

Media converters for Ethernet networks

Secure communication via fiber

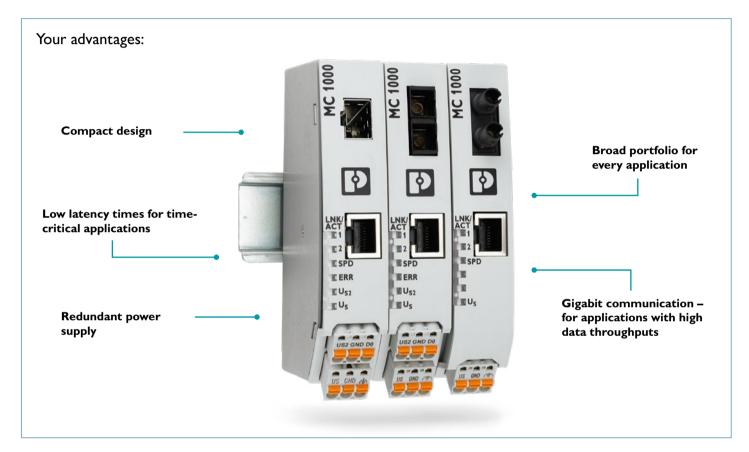


Ethernet media converters

For high-level immunity to interference and long transmission ranges in industrial applications, media converters transparently convert Ethernet data to fiber optics. Depending on the device and cable, they bridge distances of up to 80 km at data rates of up to 1 Gbps.

The Ethernet media converter family features durability and versatility in particular. The comprehensive portfolio of state-of-the-art media converters is divided into three product series: applications with basic requirements, advanced requirements for demanding industrial environments, and applications with requirements on special approvals.

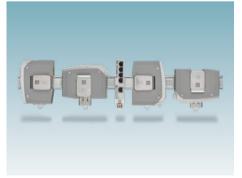
Choose among the range of functions suitable for your application and various fiberglass interfaces. The unique mounting accessories also offer particularly flexible installation options.





Single-fiber transmission

Bidirectional transmission using a single fiber-optic cable for rotating applications.



Flexible installation

Mounting accessories enable flat mounting for control cabinets with limited space.

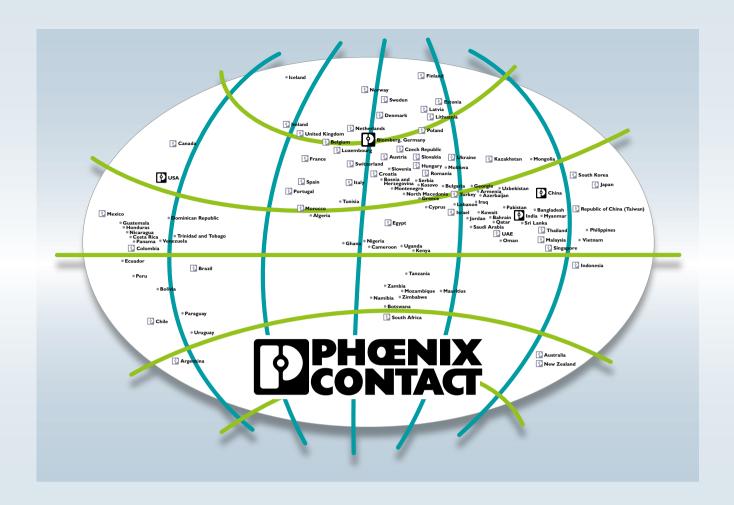


Comprehensive portfolio

Together with the FL SWITCH 1000, the media converters form a product family for every application with the same look and feel.

Product overview

pperature range: -1	MM SC MM SC MM ST MM LC SM SC SM ST MM WDM A MM WDM B MM SC SFP	Up to 10 km Up to 20 km Up to 40 km Up to 20 km	10/100 Mbps 10/100/1000 Mbps	Automatic switching between store-and-forward and cutthrough mode Short latency times for realtime protocols Link Fault Pass Through (LFPT) — activated via DIP switch Ing industrial environme	MC 1000-MM SC MC 1000-MM ST MC 1000-MM LC MC 1000-SM20 SC MC 1000-SM20 ST MC 1000-MM WDM A MC 1000-MM WDM B MC 1100-SFP Thts MC 1000T-MM SC MC 1000T-MM ST MC 1000T-MM LC MC 1000T-SM20 SC MC 1000T-SM40 SC MC 1000T-SM40 SC MC 1000T-SM20 ST	1329818 1329818 1329829 1329821 1329822 1329823 1330888 1330903 1329827 1330244 1330259 1330262 1330276
1000T – me perature range: -4	MM SC MM ST MM LC SM SC SM ST MM WDM A MM WDM B MM SC SFP edia converte 40°C +75°C, rot MM SC MM ST MM LC SM SC SM SC SM ST	Up to 10 km Up to 20 km Up to 10 km Depending on module ers for application oust metal housing, ship Up to 10 km Up to 20 km Up to 40 km Up to 20 km	10/100 Mbps 10/100/1000 Mbps ons in demandial	store-and-forward and cut- through mode • Short latency times for real- time protocols • Link Fault Pass Through (LFPT) – activated via DIP switch ng industrial environme dundant power supply • Automatic switching between store-and-forward and cut- through mode • Short latency times for real-	MC 1000-MM ST MC 1000-MM LC MC 1000-SM20 SC MC 1000-SM20 ST MC 1000-MM WDM A MC 1000-MM WDM B MC 1100-MM SC MC 1100-SFP Thts MC 1000T-MM SC MC 1000T-MM ST MC 1000T-SM20 SC MC 1000T-SM40 SC	1329818 1329820 1329820 1329821 1329823 1330888 1330903 1329827 1330244 1330259 1330262
2 1000T – me perature range: -4	MM ST MM LC SM SC SM ST MM WDM A MM WDM B MM SC SFP edia converte 10°C +75°C, rol MM SC MM ST MM LC SM SC SM SC SM ST	Up to 20 km Up to 10 km Depending on module ers for application oust metal housing, ship Up to 10 km Up to 20 km Up to 40 km Up to 20 km	10/100/1000 Mbps ons in demandia obuilding approval, rec	store-and-forward and cut- through mode • Short latency times for real- time protocols • Link Fault Pass Through (LFPT) – activated via DIP switch ng industrial environme dundant power supply • Automatic switching between store-and-forward and cut- through mode • Short latency times for real-	MC 1000-MM ST MC 1000-MM LC MC 1000-SM20 SC MC 1000-SM20 ST MC 1000-MM WDM A MC 1000-MM WDM B MC 1100-MM SC MC 1100-SFP Thts MC 1000T-MM SC MC 1000T-MM ST MC 1000T-SM20 SC MC 1000T-SM40 SC	1329818 1329820 1329820 1329821 1329823 1330888 1330903 1329827 1330244 1330259 1330262
C 1000T – me	MM LC SM SC SM ST MM WDM A MM WDM B MM SC SFP edia converte MM SC MM SC MM SC MM SC SM ST MM LC SM SC SM SC SM ST	Up to 20 km Up to 10 km Depending on module ers for application oust metal housing, ship Up to 10 km Up to 20 km Up to 40 km Up to 20 km	10/100/1000 Mbps ons in demandia obuilding approval, rec	store-and-forward and cut- through mode • Short latency times for real- time protocols • Link Fault Pass Through (LFPT) – activated via DIP switch ng industrial environme dundant power supply • Automatic switching between store-and-forward and cut- through mode • Short latency times for real-	MC 1000-MM LC MC 1000-SM20 SC MC 1000-SM20 ST MC 1000-MM WDM A MC 1000-MM WDM B MC 1100-MM SC MC 1100-SFP Ints MC 1000T-MM SC MC 1000T-MM ST MC 1000T-MM LC MC 1000T-SM20 SC MC 1000T-SM40 SC	1329819 1329820 1329821 1329822 1329823 1330888 1330903 1329827 1330244 1330259 1330262
C 1000T – me perature range: -4	SM SC SM ST MM WDM A MM WDM B MM SC SFP edia converte 40°C +75°C, rot MM SC MM ST MM LC SM SC SM SC SM ST	Up to 10 km Depending on module ers for application oust metal housing, ship Up to 10 km Up to 20 km Up to 40 km Up to 20 km	10/100/1000 Mbps ons in demandia obuilding approval, rec	store-and-forward and cut- through mode • Short latency times for real- time protocols • Link Fault Pass Through (LFPT) – activated via DIP switch ng industrial environme dundant power supply • Automatic switching between store-and-forward and cut- through mode • Short latency times for real-	MC 1000-SM20 SC MC 1000-SM20 ST MC 1000-MM WDM A MC 1000-MM WDM B MC 1100-MM SC MC 1100-SFP Ints MC 1000T-MM SC MC 1000T-MM ST MC 1000T-SM20 SC MC 1000T-SM40 SC	1329820 1329821 1329823 1330888 1330903 1329827 1330244 1330259 1330262
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Departure range: -4	MM WDM A MM WDM B MM SC SFP edia converte 40°C +75°C, rot MM SC MM ST MM LC SM SC SM SC SM ST	Up to 10 km Depending on module ers for application oust metal housing, ship Up to 10 km Up to 20 km Up to 40 km Up to 20 km	ons in demandi	time protocols Link Fault Pass Through (LFPT) — activated via DIP switch right industrial environme dundant power supply Automatic switching between store-and-forward and cutthrough mode Short latency times for real-	MC 1000-MM WDM A MC 1000-MM WDM B MC 1100-MM SC MC 1100-SFP Ints MC 1000T-MM SC MC 1000T-MM ST MC 1000T-MM LC MC 1000T-SM40 SC MC 1000T-SM40 SC	1329822 1329823 1330888 1330903 1329822 1330244 1330259 1330262 1330276
Departure range: -4	MM WDM B MM SC SFP edia converte 40°C +75°C, rol MM SC MM ST MM LC SM SC SM SC SM ST	Depending on module ers for application oust metal housing, ship Up to 10 km Up to 20 km Up to 40 km Up to 20 km	ons in demandi	Link Fault Pass Through (LFPT) — activated via DIP switch Ing industrial environme dundant power supply Automatic switching between store-and-forward and cutthrough mode Short latency times for real-	MC 1000-MM WDM B MC 1100-MM SC MC 1100-SFP Ints MC 1000T-MM SC MC 1000T-MM ST MC 1000T-MM LC MC 1000T-SM20 SC MC 1000T-SM40 SC	1329823 1330888 1330903 1329823 1330244 1330259 1330262 1330276
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2 1000T – me	SFP edia converte 40°C +75°C, rot MM SC MM ST MM LC SM SC SM SC SM ST	Up to 10 km Up to 20 km Up to 40 km Up to 20 km	ons in demandi	Automatic switching between store-and-forward and cutthrough mode Short latency times for real-	MC 1100-SFP MC 1000T-MM SC MC 1000T-MM ST MC 1000T-MM LC MC 1000T-SM20 SC MC 1000T-SM40 SC	132982 133024 133025 133026 133027
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perature range: -4	MM SC MM ST MM LC SM SC SM SC SM ST	Up to 10 km Up to 20 km Up to 40 km Up to 20 km	building approval, re	Automatic switching between store-and-forward and cutthrough mode Short latency times for real-	MC 1000T-MM SC MC 1000T-MM ST MC 1000T-MM LC MC 1000T-SM20 SC MC 1000T-SM40 SC	133024 133025 133026 133027
perature range: -4	MM SC MM ST MM LC SM SC SM SC SM ST	Up to 10 km Up to 20 km Up to 40 km Up to 20 km	building approval, re	Automatic switching between store-and-forward and cutthrough mode Short latency times for real-	MC 1000T-MM SC MC 1000T-MM ST MC 1000T-MM LC MC 1000T-SM20 SC MC 1000T-SM40 SC	133024 133025 133026 133027
	MM SC MM ST MM LC SM SC SM SC SM SC	Up to 10 km Up to 20 km Up to 40 km Up to 20 km		Automatic switching between store-and-forward and cut- through mode Short latency times for real-	MC 1000T-MM ST MC 1000T-MM LC MC 1000T-SM20 SC MC 1000T-SM40 SC	133024 133025 133026 133027
	MM ST MM LC SM SC SM SC SM ST	Up to 20 km Up to 40 km Up to 20 km	10/100 Mbps	store-and-forward and cut- through mode • Short latency times for real-	MC 1000T-MM ST MC 1000T-MM LC MC 1000T-SM20 SC MC 1000T-SM40 SC	133024 133025 133026 133027
	MM LC SM SC SM SC SM ST	Up to 20 km Up to 40 km Up to 20 km	10/100 Mbps	store-and-forward and cut- through mode • Short latency times for real-	MC 1000T-MM LC MC 1000T-SM20 SC MC 1000T-SM40 SC	133025 133026 133027
	SM SC SM SC SM ST	Up to 40 km	10/100 Mbps	store-and-forward and cut- through mode • Short latency times for real-	MC 1000T-SM20 SC MC 1000T-SM40 SC	133026 133027
	SM SC SM ST	Up to 40 km	10/100 Mbps	through mode • Short latency times for real-	MC 1000T-SM40 SC	133027
	SM ST	Up to 20 km	10/100 Mbps	Short latency times for real-		
				time protocols	11C 10001-31120 31	133020
	214 AADIA W			time protocols Link Fault Pass Through (LFPT) – activated via DIP switch Redundant power supply Digital output for reading out alarm messages	MC 1000T CM10 \A/DM A	422020
E .	CNANADNAD	Up to 40 km			MC 1000T-SM40 WDM A	133029
, a ** 	SM WDM B				MC 1000T-SM40 WDM B	133029
A .	MM WDM A	Up to 10 km			MC 1000T-MM WDM A	133049
	MM WDM B	D 1: 1.1		DNV-GL approval	MC 1000T-MM WDM B	133050
<u> </u>	SFP	Depending on module			MC 1100T-SFP	133090
-	MM SC	Up to 10 km	10/100/1000 Mbps		MC 1100T-MM SC	133090
	SM SC	Up to 20 km			MC 1100T-SM20 SC	133089
1000E – me	edia converte	ers for applicatio	ns with require	ements on special appro	ovals	
perature range: -4	10°C +75°C, rol	oust metal housing, exte	ended approval packa	age, redundant power supply		
	MM SC				MC 1000E-MM SC	133050
4	MM ST	Up to 10 km	10/100 Mbps	Automatic switching between store-and-forward and cutthrough mode Short latency times for realtime protocols Link Fault Pass Through (LFPT) – activated via DIP switch Redundant power supply Digital output for reading out alarm messages Increased resistance to EMI DNV-GL, ATEX, IECEx, and UL HazLoc approval IEC 61850 and IEEE 1613 for applications in the energy	MC 1000E-MM ST	133050
2	MM LC				MC 1000E-MM LC	133061
	SM SC	Up to 20 km			MC 1000E-SM20 SC	133072
	SM SC	Up to 40 km			MC 1000E-SM40 SC	133072
de	SM ST	Up to 20 km			MC 1000E-SM20 ST	133072
	SM LC	-F 20 70 MII	11.100.1000		MC 1000E-SM40 LC	133072
	SM WDM A	Up to 40 km			MC 1000E-SM40 WDM A	133088
	SM WDM B				MC 1000E-SM40 WDM B	133089
(I)	MM WDM A	Up to 10 km			MC 1000E-MM WDM A	133057
	MM WDM B				MC 1000E-MM WDM B	133038
(m)		Depending on module			MC 1100E-SFP	133067
100		pepending on module	10/100/1000 Mbps	sector	I IC I IUUL-SFF	
	SFP MM SC	Up to 10 km	10/100/1000 Mb	33333.	MC 1100E-MM SC	133089



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