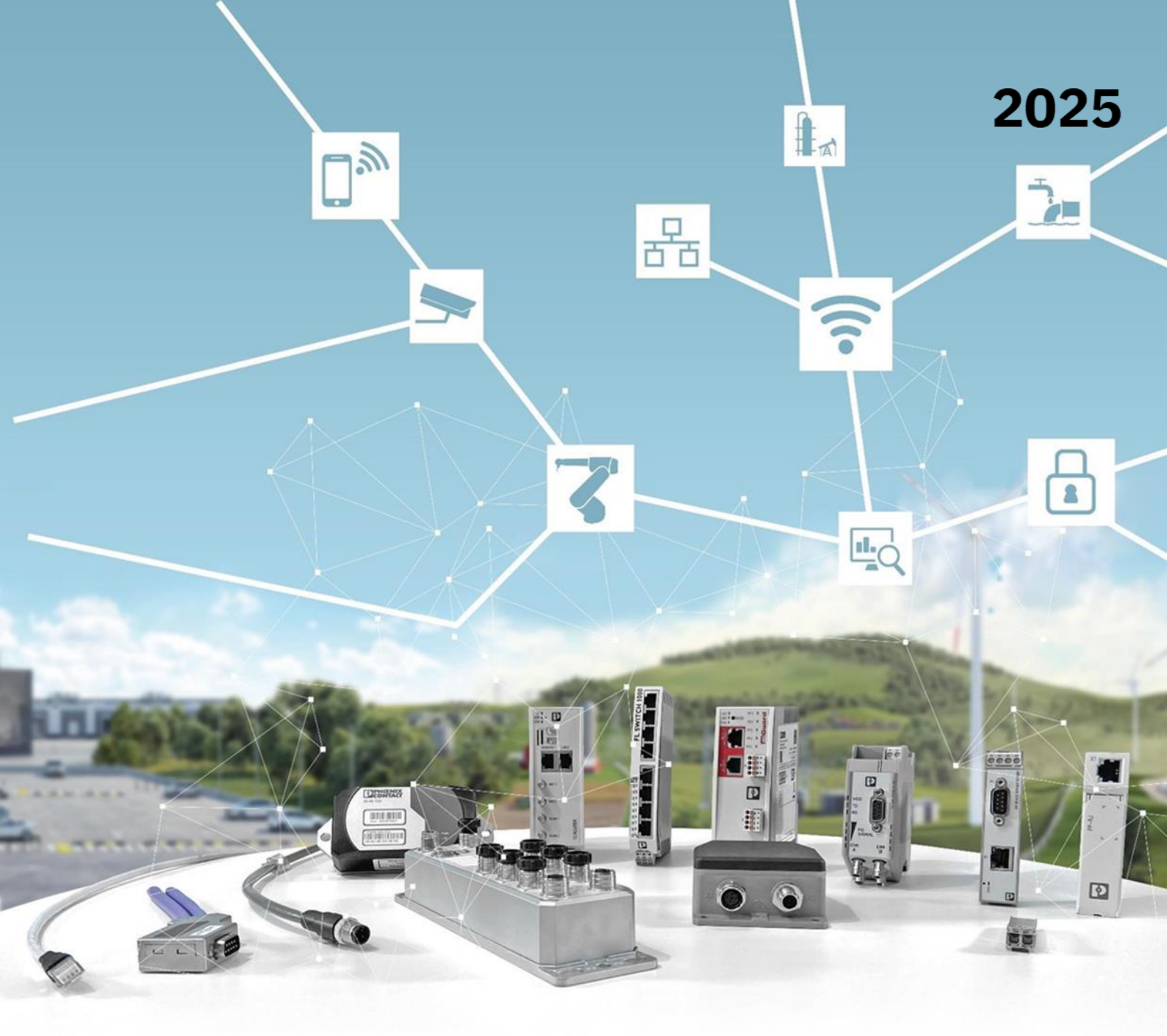


Plug n’ Play Digital

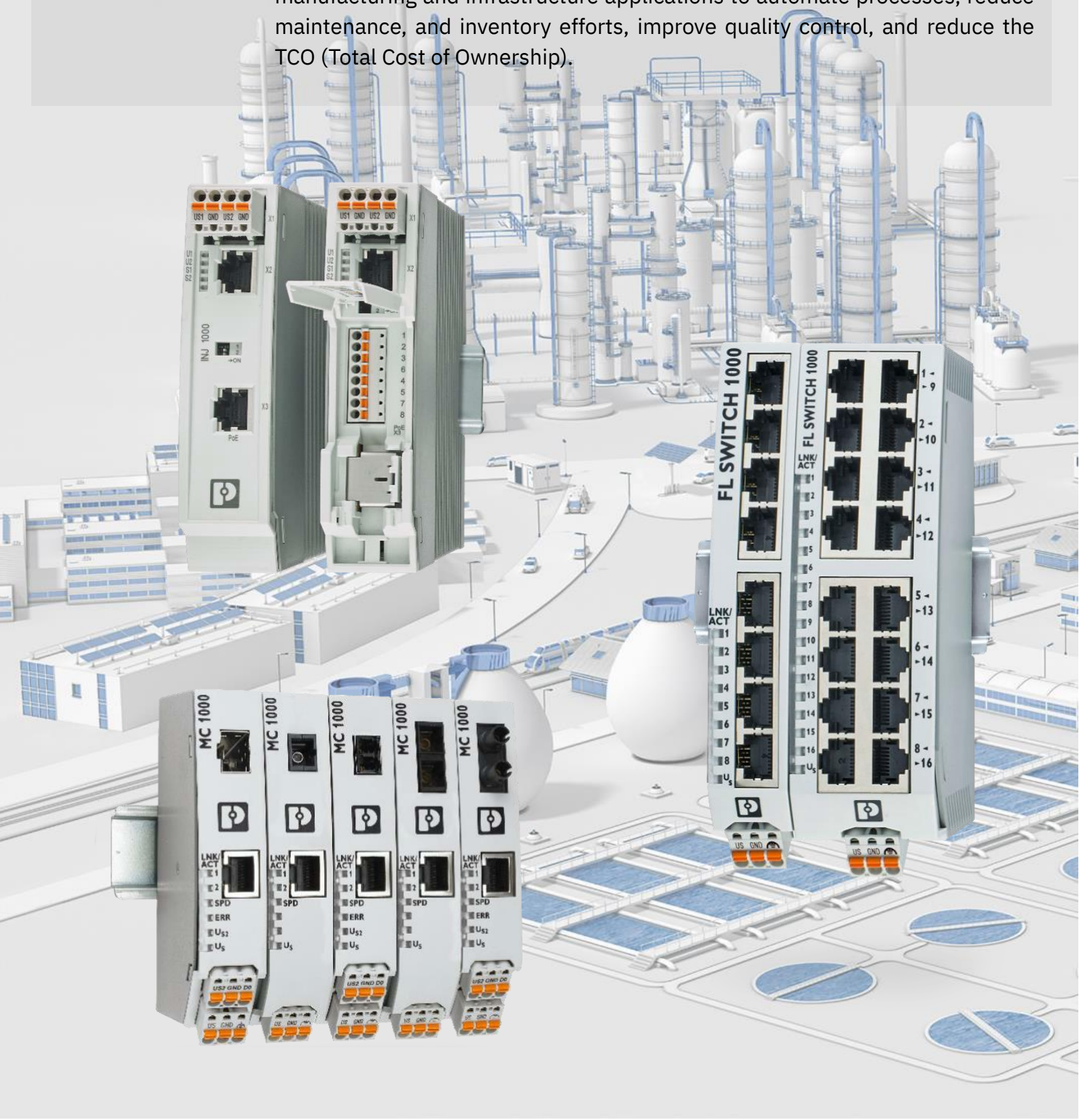
Every digitalisation journey starts with connectivity

PHOENIX CONTACT

What is Plug n’ Play Digital?

Plug n' Play Digital technologies from Phoenix Contact are network devices easily installed and used without configuration efforts or specialized knowledge. They can help businesses to save time and money and to improve efficiency and productivity.

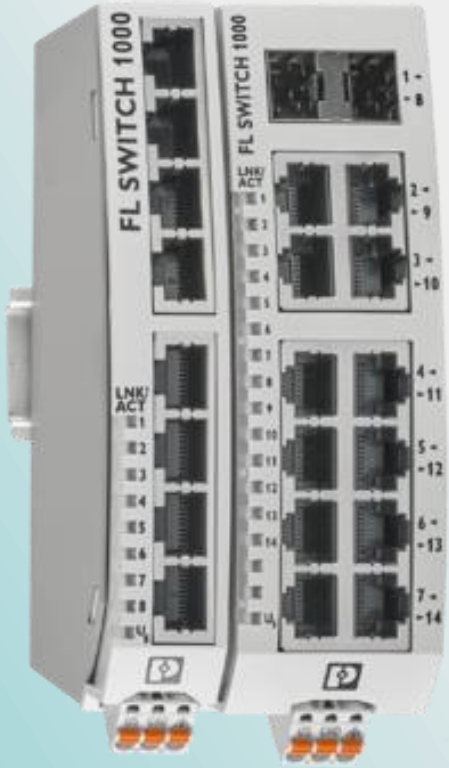
Phoenix Contact offers a wide range of Plug n’ Play Digital technologies, including Unmanaged Switches, Patch Panels, PoE injectors, Media Converters and NearFi technology. These technologies can be used in a variety of manufacturing and infrastructure applications to automate processes, reduce maintenance, and inventory efforts, improve quality control, and reduce the TCO (Total Cost of Ownership).




US1
US2
XD1
XD2
FL SWITCH 1000
XF1
LNK/ ACT
SPD
XF5
XF2
XF6
XF3
XF7
XF4
XF8
X1
X2
PP-RJ
sc

Your advantages

- ☑ Auto negotiation and autocrossing ensure easy network creation and expansion.
- ☑ Gigabit versions for high data throughout.
- ☑ Electrical isolation and FO versions for interference-free operation in industrial environments.
- ☑ Quality of service for the prioritization of automation protocols.



For harsh ambient conditions

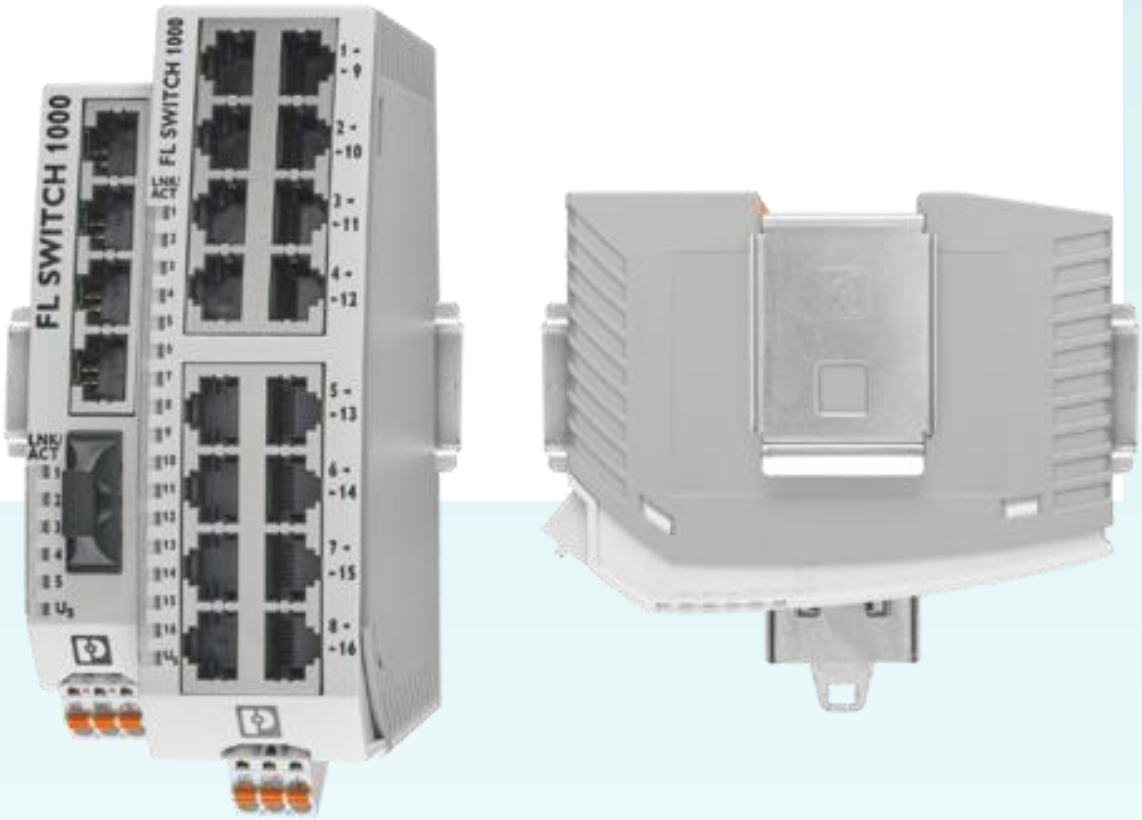
Thanks to the extended temperature range, the 1000NT series is designed for use in very demanding applications for the oil and gas industry, shipbuilding, and other outdoor applications. Fiberglass versions also enable long transmission distances.

For field installation

With IP65/IP66/IP67 degrees of protection and M12 connection technology, the 1600 and 1700 series devices are particularly resistant to environmental influences and mechanical strain. The use of filtering and prioritization mechanisms ensure consistent behavior in the network.

Unmanaged Switches

Unmanaged switches from Phoenix Contact stand out thanks to their standard functions, variable number of ports, and various designs. Thanks to a high level of immunity and a wide temperature range, they are entirely suitable for continuous operation in industrial application. Select the right switch for your application.



For standard applications

The 1000N series unmanaged switches feature compact designs and flexible installation options. The 1100N switch versions also feature transmission speeds in the Gigabit range. The prioritization of data traffic ensures a more stable network and increases system availability.

For flat control cabinets

Using the mounting accessories, you can also mount the FL SWITCH 1000N(T) flat in the control cabinet or on the wall. AT the same time, you can freely select the port outlet direction: upwards, downwards, to the left or right. This enables flexible use for a large number of applications.

Product overview for Unmanaged Switches

Features	Copper ports	FO ports	Port speed	Quality of Service	Special Features	Item No.
Unmanaged switches for universal use: FL SWITCH 1000N and 1100N						
Supply voltage: 9 V DC...32 V DC, 18...30 V AC, temperature range: -10°C...+60°C						
	5 x RJ45	-	10/100 Mbps	•	-	1085039
	4 x RJ45	1 x MM SC		•	-	1084159
		1 x MM ST		•	-	1085179
		1 x SM SC		•	-	1085214
		1 x SFP		•	-	1085177
	5 x RJ45	2 x SFP		•	-	1085176
	8 x RJ45	-		•	-	1085256
	16 x RJ45	-		•	-	1085255
	5 x RJ45	-	10/100/1000 Mbps	•	Jumbo frames, extended Quality of Service functionality (e.g., EtherNet/IP™, BACnet)	1085254
	4 x RJ45	2 x SFP		•		1085173
	5 x RJ45	2 x SFP		•		1085171
	8 x RJ45	-		•		1085243
	16 x RJ45	-		•		1085219

Features	Mounting type	Port speed	Designation	Item No.
Unmanaged switches for universal use: FL SWITCH 1000N and 1100N				
Adapters for wall mounting or flat mounting on the DIN rail, e.g., for FL SWITCH 1000N(T) series devices				
	Wall mounting	22.5 mm	FL PANEL ADAPTER 22.5	1085488
		40mm	FL PANEL ADAPTER 40	1085486
	Flat DIN rail mounting	22.5mm	FL DIN-RAIL ADAPTER 22.5	1085485
		40mm	FL DIN-RAIL ADAPTER 40	1085484

*DC supply only

Product overview for Unmanaged Switches

Features	Copper ports	FO ports	Port speed	Quality of Service	Special Features	Item No.
Unmanaged switches for rack mounting: FL SWITCH 1800 and 1900						
Supply voltage: 120/220 V AC, temperature range: 0°C...+60°C						
	24 X RJ45	-	10/100 Mbps	•	19” mounting	2891041
		-	10/100/1000 Mbps	•		2891057
Robust unmanaged switches for harsh ambient conditions: FL SWITCH 1000NT and 1100NT						
Supply voltage: 9 V DC...32 V DC, 18 V AC...30 V AC, temperature range: -40°C...+75°C, approvals: DNV/GL, process (ATEX, IECEx, C1D2)						
	5 x RJ45	-	10/100 Mbps	•	-	1085170
	4 x RJ45	1 x SFP		•	-	1085169
	8 x RJ45	-		•	-	1085165
	5 x RJ45	2 x SFP		•	-	1085164
	12 x RJ45	2 x SFP	10/100/1000 Mbps (RJ45), 10/100/1000 Mbps (SFP)	•	-	1249598
	5 x RJ45	2 x MM SC	10/100/1000 Mbps	•	Jumbo frames, extended Quality of Service functionality (e.g., EtherNet/IP™, BACnet)	1085163
	8 x RJ45	-		•		1085162
Robust unmanaged switches with IP67: FL SWITCH 1600 and 1700						
Supply voltage: 24 V DC, temperature range: -40°C...+70°C						
	5 x M12	-	10/100 Mbps	•	With PTCP filter for PROFINET	2700200
	8 x M12	-	10/100 Mbps	•	M12 push-pull, Quality of Service functionality (PROFINET)	1196227
	8 x M12	-	10/100/1000 Mbps	•	M12 push-pull, extended Quality of Service functionality (e.g., BACnet, PROFINET, EtherNet/IP™)	1196228

The secure connection – Made fast

The product family includes eight Ethernet patch panels, which serve as interface modules between the field and control cabinet cabling. The range is complemented with 12 Powe over Ethernet (PoE) injectors, which can supply remote Ethernet devices with data and power via one cable.

Easy assembly
Just one base latch
on the DIN rail

**Integrated
surge protection**

Diagnostics
Shield current monitoring via LED

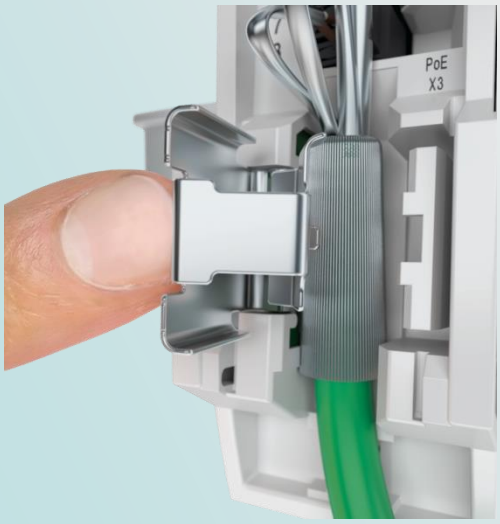
Easy installation
Installation time
reduced by up to 60%

Your advantages

- ☑ Quick and easy mounting
- ☑ Large selection of different connection technologies
- ☑ Protective functions for high system availability
- ☑ Concealed wiring space, thanks to front cover
- ☑ Compact design

Concealed cable wiring space

Toll-free
Easy connection of the cable shielding and simultaneous strain relief



Alternative connection technologies
RJ45, Push-in, IDC, and screw

Product overview for Patch Panels and PoE

				
Description	**Ethernet patch panel**			
Interfaces	RJ45 / IDC	RJ45/ Push-In	RJ45/ Screw	RJ45 / RJ45
Type	PP-RJ-IDC...	PP-RJ-SCC...	PP-RJ-SC...	PP-RJ-RJ...
Order no. standard Order no. with surge protection	**2703019** **2703023**	**2703013** **2703022**	**2703016** **2703021**	**2703015** **2703020**

						
Description	**PoE injector INJ 1000**			**PoE injector INJ 2000**		
Interfaces	RJ45 / RJ45	RJ45 / RJ45	RJ45/ RJ45	RJ45/ IDC	RJ45/ Push-In	RJ45/ Screw
Type Order No. PoE at/af, 15/30 W	INJ 1000 **2703005**	INJ 1000-T **27030006**	INJ 1100-T **2703009**	INJ 2102-T **2703012**	INJ 2103-T **1004065**	INJ 2101-T **2703011**
Type Order No. PoE bt, 60 W	INJ 1000 **2703007**	INJ 1000 **2703008**	INJ 1000 **2703010**	INJ 1000 **2703014**	INJ 1000 **1004066**	INJ 1000 **2703013**

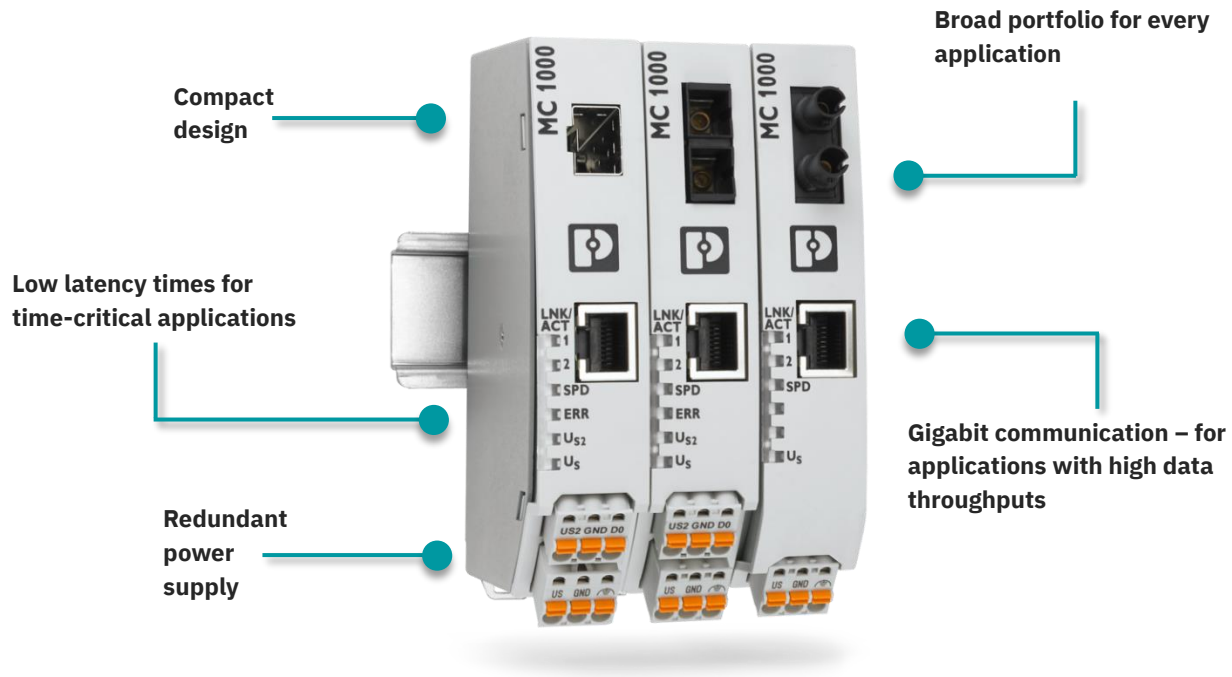
Ethernet media converters

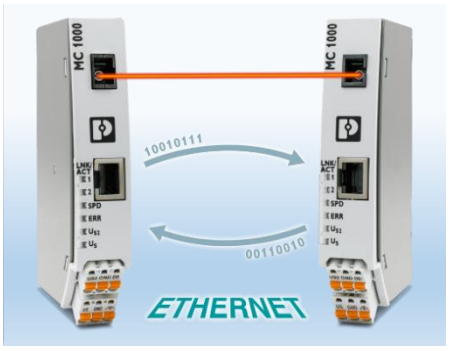
For high-level immunity to interference and long transmission ranges in industrial applications, media converters transparently convert Ethernet data to fiber optics. Depending on the device and cable, they bridge distances of up to 80 km at data rates of up to 1 Gbps.

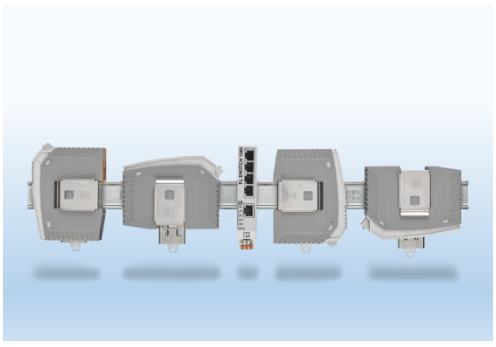
The Ethernet media converter family features durability and versatility in particular. The comprehensive portfolio of state-of-the-art media converters is divided into three product series: applications with basic requirements, advanced requirements for demanding industrial environments, and application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

Your advantages







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 for Media Converters

	FO connection	Range	Data rate	Special features	Type	Item No.
MC 1000 – media converters for applications with basic requirements						
Temperature range: -10°C...+60°C, for an easy introduction to FO technology						
	MM SC	Up to 10 km	10/100 Mbps	- Automatic switching between store-and-forward and cut-through mode - Short latency times for real-time protocols - Link Fault Pass Through (LFPT) – activated via DIP switch	MC 1000-MM SC	1329817
	MM ST				MC 1000-MM ST	1329818
	MM LC				MC 1000-MM LC	1329819
	SM SC	Up to 20km			MC 1000-SM20 SC	1329820
	SM ST				MC 1000-SM20 ST	1329821
	MM WDM A	Up to 10km			MC 1000-MM WDM A	1329822
	MM WDM B				MC 1000-MM WDM B	1329823
	MM SC		10/100/1000 Mbps		MC 1100-MM SC	1330888
	SFP	Depending on module			MC 1100-SFP	1330903
MC 1000T – media converters for applications in demanding industrial environments						
Temperature range: -40°C...+75°C, robust metal housing, extended approval package, redundant power supply						
	MM SC	Up to 10 km	10/100 Mbps	- Automatic switching between store-and-forward and cut-through mode - Short latency times for real-time protocols - Link Fault Pass Through (LFPT) – activated via DIP switch - Redundant power supply - Digital output for reading out alarm messages - DNV-GL approval	MC 1000T-MM SC	1329827
	MM ST				MC 1000T-MM ST	1330244
	MM LC				MC 1000T-MM LC	1330259
	SM SC	Up to 20km			MC 1000T-SM20 SC	1330262
	SM SC	Up to 40km			MC 1000T-SM40 SC	1330276
	SM ST	Up to 20km			MC 1000T-SM20 ST	1330282
	SM WDM A	Up to 40km			MC 1000T-SM40 WDM A	1330293
	SM WDM B				MC 1000T-SM40 WDM B	1330296
	MM WDM A	Up to 10km			MC 1000T-MM WDM A	1330494
	MM WDM B				MC 1000T-MM WDM B	1330509
	SFP	Depending on module			MC 1100T-SFP	1330902
	MM SC	Up to 10km	10/100/1000 Mbps		MC 1100T-MM SC	1330900
	SM SC	Up to 20km			MC 1100T-SM20 SC	1330898
MC 1000T – media converters for applications in demanding industrial environments						
Temperature range: -10°C...+60°C, for an easy introduction to FO technology						
	MM SC	Up to 10 km	10/100 Mbps	- Automatic switching between store-and-forward and cut-through mode - Short latency times for real-time protocols - Link Fault Pass Through (LFPT) – activated via DIP switch - Redundant power supply - Digital output for reading out alarm messages - DNV-GL, ATEX, IECEx, and UL HazLoc approval - IEC 61850 and IEEE 1613 for application in the energy sector	MC 1000E-MM SC	1330507
	MM ST				MC 1000E-MM ST	1330504
	MM LC				MC 1000E-MM LC	1330611
	SM SC	Up to 20km			MC 1000E-SM20 SC	1330728
	SM SC	Up to 40km			MC 1000E-SM40 SC	1330725
	SM ST	Up to 20km			MC 1000E-SM20 ST	1330723
	SM LC	Up to 40km				1330722
	SM WDM A				MC 1000E-SM40 WDM A	1330885
	SM WDM B				MC 1000E-SM40 WDM B	1330892
	MM WDM A	Up to 10km			MC 1000E-MM WDM A	1330588
	MM WDM B				MC 1000E-MM WDM B	1330890
	SFP	Depending on module			MC 1100E-SFP	1331375
	MM SC	Up to 10km	10/100/1000 Mbps		MC 1100E-MM SC	1330896
	SM SC	Up to 20km			MC 1100E-SM20 SC	1331377

NearFi coupler

The new NearFi technology extends the Phoenix Contact wireless portfolio. It transmits power and real-time Ethernet data wirelessly, and therefore allows completely new latency-free communication capabilities in the close-proximity range up to 10 mm. The new NearFi couplers are a simple replacement for connections subject to wear and slip rings in industrial applications and will minimise costs caused by failures.

Your advantages

- ☑ Contactless – no wear, no maintenance
- ☑ Protocol-independent, latency-free real-time communication with 100 Mbps (full duplex)
- ☑ High power in a compact housing
- ☑ High degree of mounting freedom with flexible proximity options
- ☑ All-around visible diagnostics with LED ring on the housing

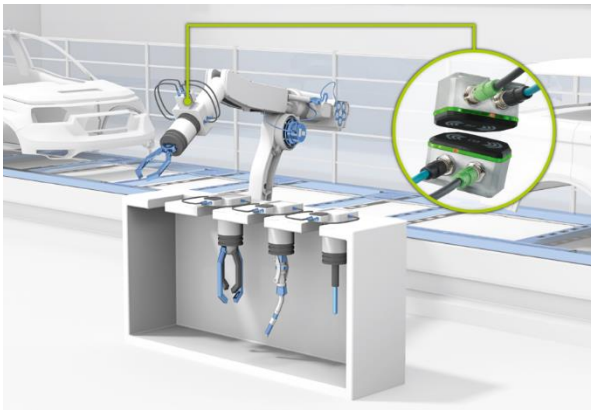
Product overview for NearFi Technology

NearFi couplers				
				
Description	**Power and data coupler**	**Data coupler**	**Power coupler, communication power**	**Power coupler, actuator supply**
Wireless standard	NearFi			
Range	≤10mm	≤100mm (can be set via DIP switch	≤10mm	
Interfaces	Ethernet Inductive interface (power transmission)	Ethernet	Inductive interface (power transmission)	
Transmission speed	100 Mbps			
Delay time (typical)	≤1 µs (typical)			
Output power	50 W (communications power)		50 W (communications power)	50 W (actuator supply)
Output voltage	24 V DC ±5%		24 V DC ±5%	
Output current	≤2 A (typical)		≤2 A (typical)	
Degree of protection	IP65 (manufacturer's declaration)			
Ambient temperature (operation)	-20°C ... +55°C (observe derating)	-20°C ... +65°C (observe derating)	-20°C ... +55°C (observe derating)	-20°C ... +60°C (observe derating)
Remote coupler	NEARFI 2200 R	NEARFI 2000 R	NEARFI 200 R	NEARFI 300 R
	1433049 NEW	**1433040** NEW	**1433046** NEW	**1509989** NEW
Base coupler	NEARFI 2200 B	NEARFI 2000 B	NEARFI 200 B	NEARFI 300 B
	1433050 NEW	**1433041** NEW	**1433047** NEW	**1464614** NEW

NearFi coupler in use

In industrial automation, power and data are often transmitted via connectors. Wherever connectors are connected and disconnected frequently, for example during tool changes on robots, connector service life is limited because contacts can become soiled or warped.

In addition to contactless power and real-time Ethernet transmission, application-specific functions such as Fast Startup and the transmission of two electrically isolated voltages (US=communications power/sensor supply and UA=actuator supply) are also possible.



Tool changes on industrial robots

Typical areas of application

- Tool changes on robots
- Transport systems such as cargo and workpiece carriers
- Turntables, rotary tables
- Modular production systems
- Automated guided vehicle systems (AGVs)

NearFi technology in the automotive industry

Ongoing communication with customers and partners worldwide

Phoenix Contact is a global, market leader based in Germany.

Our group is known for its future-oriented components, systems, and solutions in the fields of electrical engineering, electronics, and automation.

With a global network reaching across more than 100 countries and 22,000 employees, we can stay in close contact with our customers, something we believe is essential to success. The wide variety of our innovative products makes it easy for our customers to find future-oriented solutions for multiple applications and industries. We especially focus on the fields of energy, infrastructure, process, and factory automation.

You will find our complete product range at:
www.phoenixcontact.com.au

MC_014_10/4/2026_DM_v2.0

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