

# MC 1000E-MM SC - FO converters



1330507

<https://www.phoenixcontact.com/us/products/1330507>

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 multimode fiber optics, DIN rail mountable, extended temperature range, redundant power supply, IECEx, ATEX, UL HazLoc, IEC 61850, IEEE 1613, DNV.

## Product description

The MC 1000E-MM SC media converter comes with one 10/100 Mbps twisted-pair RJ45 port and one 100 Mbps multimode fiber optics port with an SC-duplex connector, ruggedized EMI protection, and wide 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
- Network structure according to IEC 61850-3
- IEEE 1613
- Class 1 laser product complies with EN 60825-1

## Commercial data

Item number	1330507
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	DN06
Product key	DNC314
GTIN	4063151626235
Weight per piece (including packing)	284 g
Weight per piece (excluding packing)	180 g
Customs tariff number	85176200
Country of origin	CA

# MC 1000E-MM SC - FO converters



1330507

<https://www.phoenixcontact.com/us/products/1330507>

## Technical data

### Notes

#### Note on application

Note on application	Only for industrial use
---------------------	-------------------------

### Product properties

Product type	Media converter
Product family	MC 1000E
MTTF	68.5 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

Maximum power dissipation for nominal condition	1.5 W
-------------------------------------------------	-------

#### Supply

Supply voltage range	12 V DC ... 57 V DC
Nominal supply voltage	24 V DC
	48 V DC
Typical current consumption	62 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 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Single-wire/terminal point, flexible	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross-section, flexible [AWG]	24 ... 12
Stripping length	10.00 mm

### Interfaces

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

#### Data: optical FO

Transmit capacity, minimum	-20 dBm (62.5/125 µm, multimode fiberglass)
----------------------------	---------------------------------------------

# MC 1000E-MM SC - FO converters



1330507

<https://www.phoenixcontact.com/us/products/1330507>

	-23.5 dBm (50/125 µm, multimode fiberglass)
Transmit capacity, maximum	-14 dBm
Transmission length incl. 3 dB system reserve	2 km
Connection method	SC duplex
Wavelength	1310 nm
Minimum receiver sensitivity	-32 dBm
Maximum receiver sensitivity	-8 dBm
Transmission medium	Multi-mode fiberglass

Data: Ethernet interface, 10/100Base-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

Color	light gray RAL 7035
Material (Housing)	Polyamide fiberglass reinforced
	Aluminum
	Sheet steel

## Cable/line

FO cable

Fiber types	50/125 µm
	62.5/125 µm
	Fiberglass

## Mechanical tests

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

## Environmental and real-life conditions

Ambient conditions

# MC 1000E-MM SC - FO converters



1330507

<https://www.phoenixcontact.com/us/products/1330507>

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/s <sup>2</sup> , 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
	Class I, Zone 2, IIC T4

### IECEX

Identification	Ex ec IIC T4 Gc
Certificate	IECEX UL 25.0019X

### ATEX

Identification	⊕ II 3 G Ex ec IIC T4 Gc
Certificate	UL 25 ATEX 3348X

## EMC data

Electromagnetic compatibility	Conformance with EMC Directive 2014/30/EU
Noise immunity	IEC 61850-3, IEEE 1613

### 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)

# MC 1000E-MM SC - FO converters



1330507

<https://www.phoenixcontact.com/us/products/1330507>

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 1000E-MM SC - FO converters



1330507

<https://www.phoenixcontact.com/us/products/1330507>

## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1330507>



**cULus Listed**

Approval ID: E238705

**BSH**

Approval ID: BSH Nr. 1176



**IECEE CB Scheme**

Approval ID: CA-11671-M1-UL

**BSH**

Approval ID: BSH Nr. 1176



**cULus Listed**

Approval ID: E238705

**DNV**

Approval ID: TAA00003RU

**DNV**

Approval ID: TAA00003RU



**IECEx**

Approval ID: IECEx UL 25.0019X



**ATEX**

Approval ID: UL 25 ATEX 3348X



**cULus Listed**

Approval ID: E196811



**cULus Listed**

Approval ID: E196811

# MC 1000E-MM SC - FO converters



1330507

<https://www.phoenixcontact.com/us/products/1330507>



**IECEx**

Approval ID: IECEx UL 25.0019X



**ATEX**

Approval ID: UL 25 ATEX 3348X

# MC 1000E-MM SC - FO converters



1330507

<https://www.phoenixcontact.com/us/products/1330507>

## Classifications

### ECLASS

ECLASS-13.0	19170411
ECLASS-15.0	19170411

### ETIM

ETIM 10.0	EC001467
-----------	----------

### UNSPSC

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

# MC 1000E-MM SC - FO converters



1330507

<https://www.phoenixcontact.com/us/products/1330507>

## 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%
-------------------------------------	----------------------------

Phoenix Contact 2026 © - 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](mailto:info@phoenixcon.com)