

# Industrial Ethernet Switch - FL SWITCH 1008N



1085256

<https://www.phoenixcontact.com/pc/products/1085256>

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Narrow Ethernet switch, eight RJ45 ports with 10/100 Mbps on all ports, automatic data transmission speed detection, autocrossing function, and QoS

## Your advantages

- RJ45 ports support a transmission speed of 10/100 Mbps
- QoS-prioritized (Quality of Service) messages
- Local diagnostic indicators with LEDs
- PROFINET PTCP filter for reliable communication on PROFINET networks
- Enhanced traffic prioritization for automation protocols
- Energy-efficient Ethernet in accord. with IEEE 802.3az
- PROFINET Conformance Class A for real-time data exchange
- Auto negotiation and autocrossing detection simplifies installation and setup

## Commercial Data

|                                      |               |
|--------------------------------------|---------------|
| Item number                          | 1085256       |
| Packing unit                         | 1 pc          |
| Minimum order quantity               | 1 pc          |
| Product Key                          | DNN116        |
| GTIN                                 | 4055626833590 |
| Weight per Piece (including packing) | 257 g         |
| Weight per Piece (excluding packing) | 174 g         |
| Customs tariff number                | 85176200      |
| Country of origin                    | TW            |

## Technical Data

### Dimensions

|        |          |
|--------|----------|
| Width  | 22.5 mm  |
| Height | 140.4 mm |
| Depth  | 92.4 mm  |

### Material specifications

|                  |                                |
|------------------|--------------------------------|
| Housing material | Polycarbonate fiber reinforced |
|                  | Polycarbonate fiber reinforced |

### Mounting

|               |                   |
|---------------|-------------------|
| Mounting type | DIN rail mounting |
|---------------|-------------------|

### Interfaces

#### Ethernet (RJ45)

|                               |                                   |
|-------------------------------|-----------------------------------|
| Number of interfaces          | 8                                 |
| Connection method             | RJ45                              |
| Note on the connection method | Auto negotiation and autocrossing |
| Transmission speed            | 10/100 Mbps                       |
| Transmission physics          | Ethernet in RJ45 twisted pair     |
| Transmission length           | 100 m (per segment)               |
| Signal LEDs                   | Data receive, link status         |
| No. of channels               | 8 (RJ45 ports)                    |

### Product properties

|              |   |
|--------------|---|
| Product type | Switch  |
| MTTF         | 133.9 Years (MIL-HDBK-217F standard, temperature 25°C, operating cycle 100%)                          |
|              | 1254 Years (SN 29500 standard, temperature 25°C, operating cycle 21%)                                 |
|              | 1196 Years (Telcordia standard, 25°C temperature, 21% operating cycle (5 days a week, 8 hours a day)) |

#### Switch functions

|                                  |   |
|----------------------------------|---|
| Basic functions                  | Unmanaged switch                                      |
|                                  | Autonegotiation                                       |
|                                  | Store and Forward switching mode                      |
| PROFINET conformance class       | Conformance-Class A                                   |
| MAC address table                | 2k  |
| Status and diagnostic indicators | LEDs: U <sub>S</sub> , link and activity per port     |
| Additional functions             | 100 BASE-TX/100BASE-FX (IEEE 802.3u)                  |
|                                  | Quality of Service (QoS) prioritization (IEEE 802.1p) |
|                                  | Energy-efficient Ethernet (IEEE 802.3az)              |

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|                    |                                  |
|--------------------|----------------------------------|
|                    | 10Base-T (IEEE 802.3)            |
| Security functions |                                  |
| Basic functions    | Unmanaged switch                 |
|                    | Autonegotiation                  |
|                    | Store and Forward switching mode |

## Electrical properties

|                             |  |
|-----------------------------|--|
| Transmission medium         | Copper   |
| Supply                      |  |
| Supply voltage              | 24 V   |
|                             | 24 V AC (50/60 Hz)   |
| Supply voltage range        | 9 V DC ... 32 V DC   |
|                             | 18 V AC ... 30 V AC (50/60 Hz)                                 |
| Power supply connection     | Via COMBICON, max. conductor cross section 2.5 mm <sup>2</sup> |
| Residual ripple             | 3.6 V <sub>PP</sub> (within the permitted voltage range)       |
| Max. current consumption    | 173 mA (at 9 V DC)   |
| Typical current consumption | 28 mA (at 24 V DC)   |

## Connection data

|   |  |
|---|--|
| Connection method   | Push-in spring connection                    |
| Conductor cross section, rigid  | 0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>  |
| Conductor cross section flexible, with ferrule without plastic sleeve | 0.25 mm <sup>2</sup> ... 2.5 mm <sup>2</sup> |
| Stripping length  | 10 mm  |

## Ambient conditions

|  |   |
|--|---|
| Degree of protection                     | IP30  |
| Ambient temperature (operation)          | -10 °C ... 60 °C  |
| Ambient temperature (storage/transport)  | -40 °C ... 85 °C  |
| Altitude                                 | 2000 m (maximum)  |
| Permissible humidity (operation)         | 5 % ... 95 % (non-condensing)   |
| Permissible humidity (storage/transport) | 5 % ... 95 % (non-condensing)   |
| Shock (operation)                        | 30g (EN 60068-2-27)   |
| Vibration (operation)                    | in acc. with IEC 60068-2-6: 5g, 150 Hz                                  |
| Air pressure (operation)                 | 79 kPa ... 108 kPa up to 2000 m above mean sea level (Without derating) |
| Air pressure (storage/transport)         | 79 kPa ... 108 kPa up to 2000 m above mean sea level (Without derating) |

## EMC data

|                                 |  |
|---------------------------------|--|
| Conformance with EMC directives | EN 61000-6-2 EN 61000-4-2 (ESD) Criterion B                    |
|                                 | EN 61000-6-2 EN 61000-4-3 (electromagnetic fields) Criterion A |
|                                 | EN 61000-6-2 EN 61000-4-4 (EFT burst) Criterion A              |
|                                 | EN 61000-6-2 EN 61000-4-5 (surge) Criterion B                  |

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|                               |  |
|-------------------------------|--|
|                               | EN 61000-6-2 EN 61000-4-6 (line noise immunity) Criterion A    |
|                               | EN 61000-6-2 EN 61000-4-8 (electromagnetic fields) Criterion A |
|                               | EN 61000-6-2 Class A   |
| Electromagnetic compatibility | Conformance with EMC Directive 2014/30/EU                      |
| Noise emission                | EN 61000-6-4:2007 + A1:2011                                    |
| Noise immunity                | EN 61000-6-2:2005  |

## LED signaling

|                |   |
|----------------|---|
| Status display | LEDs: U <sub>S</sub> , link and activity per port |
|----------------|---|


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## Approvals

|  |                       |                       |                   |                             |
|--|-----------------------|-----------------------|-------------------|-----------------------------|
|  <b>IECEE CB Scheme</b><br>Approval ID: DK-91138-UL |                       |                       |                   |                             |
|  | Nominal Voltage $U_N$ | Nominal Current $I_N$ | Cross Section AWG | Cross Section $\text{mm}^2$ |
|  |                       |                       | -                 | -                           |


|   |
|---|
|  <b>EAC</b><br>Approval ID: RU *-DE.A*08.B.00731 |
|---|

|  |                       |                       |                   |                             |
|--|-----------------------|-----------------------|-------------------|-----------------------------|
|  <b>IECEE CB Scheme</b><br>Approval ID: DK-91246-UL |                       |                       |                   |                             |
|  | Nominal Voltage $U_N$ | Nominal Current $I_N$ | Cross Section AWG | Cross Section $\text{mm}^2$ |
|  |                       |                       | -                 | -                           |

|  |
|--|
|  <b>UL Listed</b><br>Approval ID: FILE E 140403 |
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|   |
|---|
|  <b>cUL Listed</b><br>Approval ID: FILE E 140403 |
|---|

|   |
|---|
|  <b>KC</b><br>Approval ID: R-R-PCK-1085256 |
|---|

|   |
|---|
|  <b>cUL Listed</b><br>Approval ID: FILE E 238705 |
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|  <b>UL Listed</b><br>Approval ID: FILE E 238705 |
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|  <b>cUL Listed</b><br>Approval ID: FILE E 196811 |
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|  <b>UL Listed</b><br>Approval ID: FILE E 196811 |
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|                     |
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| <b>cULus Listed</b> |
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## Classifications

### ECLASS

|               |          |
|---------------|----------|
| ECLASS-9.0    | 19170106 |
| ECLASS-10.0.1 | 19170402 |
| ECLASS-11.0   | 19170402 |

### ETIM

|          |          |
|----------|----------|
| ETIM 8.0 | EC000734 |
|----------|----------|

### UNSPSC

|             |          |
|-------------|----------|
| UNSPSC 21.0 | 43222600 |
|-------------|----------|

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## Environmental Product Compliance

REACH SVHC

Lead 7439-92-1



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## Accessories

### PCB connector

PCB connector - FKCT 2,5/ 3-ST KMGY BD:US,GND - 1087544

<https://www.phoenixcontact.com/pc/products/1087544>



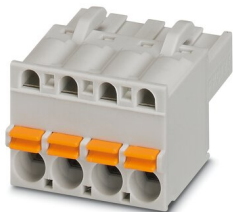
PCB connector, nominal cross section: 2.5 mm<sup>2</sup>, color: light grey, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Female connector, number of rows: 1, number of positions: 3, product range: FKCT 2,5/..-ST, pitch: 5 mm, connection method: Push-in spring connection, conductor/PCB connection direction: 0 °, locking clip: - Locking clip, plug-in system: COMBICON MSTB 2,5, locking: without, mounting: without, type of packaging: packed in cardboard

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### PCB connector

PCB connector - FKCT 2,5/ 3-ST KMGY - 1998263

<https://www.phoenixcontact.com/pc/products/1998263>



PCB connector, nominal cross section: 2.5 mm<sup>2</sup>, color: light grey, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Female connector, number of potentials: 3, number of rows: 1, number of positions: 3, number of connections: 3, product range: FKCT 2,5/..-ST, pitch: 5 mm, connection method: Push-in spring connection, conductor/PCB connection direction: 0 °, locking clip: - Locking clip, plug-in system: COMBICON MSTB 2,5, locking: without, mounting: without, type of packaging: packed in cardboard

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## Mounting plate

Mounting plate - FL DIN-RAIL ADAPTER 22.5 - 1085485

<https://www.phoenixcontact.com/pc/products/1085485>



The FL DIN-RAIL ADAPTER 22.5 is designed to allow products 22.5 mm wide to be mounted flush to a standard 35 mm DIN rail, in any orientation.

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## Mounting plate

Mounting plate - FL PANEL ADAPTER 22.5 - 1085488

<https://www.phoenixcontact.com/pc/products/1085488>



The FL PANEL ADAPTER 22.5 is designed to allow products 22.5 mm wide to be mounted flush to a panel, in any orientation.

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## Surge protection device

Surge protection device - DT-LAN-CAT.6+ - 2881007

<https://www.phoenixcontact.com/pc/products/2881007>



Surge protection in accordance with Class E<sub>A</sub> (CAT6<sub>A</sub>), for Gigabit Ethernet (up to 10 Gbps), token ring, FDDI/CDDI, ISDN, and DS1. Suitable for Power over Ethernet (PoE++ / 4PPoE) "Mode A" and "Mode B". RJ45 attachment plug with separate grounding cable and ground connection snap-on foot for NS 35 DIN rails.

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## Patch cable

Patch cable - FL CAT5 PATCH 0,5 - 2832263

<https://www.phoenixcontact.com/pc/products/2832263>



Patch cable, CAT5, assembled, 0.5 m

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## Patch cable

Patch cable - FL CAT5 PATCH 1,0 - 2832276

<https://www.phoenixcontact.com/pc/products/2832276>

Patch cable, CAT5, assembled, 1 m



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## Patch cable

Patch cable - FL CAT5 PATCH 2,0 - 2832289

<https://www.phoenixcontact.com/pc/products/2832289>

Patch cable, CAT5, assembled, 2 m



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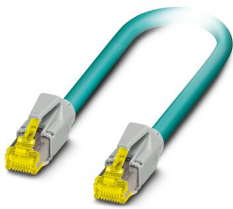
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<https://www.phoenixcontact.com/pc/products/1085256>

## Patch cable

Patch cable - NBC-R4AC-R4AC-IE8A/.../... - 1411854

<https://www.phoenixcontact.com/pc/products/1411854>



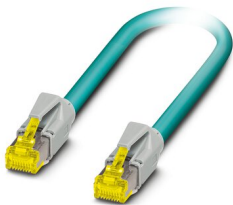
Patch cable, degree of protection: IP20, number of positions: 8, 10 Gbps, CAT6<sub>A</sub>, cable outlet: straight, Ethernet

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## Patch cable

Patch cable - NBC-R4AC/10G-R4AC/10G-94F/2,0 - 1408360

<https://www.phoenixcontact.com/pc/products/1408360>



Patch cable, CAT6<sub>A</sub>, 4-pair, shielded, connection not crossed (line), assembled at both ends with RJ45/IP20 connectors, outer sheath material: PUR, length: 2.0 m

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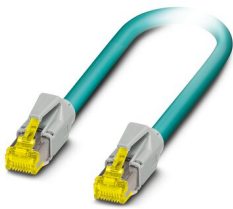
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<https://www.phoenixcontact.com/pc/products/1085256>

## Patch cable

Patch cable - NBC-R4AC/10G-R4AC/10G-94F/3,0 - 1408365

<https://www.phoenixcontact.com/pc/products/1408365>



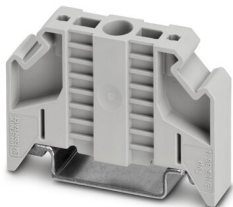
Patch cable, CAT6<sub>A</sub>, 4-pair, shielded, connection not crossed (line), assembled at both ends with RJ45/IP20 connectors, outer sheath material: PUR, length: 3.0 m

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## End clamp

End clamp - E/NS 35 N - 0800886

<https://www.phoenixcontact.com/pc/products/0800886>



End clamp, width: 9.5 mm, color: gray

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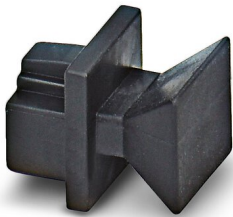
<https://www.phoenixcontact.com/pc/products/1085256>

## Dust protection

Dust protection - FL RJ45 PROTECT CAP - 2832991

<https://www.phoenixcontact.com/pc/products/2832991>

Dust protection caps for RJ45 socket



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