

# MC 1000-SM20 SC - FO converters



1329820

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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 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	*****
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

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## Technical data

### Notes

#### Note on application

Note on application	Only for industrial use
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#### Utilization restriction

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

Product type	Media converter
MTTF	87.2 Years (MIL-HDBK-217F standard, temperature 25°C, operating cycle 100%)
	756.3 Years ()
	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

### Connection data

#### Supply

Connection method	Push-in spring connection
Conductor cross section, flexible	0.20 mm <sup>2</sup> ... 2.50 mm <sup>2</sup>
Conductor cross section, rigid	0.20 mm <sup>2</sup> ... 2.50 mm <sup>2</sup>
Conductor cross section, flexible [AWG]	24 ... 12
Conductor cross section 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)

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Transmission medium	Single-mode fiberglass
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Data: Ethernet interface, 100Base-Tx in acc. with IEEE 802.3u

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

Housing material	Polyamide fiber reinforced
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## Cable/line

FO cable

Fiber types	9/125 µm Fiberglass
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## 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 <sup>2</sup> , 11 ms (IEC 60068-2)

## Approvals

Conformity/Approvals

Conformance	CE-compliant
UL, USA / Canada	UL 61010-1, UL 61010-2-201

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## 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: 35 mm
Mounting position	On horizontal DIN rail NS 35 in acc. with EN 60715

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## Approvals

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



**cULus Listed**

Approval ID: E238705

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## Classifications

### ECLASS

ECLASS-11.0	19170411
ECLASS-12.0	19170411
ECLASS-13.0	19170411

### ETIM

ETIM 9.0	EC001467
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## Environmental product compliance

### EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions
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### 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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