

MC 1000-SM20 SC - FO converters



1329820

<https://www.phoenixcontact.com/us/products/1329820>

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 documentation. Our general terms of use for downloads are valid.



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

Product description

The MC 1000-MM 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

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	1329820
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	DN06
Product key	DNC314
GTIN	4063151625801
Weight per piece (including packing)	188 g
Weight per piece (excluding packing)	124 g
Customs tariff number	85176200
Country of origin	CA

MC 1000-SM20 SC - FO converters



1329820

<https://www.phoenixcontact.com/us/products/1329820>

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 1000
MTTF	87.2 Years (MIL-HDBK-217F standard, temperature 25°C, operating cycle 100%)
	756.3 Years (SN 29500 standard, temperature 25°C, operating cycle 21%)
	668.4 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 ... 48 V DC
Nominal supply voltage	24 V DC
Typical current consumption	20 mA (24 V DC)
Max. current consumption	170 mA (12 V DC, 60 °C)

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
Conductor cross-section AWG	24 ... 12
Stripping length	10.00 mm

Interfaces

Signal	Ethernet
--------	----------

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

MC 1000-SM20 SC - FO converters



1329820

<https://www.phoenixcontact.com/us/products/1329820>

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, US
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
--------------------	---------------------------------

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)	-10 °C ... 60 °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/s ² , 11 ms (IEC 60068-2)

Approvals

CE

MC 1000-SM20 SC - FO converters



1329820

<https://www.phoenixcontact.com/us/products/1329820>

Certificate	CE-compliant
-------------	--------------

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

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

MC 1000-SM20 SC - FO converters



1329820

<https://www.phoenixcontact.com/us/products/1329820>

Approvals

🔗 To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1329820>



cULus Listed

Approval ID: E238705

MC 1000-SM20 SC - FO converters

1329820

<https://www.phoenixcontact.com/us/products/1329820>



Classifications

ECLASS

ECLASS-13.0	19170411
ECLASS-15.0	19170411

ETIM

ETIM 9.0	EC001467
----------	----------

UNSPSC

UNSPSC 21.0	43223323
-------------	----------

MC 1000-SM20 SC - FO converters



1329820

<https://www.phoenixcontact.com/us/products/1329820>

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%

MC 1000-SM20 SC - FO converters



1329820

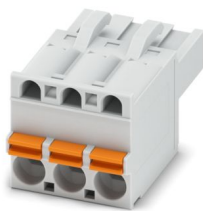
<https://www.phoenixcontact.com/us/products/1329820>

Accessories

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

1998263

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



PCB connector, nominal cross section: 2.5 mm², 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).

MC 1000-SM20 SC - FO converters



1329820

<https://www.phoenixcontact.com/us/products/1329820>

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.

MC 1000-SM20 SC - FO converters

1329820

<https://www.phoenixcontact.com/us/products/1329820>

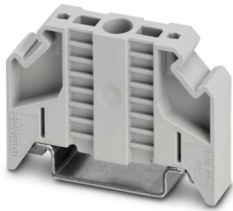


E/NS 35 N - End bracket

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



MC 1000-SM20 SC - FO converters

1329820

<https://www.phoenixcontact.com/us/products/1329820>



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

MC 1000-SM20 SC - FO converters

1329820

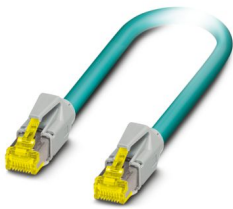
<https://www.phoenixcontact.com/us/products/1329820>



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

1411854

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

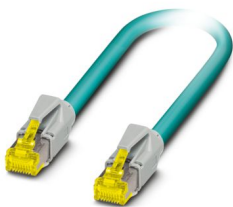


Patch cable, degree of protection: IP20, number of positions: 8, 10 Gbps, CAT6_A, cable outlet: straight, Ethernet

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

MC 1000-SM20 SC - FO converters

1329820

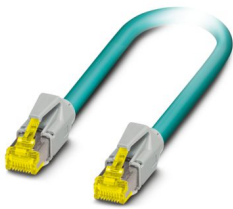
<https://www.phoenixcontact.com/us/products/1329820>



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

MC 1000-SM20 SC - FO converters

1329820

<https://www.phoenixcontact.com/us/products/1329820>



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.

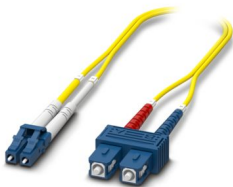


FOC-LC:PA-SC:PA-OS2:D01/1 - FO patch cable

1115618

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

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



MC 1000-SM20 SC - FO converters



1329820

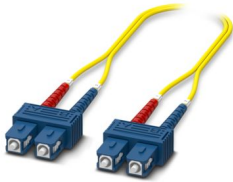
<https://www.phoenixcontact.com/us/products/1329820>

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

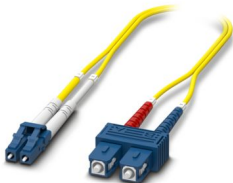


FOC-LC:PA-SC:PA-OS2:D01/2 - FO patch cable

1115617

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

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



MC 1000-SM20 SC - FO converters



1329820

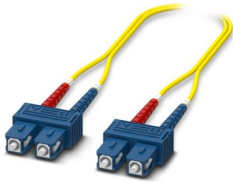
<https://www.phoenixcontact.com/us/products/1329820>

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

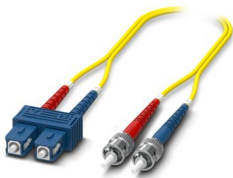


FOC-ST:PA-SC:PA-OS2:D01/0.5 - FO patch cable

1115583

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

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



MC 1000-SM20 SC - FO converters



1329820

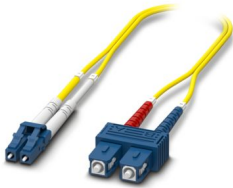
<https://www.phoenixcontact.com/us/products/1329820>

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

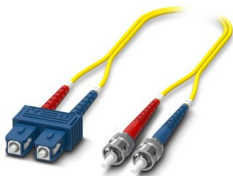


FOC-ST:PA-SC:PA-OS2:D01/1 - FO patch cable

1115582

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

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



MC 1000-SM20 SC - FO converters



1329820

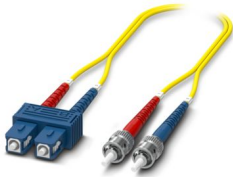
<https://www.phoenixcontact.com/us/products/1329820>

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

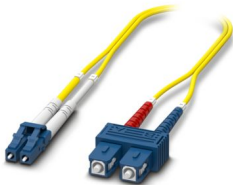


FOC-LC:PA-SC:PA-OS2:D01/5 - FO patch cable

1115615

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

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



MC 1000-SM20 SC - FO converters



1329820

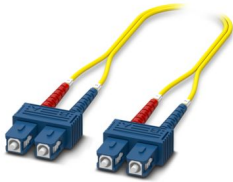
<https://www.phoenixcontact.com/us/products/1329820>

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

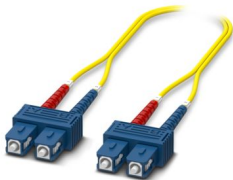


FOC-SC:PA-SC:PA-OS2:D01/5 - FO patch cable

1115546

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

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



MC 1000-SM20 SC - FO converters



1329820

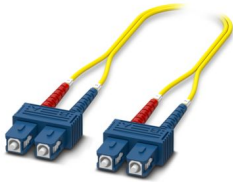
<https://www.phoenixcontact.com/us/products/1329820>

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

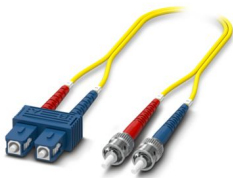


FOC-ST:PA-SC:PA-OS2:D01/5 - FO patch cable

1115579

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

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



MC 1000-SM20 SC - FO converters



1329820

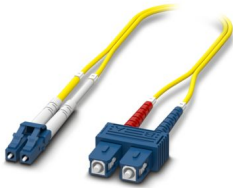
<https://www.phoenixcontact.com/us/products/1329820>

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

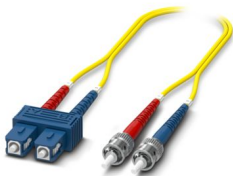


FOC-ST:PA-SC:PA-OS2:D01/3 - FO patch cable

1115580

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

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



MC 1000-SM20 SC - FO converters

1329820

<https://www.phoenixcontact.com/us/products/1329820>

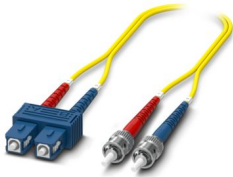


FOC-ST:PA-SC:PA-OS2:D01/10 - FO patch cable

1146550

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

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



Phoenix Contact 2025 © - all rights reserved

<https://www.phoenixcontact.com>

Phoenix Contact USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com