MC 1000T-SM20 SC - FO converters

1330262

https://www.phoenixcontact.com/us/products/1330262

PHŒNIX CONTACT

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Fiber optic converter with SC duplex connection (1310 nm) for 100Base-TX to singlemode fiber optics, DIN rail mountable, extended temperature range, redundant power supply.

Product description

The MC 1000T-SM20 SC media converter comes with one 10/100 Mbps twisted-pair RJ45 port and one 100 Mbps singlemode fiber optics port with an SC-duplex connector and wide operating temperature range.

Your advantages

- Auto MDI/MDI-X switch-over
- Data transfer rates of 100 Mbps
- Link fault pass through (LFPT) function for easy connection monitoring

Commercial data

Item number	1330262
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	DN06
Product key	DNC314
GTIN	4063151626341
Weight per piece (including packing)	270.7 g
Weight per piece (excluding packing)	180 g
Customs tariff number	85176200
Country of origin	CA

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Technical data

Notes

Note on application

Note on application	Only for industrial use

Utilization restriction

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

Product properties

Product type	Media converter
Product family	MC 1000T
MTTF	69.1 Years (MIL-HDBK-217F standard, temperature 25°C, operating cycle 100%)
	508.3 Years (SN 29500 standard, temperature 25°C, operating cycle 21%)
	551.7 Years (Telcordia standard, temperature 25 °C, operating cycle 100 % (7 days a week, 24 hours a day))

Electrical properties

Supply

Supply voltage range	12 V DC ... 57 V DC
Nominal supply voltage	24 V DC
	48 V DC
Typical current consumption	20 mA (24 V DC)
Max. current consumption	170 mA (12 V DC, 75 °C)

Output data

Signal

Voltage output signal	12 V DC ... 48 V DC (depending on the input voltage)
Current output signal	100 mA

Connection data

Supply

Connection method	Push-in spring connection
Single conductor/terminal point, rigid	0.2 mm² ... 2.5 mm²
Single-wire/terminal point, flexible	0.2 mm² ... 2.5 mm²
Conductor cross-section, flexible [AWG]	24 ... 12
Stripping length	10.00 mm

Interfaces

Signal	Ethernet

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Data: optical FO

Transmit capacity, minimum	-15 dBm (9/125 µm, singlemode fiberglass)
Transmit capacity, maximum	-8 dBm (9/125 µm, singlemode fiberglass)
Connection method	SC duplex
Wavelength	1310 nm
Minimum receiver sensitivity	-32 dBm (9/125 µm, singlemode fiberglass)
Maximum receiver sensitivity	0 dBm (9/125 µm, singlemode fiberglass)
Transmission medium	Single-mode fiberglass

Data: Ethernet interface, 100Base-T(X) in accordance with IEEE 802.3

Transmission speed	10/100 Mbps
Connection method	RJ45 jack, shielded
No. of channels	1
Transmission length	100 m (twisted pair, shielded)
Transmission medium	Copper
Signal LEDs	LNK/ACT, SPD, Err, US, US2
Auto-negotiation modes	Auto
Link through	Link fault pass through
MDI-/MDI-X switchover	Auto-MDI(X)

Dimensions

Width	22.5 mm
Height	123 mm
Depth	90 mm

Material specifications

Material (Housing)	Polyamide fiberglass reinforced
	Aluminum
	Sheet steel

Cable/line

FO cable

Fiber types	9/125 µm
	Fiberglass

Mechanical tests

Vibration resistance in accordance with EN 60068-2-6/IEC 60068-2-6	: 5g, 150 Hz, Criterion 3
Shock in accordance with EN 60068-2-27/IEC 60068-2-27	: 30g, 11 ms half-sine shock pulse

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP30
Ambient temperature (operation)	-40 °C ... 75 °C

Ambient temperature (storage/transport)	-40 °C ... 85 °C
Altitude	≤ 2000 m (in acc. with UL)
Permissible humidity (operation)	10 % ... 95 % (non-condensing)
Shock	300 m/s², 11 ms (IEC 60068-2)

Approvals

CE

Certificate	CE-compliant

UL, USA/Canada

Identification	Class I, Division 2, Groups A, B, C, and D, T4

EMC data

Electromagnetic compatibility	Conformance with EMC Directive 2014/30/EU

Electrostatic discharge

Standards/regulations	EN 61000-4-2

Electrostatic discharge

Comments	Criterion B

Electromagnetic HF field

Standards/regulations	EN 61000-4-3

Electromagnetic HF field

Comments	Criterion A

Fast transients (burst)

Standards/regulations	EN 61000-4-4

Fast transients (burst)

Comments	Criterion A

Surge current load (surge)

Standards/regulations	EN 61000-4-5

Surge current load (surge)

Comments	Criterion B

Conducted interference

Standards/regulations	EN 61000-4-6

Conducted interference

Comments	Criterion A

Emitted interference

Standards/regulations	EN 55032

Mounting

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Mounting type	DIN rail mounting
Mounting position	on horizontal DIN rail NS 35 in acc. with EN 60715
Useable DIN rail type	DIN rail: 35 mm

Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1330262

cULus Listed
Approval ID: E238705

BSH
Approval ID: BSH Nr. 1176

cULus Listed
Approval ID: E196811

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Classifications

ECLASS

ECLASS-13.0	19170411
ECLASS-15.0	19170411

ETIM

ETIM 9.0	EC001467

UNSPSC

UNSPSC 21.0	43223323

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Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions

China RoHS

Environment friendly use period (EFUP)	EFUP-E
	No hazardous substances above the limits

EU REACH SVHC

REACH candidate substance (CAS No.)	No substance above 0.1 wt%

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Accessories

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

1998263

https://www.phoenixcontact.com/us/products/1998263
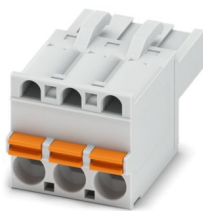
PCB connector, nominal cross section: 2.5 mm^2, color: light gray, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Sn, contact connection type: Socket, number of potentials: 3, number of rows: 1, number of positions: 3, number of connections: 3, product range: FKCT 2,5/..-ST, pitch: 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 method: without, type of packaging: packed in cardboard

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

2881007

https://www.phoenixcontact.com/us/products/2881007

Surge protection in accordance with Class E_A (CAT6$_A$), for Gigabit Ethernet (up to 10 Gbps), token ring, FDDI/CDDI, ISDN, DS1. Suitable for Power over Ethernet (PoE++/4PPoE) "Mode A" and "Mode B". RJ45 intermediate plug with separate grounding cable and ground connection snap-on foot for NS 35 DIN rails. Products with similar requirements: DT-LAN-CAT.6A (2908726) und D-LAN-CAT.5-HC (2800763).

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FL DIN-RAIL ADAPTER 22.5 - Mounting panel

1085485

https://www.phoenixcontact.com/us/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.

FL PANEL ADAPTER 22.5 - Mounting panel

1085488

https://www.phoenixcontact.com/us/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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E/NS 35 N - End bracket

0800886

https://www.phoenixcontact.com/us/products/0800886
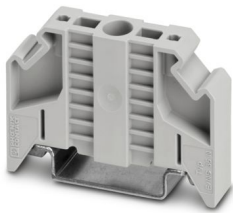
End clamp, width: 9.5 mm, color: gray

FL CAT5 PATCH 0,5 - Patch cable

2832263

https://www.phoenixcontact.com/us/products/2832263

Patch cable, CAT5, assembled, 0.5 m

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FL CAT5 PATCH 1,0 - Patch cable

2832276

https://www.phoenixcontact.com/us/products/2832276

Patch cable, CAT5, assembled, 1 m

FL CAT5 PATCH 2,0 - Patch cable

2832289

https://www.phoenixcontact.com/us/products/2832289

Patch cable, CAT5, assembled, 2 m

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https://www.phoenixcontact.com/us/products/1330262

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

1411854

https://www.phoenixcontact.com/us/products/1411854
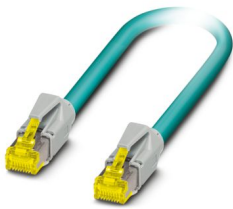
Patch cable, degree of protection: IP20, number of positions: 8, 10 Gbps, CAT6$_A$, cable outlet: straight, Ethernet

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

1408360
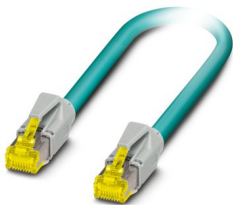
https://www.phoenixcontact.com/us/products/1408360

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

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https://www.phoenixcontact.com/us/products/1330262

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

1408365
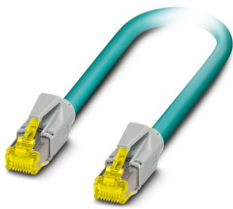
https://www.phoenixcontact.com/us/products/1408365

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

SZS 0,4X2,0 - Screwdriver

1205202

https://www.phoenixcontact.com/us/products/1205202

Micro screwdriver, bladed, size: 0.4 x 2.0 x 60 mm, 2-component grip, with non-slip grip and twist cap

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FL DIN RA - DIN rail adapter

2891053

https://www.phoenixcontact.com/us/products/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.

FOC-LC:PA-SC:PA-OS2:D01/1 - FO patch cable

1115618

https://www.phoenixcontact.com/us/products/1115618

Single-mode OS2 duplex jumper, LC-SC, UPC polishing, length 1 m
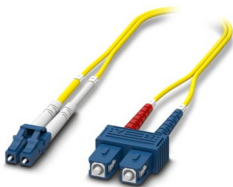
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1330262

https://www.phoenixcontact.com/us/products/1330262

FOC-SC:PA-SC:PA-OS2:D01/2 - FO patch cable

1115548

https://www.phoenixcontact.com/us/products/1115548

Single-mode OS2 duplex jumper, SC-SC, UPC polishing, length 2 m

FOC-LC:PA-SC:PA-OS2:D01/2 - FO patch cable
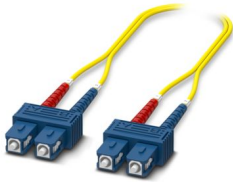
1115617

https://www.phoenixcontact.com/us/products/1115617

Single-mode OS2 duplex jumper, LC-SC, UPC polishing, length 2 m
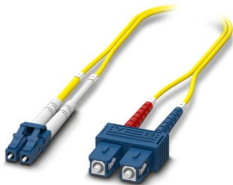
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1330262

https://www.phoenixcontact.com/us/products/1330262

FOC-SC:PA-SC:PA-OS2:D01/0.5 - FO patch cable

1115551

https://www.phoenixcontact.com/us/products/1115551

Single-mode OS2 duplex jumper, SC-SC, UPC polishing, length 0.5 m

FOC-ST:PA-SC:PA-OS2:D01/0.5 - FO patch cable
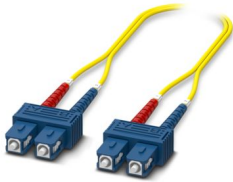
1115583

https://www.phoenixcontact.com/us/products/1115583

Single-mode OS2 duplex jumper, ST-SC, UPC polishing, length 0.5 m
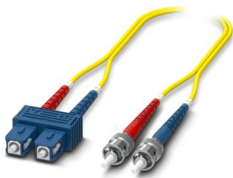
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1330262

https://www.phoenixcontact.com/us/products/1330262

FOC-LC:PA-SC:PA-OS2:D01/0.5 - FO patch cable

1115620

https://www.phoenixcontact.com/us/products/1115620

Single-mode OS2 duplex jumper, LC-SC, UPC polishing, length 0.5 m

FOC-ST:PA-SC:PA-OS2:D01/1 - FO patch cable
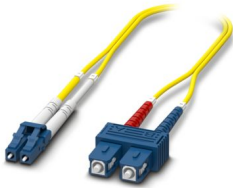
1115582

https://www.phoenixcontact.com/us/products/1115582

Single-mode OS2 duplex jumper, ST-SC, UPC polishing, length 1 m
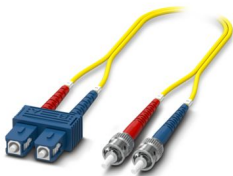
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https://www.phoenixcontact.com/us/products/1330262

FOC-ST:PA-SC:PA-OS2:D01/2 - FO patch cable

1115581

https://www.phoenixcontact.com/us/products/1115581

Single-mode OS2 duplex jumper, ST-SC, UPC polishing, length 2 m

FOC-LC:PA-SC:PA-OS2:D01/5 - FO patch cable
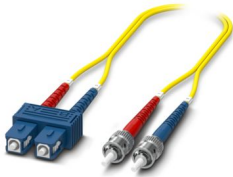
1115615

https://www.phoenixcontact.com/us/products/1115615

Single-mode OS2 duplex jumper, LC-SC, UPC polishing, length 5 m
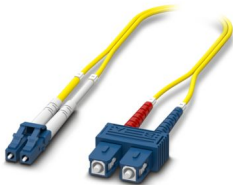
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https://www.phoenixcontact.com/us/products/1330262

FOC-SC:PA-SC:PA-OS2:D01/1 - FO patch cable

1115550

https://www.phoenixcontact.com/us/products/1115550

Single-mode OS2 duplex jumper, SC-SC, UPC polishing, length 1 m

FOC-SC:PA-SC:PA-OS2:D01/5 - FO patch cable

1115546
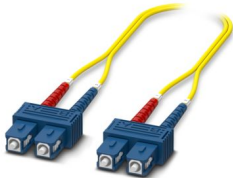
https://www.phoenixcontact.com/us/products/1115546

Single-mode OS2 duplex jumper, SC-SC, UPC polishing, length 5 m

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https://www.phoenixcontact.com/us/products/1330262

FOC-SC:PA-SC:PA-OS2:D01/3 - FO patch cable

1115547

https://www.phoenixcontact.com/us/products/1115547

Single-mode OS2 duplex jumper, SC-SC, UPC polishing, length 3 m

FOC-ST:PA-SC:PA-OS2:D01/5 - FO patch cable
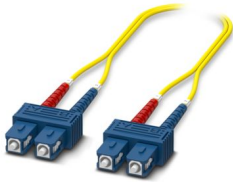
1115579

https://www.phoenixcontact.com/us/products/1115579

Single-mode OS2 duplex jumper, ST-SC, UPC polishing, length 5 m
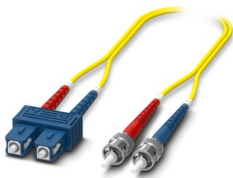
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1330262

https://www.phoenixcontact.com/us/products/1330262
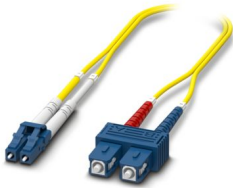
FOC-LC:PA-SC:PA-OS2:D01/10 - FO patch cable

1146546

https://www.phoenixcontact.com/us/products/1146546

Single-mode OS2 duplex jumper, LC-SC, UPC polishing, length 10 m

FOC-ST:PA-SC:PA-OS2:D01/3 - FO patch cable

1115580

https://www.phoenixcontact.com/us/products/1115580

Single-mode OS2 duplex jumper, ST-SC, UPC polishing, length 3 m

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https://www.phoenixcontact.com/us/products/1330262
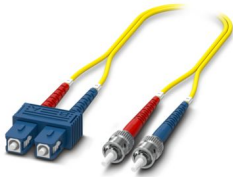
FOC-ST:PA-SC:PA-OS2:D01/10 - FO patch cable

1146550

https://www.phoenixcontact.com/us/products/1146550

Single-mode OS2 duplex jumper, ST-SC, UPC polishing, length 10 m