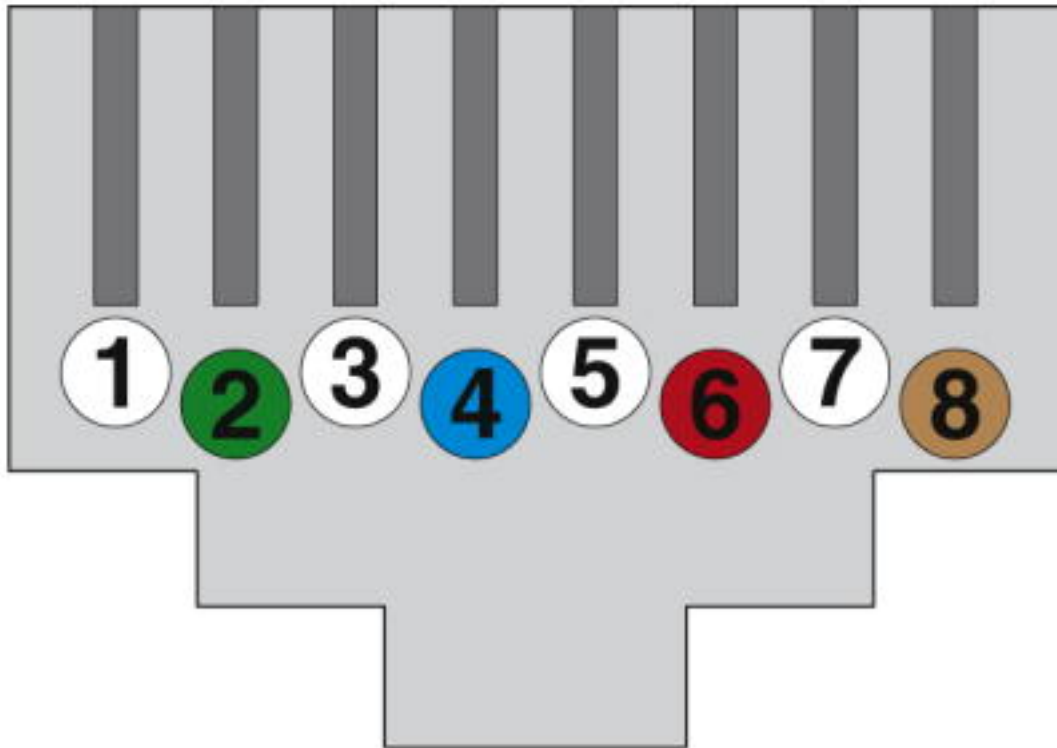
Schematic diagram



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

## Ethernet module - FL PD 1001 T GT - 2891042

Schematic diagram



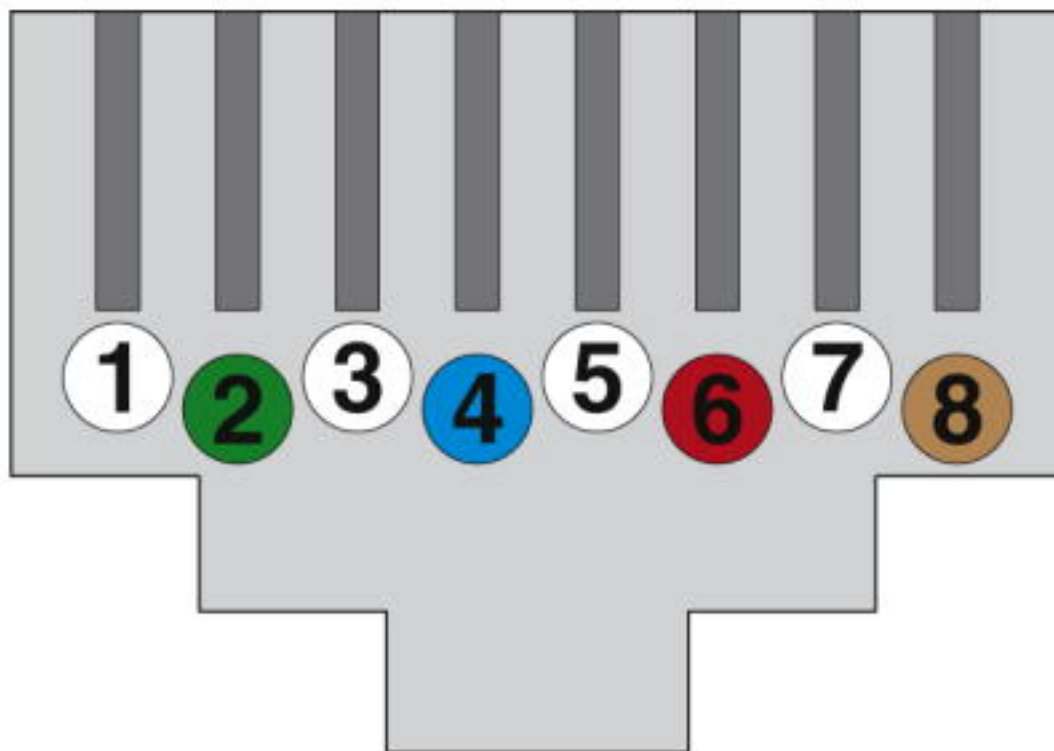
### Assignment of the LAN sockets:

#### Pin assignment, 10/100 Mbit

- 1 TD+ (transmit)
- 2 TD- (transmit)
- 3 RD+ (receive)
- 4 -
- 5 -
- 6 RD- (receive)
- 7 -
- 8 -

## Ethernet module - FL PD 1001 T GT - 2891042

Schematic diagram



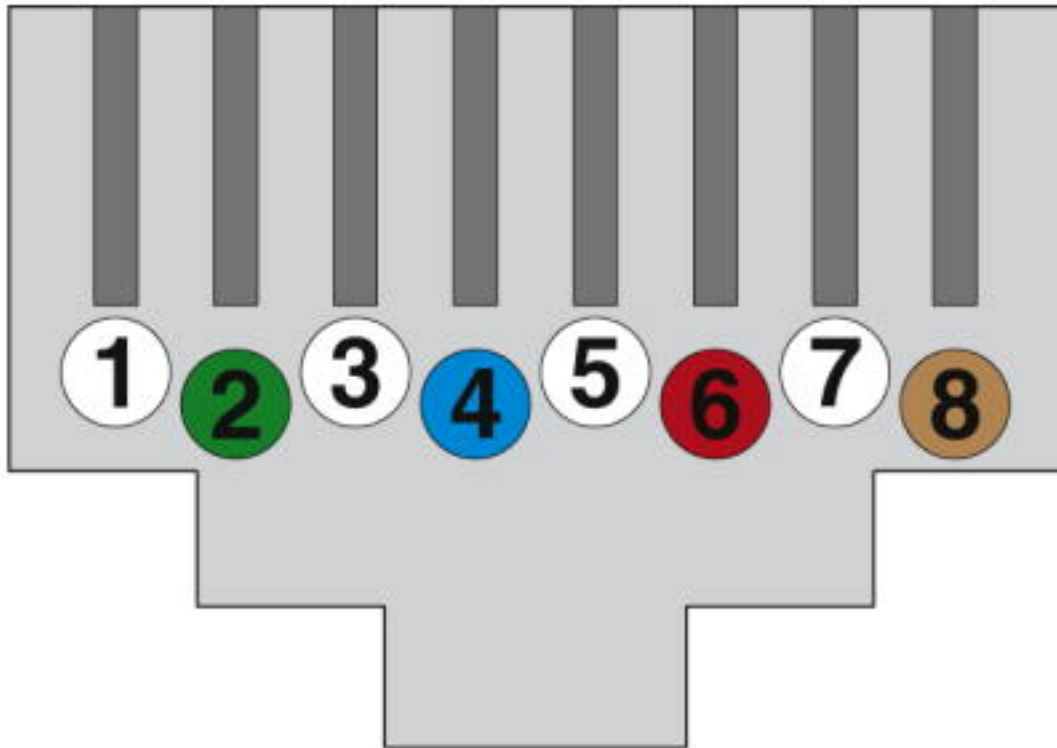
### Assignment of the LAN sockets:

#### 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)

## Ethernet module - FL PD 1001 T GT - 2891042

Schematic diagram



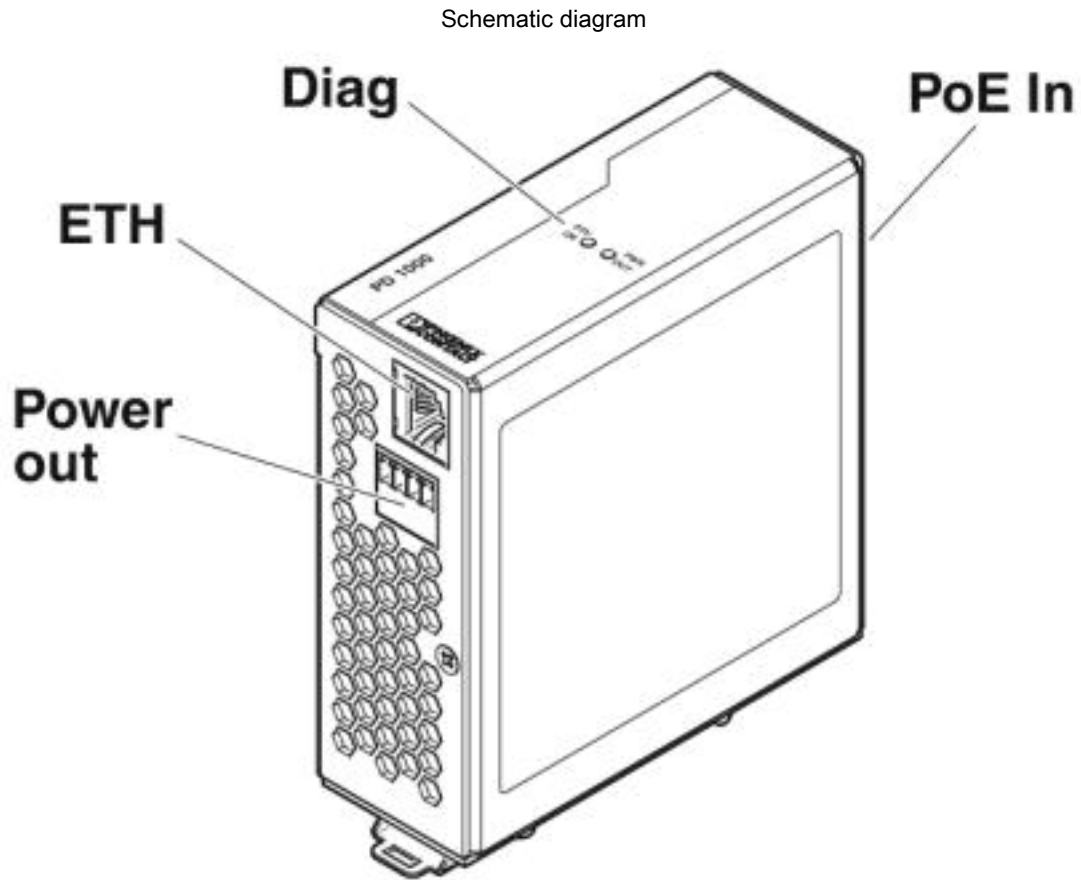
Assignment of the LAN sockets:

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)



# Ethernet module - FL PD 1001 T GT - 2891042



Device connections

## Classifications

### eCl@ss

|               |          |
|---------------|----------|
| eCl@ss 10.0.1 | 19170401 |
| eCl@ss 4.0    | 27250500 |
| eCl@ss 4.1    | 27250500 |
| eCl@ss 5.0    | 19030100 |
| eCl@ss 5.1    | 19030100 |
| eCl@ss 6.0    | 19170100 |
| 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 |

# Ethernet module - FL PD 1001 T GT - 2891042

## Classifications

### ETIM

|          |          |
|----------|----------|
| ETIM 6.0 | EC000734 |
| ETIM 7.0 | EC000734 |

### UNSPSC

|               |          |
|---------------|----------|
| UNSPSC 6.01   | 43172015 |
| UNSPSC 7.0901 | 43201404 |
| UNSPSC 11     | 43172015 |
| UNSPSC 12.01  | 43201410 |
| UNSPSC 13.2   | 43222612 |
| UNSPSC 18.0   | 43222612 |
| UNSPSC 19.0   | 43222612 |
| UNSPSC 20.0   | 43222612 |
| UNSPSC 21.0   | 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.



#### Patch cable

Patch cable - FL CAT5 PATCH 0,3 - 2832250



Patch cable, CAT5, assembled, 0.3 m

## Ethernet module - FL PD 1001 T GT - 2891042

### Accessories

---

---

Phoenix Contact 2020 © - all rights reserved  
<http://www.phoenixcontact.com>

PHOENIX CONTACT GmbH & Co. KG  
Flachsmarktstr. 8  
32825 Blomberg  
Germany  
Tel. +49 5235 300  
Fax +49 5235 3 41200  
<http://www.phoenixcontact.com>