## Industrial Ethernet Switch - FL SWITCH 1105NT - 1085163

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)

## Narrow Ethernet switch, wide temperature range, five RJ45 ports with 10/100/1000 Mbps on all ports, automatic

 data transmission speed detection, autocrossing function, and QoS
## Your advantages

$\boxed{\text { ® }}$ Auto negotiation and autocrossing detection simplifies installation and setup
$\checkmark$ Local diagnostic indicators with LEDs
$\square$ RJ45 ports support a transmission speed of 10/100/1000 Mbps
$\square$ QoS-prioritized (Quality of Service) messages
$\checkmark$ PROFINET Conformance Class A for real-time data exchange
$\checkmark$ Energy-efficient Ethernet in accord. with IEEE 802.3az
$\square$ PROFINET PTCP filter for reliable communication on PROFINET networks
$\square$ Enhanced traffic prioritization for automation protocols
$\boxed{\square}$ Jumbo frame support (frame size up to 9216 bytes/frame)


## Key Commercial Data

| Packing unit | 1 pc |
| :--- | :--- |
| Weight per Piece (excluding packing) | 300.000 g |
| Country of origin | Taiwan |

## Technical data

Note

| Utilization restriction | EMC: class A product, see manufacturer's declaration in the download <br> area |
| :--- | :--- |
| Dimensions | 22.5 mm |
| Width | 117 mm |
| Height | 84 mm |
| Depth |  |

## Industrial Ethernet Switch - FL SWITCH 1105NT - 1085163

## Technical data

## Ambient conditions

| Degree of protection | IP30 |
| :--- | :--- |
| Ambient temperature (operation) | $-40^{\circ} \mathrm{C} \ldots 75^{\circ} \mathrm{C}$ |
| Ambient temperature (storage/transport) | $-40^{\circ} \mathrm{C} \ldots 85^{\circ} \mathrm{C}$ |
| Permissible humidity (operation) | $5 \% \ldots 95 \%$ (non-condensing) |
| Permissible humidity (storage/transport) | $5 \% \ldots 95 \%$ (non-condensing) |
| Air pressure (operation) | $79 \mathrm{kPa} \ldots 108 \mathrm{kPa}$ up to 2000 m above mean sea level (Without derating) |
| Air pressure (storage/transport) | $79 \mathrm{kPa} \ldots 108 \mathrm{kPa}$ up to 2000 m above mean sea level (Without derating) |

## Interfaces

| Interface | Ethernet (RJ45) |
| :--- | :--- |
| No. of ports | 5 (RJ45 ports) |
| Note on the connection method | Auto negotiation and autocrossing |
| Transmission physics | Ethernet in RJ45 twisted pair |
| Transmission speed | $10 / 100 / 1000 \mathrm{Mbps}$ |
| Transmission length | 100 m (per segment) |
| Signal LEDs | Data receive, link status |

Function

| Basic functions | Unmanaged switch |
| :--- | :--- |
|  | Autonegotiation |
|  | Store and Forward switching mode |
| Additional functions | 100 BASE-TX/100BASE-FX (IEEE 802.3u) |
|  | Jumbo frames (Max. 9,216 bytes) |
|  | Quality of Service (QoS) prioritization (IEEE 802.1p) |
|  | Energy-efficient Ethernet (IEEE 802.3az) |
|  | Gigabit Ethernet 1000BASE-T (IEEE 802.3ab) |
|  | 10Base-T (IEEE 802.3) |
| MAC address table | 4k |
| PROFINET conformance class | Conformance-Class A |
| Status and diagnostic indicators | LEDs: Us, link and activity per port |

Network expansion parameters

| Cascading depth | Network, linear, and star structure: any |
| :--- | :--- |
| Maximum conductor length (twisted pair) | 100 m |

## Supply voltage

| Supply voltage | 24 V |
| :--- | :--- |
|  | $24 \mathrm{~V} \mathrm{AC} \mathrm{(50/60} \mathrm{Hz)}$ |
| Residual ripple | $3.6 \mathrm{~V}_{\mathrm{PP}}$ (within the permitted voltage range) |

## Industrial Ethernet Switch - FL SWITCH 1105NT - 1085163

## Technical data

## Supply voltage

| Supply voltage range | 9 V DC $\ldots 32 \mathrm{~V} \mathrm{DC}$ |
| :--- | :--- |
|  | $18 \mathrm{~V} \mathrm{AC} \ldots 30 \mathrm{~V} \mathrm{AC}(50 / 60 \mathrm{~Hz})$ |
| Typical current consumption | 34 mA |
| Max. current consumption | 98 mA |

## General

| Mounting type | DIN rail |
| :--- | :--- |
| Net weight | 222 g |
| Housing material | Polycarbonate fiber reinforced |
|  | Aluminum / steel sheet DC01 |
| MTTF | 97.6 Years (MIL-HDBK-217F standard, temperature $25^{\circ} \mathrm{C}$, operating cycle <br> $100 \%)$ |
|  | 888.3 Years (SN 29500 standard, temperature $25^{\circ} \mathrm{C}$, operating cycle 21\%) |
|  | 818.3 Years (Telcordia standard, $25^{\circ} \mathrm{C}$ temperature, $21 \%$ operating cycle <br> $(5$ days a week, 8 hours a day)) |

## Connection data

| Connection method | Push-in spring connection |
| :--- | :--- |
| Conductor cross section solid min. | $0.2 \mathrm{~mm}^{2}$ |
| Conductor cross section solid max. | $2.5 \mathrm{~mm}^{2}$ |
| Conductor cross section flexible min. | $0.2 \mathrm{~mm}^{2}$ |
| Conductor cross section flexible max. | $2.5 \mathrm{~mm}^{2}$ |
| Conductor cross section AWG min. | 24 |
| Conductor cross section AWG max. | 12 |
| Stripping length | 10 mm |

## Standards and Regulations

| Electromagnetic compatibility | Conformance with EMC Directive 2014/30/EU |
| :--- | :--- |
| Interference emission | EN 61000-6-2 EN 61000-4-8 (electromagnetic fields) Criterion A |
| Conducted noise emission | EN 61000-6-2 Class A |
| Immunity to surge | EN 61000-6-2 EN 61000-4-5 (surge) Criterion B |
| Immunity to burst | EN 61000-6-2 EN 61000-4-4 (EFT burst) Criterion A |
| Immunity to EF | EN 61000-6-2 EN 61000-4-3 (electromagnetic fields) Criterion A |
| Immunity to ESD | EN 61000-6-2 EN 61000-4-2 (ESD) Criterion B |
| Immunity to conducted interference | EN 61000-6-2 EN 61000-4-6 (line noise immunity) Criterion A |
| Type of test | Free fall in accordance with EN 61131-2 |
| Noise emission | EN 61000-6-4:2007 + A1:2011 |
| Noise immunity | EN 61000-6-2:2005 |
| Vibration (storage/transport) | $5 \mathrm{~g}, 150 \mathrm{~Hz}$, in acc. with IEC 60068-2-6 |
| Vibration (operation) | in acc. with IEC 60068-2-6: 5g, 150 Hz |

## Industrial Ethernet Switch - FL SWITCH 1105NT - 1085163

## Technical data

Standards and Regulations
Shock (operation)
30g (EN 60068-2-27)
Environmental Product Compliance

| REACh SVHC | Lead 7439-92-1 |
| :--- | :--- |

## Classifications

eCl@ss

| eCl@ss 10.0.1 | 19170402 |
| :--- | :--- |
| eCl@ss 11.0 | 19170402 |
| eCl@ss 9.0 | 19170106 |

UNSPSC

| UNSPSC 18.0 | 43222612 |
| :--- | :--- |
| UNSPSC 19.0 | 43222612 |
| UNSPSC 20.0 | 43222612 |
| UNSPSC 21.0 | 43222612 |

## Accessories

## Accessories

Assembly adapter
Mounting plate - FL DIN-RAIL ADAPTER 22.5-1085485

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.

Mounting plate - FL PANEL ADAPTER 22.5-1085488

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.

Data cable preassembled

# Industrial Ethernet Switch - FL SWITCH 1105NT - 1085163 

## Accessories

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


Patch cable, degree of protection: IP20, number of positions: $8,10 \mathrm{Gbps}^{2}, \mathrm{CAT}_{\mathrm{A}}$, cable outlet: straight, Ethernet

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



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

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



Patch cable, $\mathrm{CAT6}_{\mathrm{A}}$, 4-pair, shielded, connection not crossed (line), assembled at both ends with RJ45/IP20 connectors, outer sheath material: PUR, length: 3.0 m

## End block

End clamp - E/NS 35 N-0800886


End clamp, width: 9.5 mm , color: gray

## Patch cable

Patch cable - FL CAT5 PATCH 0,5-2832263


# Industrial Ethernet Switch - FL SWITCH 1105NT - 1085163 

## Accessories

Patch cable - FL CAT5 PATCH 1,0-2832276


Patch cable, CAT5, assembled, 1 m

Patch cable - FL CAT5 PATCH 2,0-2832289


Patch cable, CAT5, assembled, 2 m

PCB plug

PCB connector - FKCT 2,5/ 3-ST KMGY BD:US,GND - 1087544
PCB connector, nominal cross section: $2.5 \mathrm{~mm}^{2}$, color: light gray, 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: $0^{\circ}$, locking clip: - Locking clip, plug-in system: CLASSIC COMBICON, Locking: without, mounting: without, type of packaging: packed in cardboard

Printed-circuit board connector - FKCT 2,5/ 3-ST KMGY - 1998263
PCB connector, nominal cross section: $2.5 \mathrm{~mm}^{2}$, color: light gray, 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: $0^{\circ}$, locking clip: - Locking clip, plug-in system: CLASSIC COMBICON, Locking: without, mounting: without, type of packaging: packed in cardboard

## Protective cap

# Industrial Ethernet Switch - FL SWITCH 1105NT - 1085163 

## Accessories

Dust protection - FL RJ45 PROTECT CAP - 2832991


Dust protection caps for RJ45 socket

Surge protection for information technology
Surge protection device - DT-LAN-CAT.6+-2881007
Surge protection in accordance with Class $\mathrm{E}_{\mathrm{A}}\left(\mathrm{CAT6}_{\mathrm{A}}\right)$, 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.

Phoenix Contact 2022 © - all rights reserved http://www.phoenixcontact.com

