

MC 1000T-SM20 SC - FO converters



1330262

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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 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	*****
Product key	DNC314
GTIN	4063151626341
Weight per piece (including packing)	266.3 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
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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	69.1 Years (MIL-HDBK-217F standard, temperature 25°C, operating cycle 100%)
	508.3 Years ()
	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

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
Conductor cross section, flexible	0.20 mm ² ... 2.50 mm ²
Conductor cross section, rigid	0.20 mm ² ... 2.50 mm ²
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

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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-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, 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

Housing material	Polyamide fiber reinforced
	Aluminum / steel sheet DC01

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)

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Permissible humidity (operation)	10 % ... 95 % (non-condensing)
Shock	300 m/s ² , 11 ms (IEC 60068-2)

Approvals

Conformity/Approvals

Conformance	CE-compliant
UL, USA / Canada	UL 61010-1, UL 61010-2-201 Class I, Div. 2, Groups A, B, C, D, T4 Class I, Zone 2, Group IIC, T4

EMC data

Electromagnetic compatibility	Conformance with EMC Directive 2014/30/EU
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Electrostatic discharge

Standards/regulations	EN 61000-4-2
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Electrostatic discharge

Comments	Criterion B
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Electromagnetic HF field

Standards/regulations	EN 61000-4-3
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Electromagnetic HF field

Comments	Criterion A
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Fast transients (burst)

Standards/regulations	EN 61000-4-4
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Fast transients (burst)

Comments	Criterion A
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Surge current load (surge)

Standards/regulations	EN 61000-4-5
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Surge current load (surge)

Comments	Criterion B
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Conducted interference

Standards/regulations	EN 61000-4-6
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Conducted interference

Comments	Criterion A
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Emitted interference

Standards/regulations	EN 55032
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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

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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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PHOENIX CONTACT SEA Pte. Ltd.
105 Eunos Avenue 3, #04-00
Singapore 409836
+65 6228 4900
marketing@phoenixcontact.com.sg