



PLANET@SPECTRA



INDUSTRIAL ETHERNET

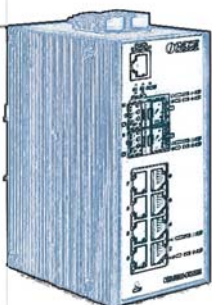
VERSION 2020|2

ETHERNET SWITCH

MEDIA CONVERTER

INJECTOR & SPLITTER

EXTENDER & GATEWAY





ETHERNET SWITCHES

UNMANAGED SWITCHES

Plug in - and the network is ready!

Unmanaged switches are the universal components for the simple, fast and secure installation of small to medium-sized industrial networks.

With the automatic detection of the network speed of 10/100 or Gigabit, Auto MDI-X and the features important for professional use - robust housing, 24 VDC supply and DIN rail mounting - the switches can be used in practically any environment.

MANAGED SWITCHES

In medium and large networks, especially in fail-safe or security-relevant network environments, controlled, automatic or manual access

to each individual network component is necessary.

Managed switches offer the IT professional in the industrial environment all the necessary setting and configuration options from the local console, web interface and SNMP to the comprehensive network management software (NMS).

GIGABIT SWITCHES

Flexibility and future security are essential arguments for the use of Gigabit also in industrial applications.

More and more integrated end devices such as controllers, sensors/actuators and video cameras require the transport and processing of data in the shortest possible time.

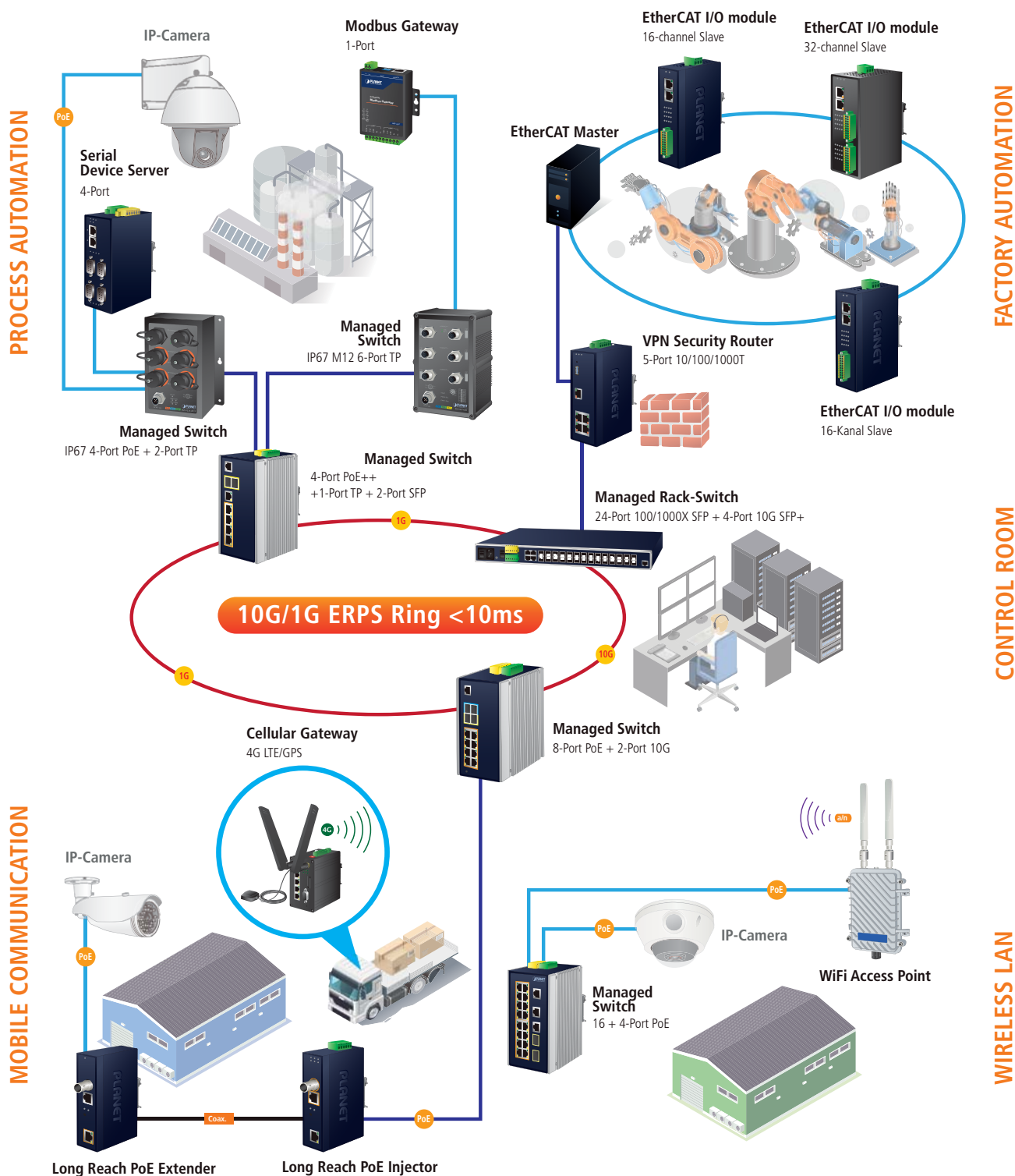
10G SWITCHES

In a 19" rack or on a DIN rail, an uplink with 10 Gigabit is particularly advantageous for fast applications with several high-resolution IP cameras. There is no other way to cope with the enormous flood of data in modern image processing. Even in the backbone, where process data from thousands of sensors mix with millions of ERP and MES data, the highest speed is required.

SWITCHES IN SPEZIELLEN BAUFORMEN

Vibration, pollution, outdoor. Extreme conditions require special measures. Metal instead of plastic housing, flat instead of vertical design, M12 screw connection instead of RJ45, all around IP67 instead of unprotected IP20.

INTELLIGENT INDUSTRIAL NETWORK INFRASTRUCTURE



THE RIGHT SWITCH FOR EVERY APPLICATION

MECHANICAL ENGINEERING

Where the industrial PC or the PLC controls the machine, where sensors and actuators exchange their data, where frequency inverters and Smart Drives need to be parameterized, industrial switches are the first node. They connect the devices to each other and provide uplink port communication to adjacent production lines and data exchange to the company network.



IMAGE PROCESSING

Whether video surveillance or visual inspection, it is almost always IP cameras that deliver the images. From the small webcam to the high-resolution, fully moveable PTZ camera, they all share the Ethernet Interface. The use of PoE-enabled switches and cameras is particularly installation-friendly. The technology transports data and power via the Ethernet cable. Plug it in - and you're done.



BUILDING AUTOMATION

In many buildings, heating, air conditioning and lighting are controlled mechanically and automatically. The control systems of the ovens, air conditioning and filtration systems exchange their data with the central building control system via Ethernet. The Switch is located in the heating cellar as well as in the energy room and in the control centre. It also ensures continuous data traffic from surveillance cameras and access control systems. More and more frequently, entertainment and multimedia services, e.g. in hotels, museums, are also being provided via Industrial Ethernet.

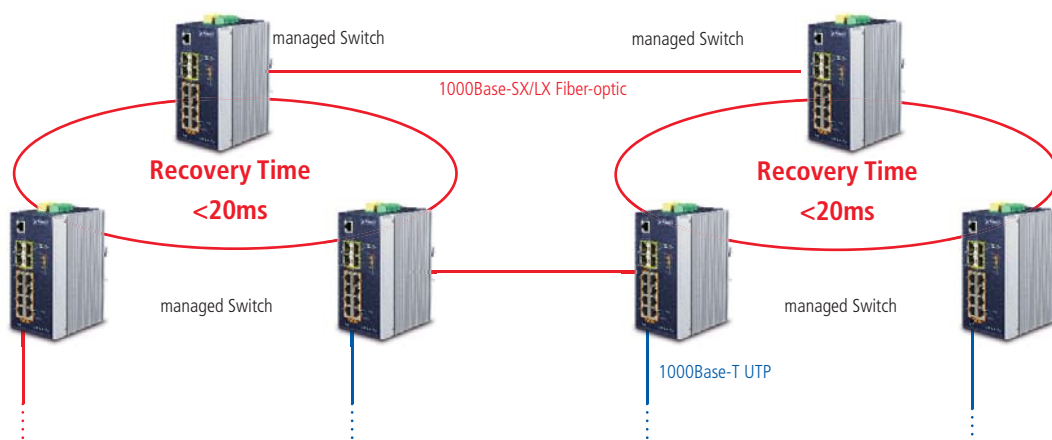


MANAGED ETHERNET SWITCHES

Article n°	Model	Ports TX + FX	Speed	Connector	Operating temperature	Feature
Managed, 19" Rack						
151856	IGS-5225-16T4S	16+4	16x 10/100/1000TX 4x 100/1000X SFP	RJ45 LC	-40°C to +75°C	2DI & 2DO ERPS-Ring IP30 Metal chassis
160402	IGS-6325-20S4C4X	20+4+4	20x 100/1000 SFP 4x 10/100/1000 TP/SFP Combo 4x 1G/10G SFP/SFP+	RJ45 LC	-40°C bis +75°C	Layer 3 2DI & 2DO ERPS-Ring IP30 Metall chassis
158644	IGS-6325-20T4C4X		20x 10/100/1000TX 4x 100/1000 TP/SFP Combo 4x 1G/10G SFP/SFP+			
Managed, 19" Rack, PoE+						
158645	IGS-6325-24P4X	24+4	24x 10/100/1000TX PoE+ (30W) 4x 10G SFP+	RJ45 LC	-40°C to +75°C	Layer 3 2DI & 2DO ERPS-Ring IP30 Metal chassis
159371	IGS-6325-24P4S		24x 10/100/1000TX PoE+ (30W) 4x 100/1000X SFP			
Managed, DIN-rail						
158646	IGS-10080MFT	2+8	2x 10/100/1000TX 8x 100/1000X SFP	RJ45 LC	-40°C to +75°C	2DI & 2DO, ERPS-Ring, IP30 Aluminium chassis
152486	IGS-5225-4T2S	4+2	4x 10/100/1000TX 2x 100/1000X SFP	RJ45 LC	-40°C to +75°C	2DI & 2DO, ERPS-Ring, IP30 Metal chassis
152252	IGS-801M	8	10/100/1000TX	RJ45 LC	-40°C to +75°C	2DI & 2DO, RSTP/MSTP, IP30 Metal chassis
150505	IGS-10020MT	8+2	8x 10/100/1000TX 2x 100/1000X SFP	RJ45 LC	-40°C to +75°C	2DI & 2DO, ERPS-Ring, IP30 Aluminium chassis
151327	IGS-12040MT	8+4	8x 10/100/1000TX 4x 100/1000X SFP	RJ45 LC	-40°C to +75°C	2DI & 2DO, ERPS-Ring, IP30 Aluminium chassis
151001	IGS-5225-8T2S2X	8+4	8x 10/100/1000TX 2x 100/1000X SFP 2x 1G/10G SFP/SFP+	RJ45 LC	-40°C to +75°C	Layer 3, 2DI & 2DO ERPS-Ring IP30 Aluminium chassis
158656	IGS-4215-16T2S	16+2	16x 10/100/1000TX 2x 100/1000X SFP	RJ45 LC	-40°C to +75°C	2DI & 2DO, RSTP/MSTP, IP40 Metal chassis
150999	IGS-20040MT	16+4	16x 10/100/1000TX 4x 100/1000X SFP	RJ45 LC	-40°C to +75°C	2DI & 2DO, ERPS-Ring, IP30 Aluminium chassis
Managed, DIN-rail, PoE++						
152487	IGS-5225-4UP1T2S	5+2	4x 10/100/1000TX PoE++ (60W) 1x 10/100/1000TX 2x 100/1000X SFP	RJ45	-40°C to +75°C	2DI & 2DO ERPS-Ring IP30 Aluminium chassis
Managed, DIN-rail, PoE+						
158071	IGS-5225-4P2S	4+2	4x 10/100/1000TX PoE+ (30W) 2x 100/1000X SFP	RJ45 LC	-40°C to +75°C	ERPS-Ring, IP40 Metal chassis
152485	IGS-10020HPT	8+2	8x 10/100/1000TX PoE+ (30W) 2x 100/1000X SFP	RJ45 LC	-40°C to +75°C	2DI & 2DO ERPS-Ring IP30 Aluminium chassis
156574	IGS-10020PT	8+2	8x 10/100/1000TX PoE+ (30W) 2x 100/1000X SFP			
161260	IGS-6325-8UP2S2X	8+2+2	8x 10/100/1000TX PoE++ (60W) 2x 100/1000X SFP 2x 1G/10G SFP+	RJ45 LC	-40°C bis +75°C	2DI & 2DO, ERPS-Ring, IP30 Aluminium chassis
155546	IGS-5225-8P4S	8+4	8x 10/100/1000TX PoE+ (30W) 4x 100/1000X SFP	RJ45 LC	-40°C to +75°C	2DI & 2DO ERPS-Ring IP30 Aluminium chassis
151858	IGS-5225-8P2S2X	8+4	8x 10/100/1000TX PoE+ (30W) 2x 100/1000X SFP 2x 1G/10G SFP/SFP+			
156289	IGS-5225-8P2T2S	10+2	8x 10/100/1000TX PoE+ (30W) 2x 10/100/1000TX 2x 100/1000X SFP			
152582	IGS-20160HPT	18+2	16x 10/100/1000TX PoE+ (30W) 2x 10/100/1000TX 2x 100/1000X SFP	RJ45 LC	-40°C to +75°C	IP30 Aluminium chassis

MANAGED ETHERNET SWITCHES

Article n°	Model	Ports TX + FX	Speed	Connector	Operating Temperature	Feature
Managed, DIN-rail, PoE+						
158648	ISW-514PS	4+1	4x 10/100TX PoE+ (30W) 1x 100FX Multi Mode SC	RJ45 SC	-10°C to +60°C	IP30 Aluminium chassis
158649	ISW-514PSF		4x 10/100TX PoE+ (30W) 1x 100FX SFP	RJ45 LC		
154921	IGS-4215-4P4T	8	4x 10/100/1000TX PoE+ (30W) 4x 10/100/1000TX	RJ45 LC	-40°C to +75°C	RST/MSTP IP30 Aluminium chassis
154922	IGS-4215-4P4T2S	8+2	4x 10/100/1000TX PoE+ (30W) 4x 10/100/1000TX 2x 100/1000X SFP			
154920	IGS-4215-8P2T2S	10+2	8x 10/100/1000TX PoE+ (30W) 2x 10/100/1000TX 2x 100/1000X SFP			
Managed, DIN-rail, PoE						
156160	ISW-504PS	5	4x 10/100TX PoE (15W) 1x 10/100TX	RJ45	-10°C to +60°C	IP30 Aluminium chassis
Managed, Wall mount, flat						
158650	WGS-4215-8T	8	8x 10/100/1000TX	RJ45	-40°C to +75°C	RSTP/MSTP IP30 Metal chassis
158651	WGS-4215-8T2S	8+2	8x 10/100/1000TX 2x 100/1000X SFP	RJ45 LC		
158675	WGS-5225-8T2SV	8+2	8x 10/100/1000TX 2x 100/1000X SFP	RJ45	-20°C to 70°C	ERPS Ring IP30 Metal chassis
Managed, Wall mount, flat, PoE+						
157497	WGR-500-4P	4+1	4x 10/100/1000TX PoE+ (30W) 1x 10/100/1000TX	RJ45	-10°C to +60°C	IP30 Metal chassis
152490	WGS-804HPT	8	4x 10/100/1000TX PoE+ (30W) 4x 10/100/1000TX	RJ45	-40°C to +75°C	RSTP/MSTP, IP30 Metal chassis
154187	WGS-5225-8P2SV	8+2	8x 10/100/1000TX PoE+ (30W) 2x 100/1000X SFP	RJ45 LC	-20°C to +70°C	LCD-Touchscreen, ERPS-Ring, IP30 Metal chassis
154186	WGS-5225-8P2S	8+2	8x 10/100/1000TX PoE+ (30W) 2x 100/1000X SFP		-40°C to +75°C	ERPS-Ring IP30 Metal chassis
155223	WGS-4215-8P2S	8+2	8x 10/100/1000TX PoE+ (30W) 2x 100/1000X SFP	RJ45 LC	-40°C to +75°C	RSTP/MSTP IP30 Metal chassis
158693	WGS-4215-16P2S	16+2	16x 10/100/1000TX PoE+ (30W) 2x 100/1000X SFP		-10°C to +60°C	



UNMANAGED ETHERNET SWITCHES

Article n°	Model	Ports TX + FX	Speed	Connector	Operating Temperature	Feature
Unmanaged, DIN-rail, Fast Ethernet						
158677	ISW-511TS15	4+1	4x 10/100TX 1x 100FX, SM, 15km, SC	RJ45 SC	-40°C to +75°C	IP30 Metal chassis
154317	ISW-621TF	4+2	4x 10/100TX 2x 100FX SFP	RJ45 LC	-40°C to +75°C	IP30 Metal chassis
152868	ISW-500T	5	5x 10/100TX	RJ45	-40°C to +75°C	IP30 Metal chassis, mini
150427	ISW-501T	5				IP30 Metal chassis
152869	ISW-800T	8	8x 10/100TX	RJ45	-40°C to +75°C	IP30 Metal chassis, mini
150428	ISW-801T	8				IP30 Metal chassis
158951	ISW-1600T	16	16x 10/100TX	RJ45 LC	-40°C to +75°C	IP30 Metal chassis
158952	IFGS-1822TF	16+2	16x 10/100TX 2x 1000TX/SFP			
Unmanaged, DIN-rail, Fast Ethernet, PoE						
158678	ISW-514PTF	4+1	4x 10/100TX PoE (15W) 1x 10/100FX SFP	RJ45	-40°C to +75°C	IP30 Aluminium chassis
156159	ISW-504PT	5	4x 10/100TX PoE (15W) 1x 10/100TX	RJ45	-10°C to +60°C	IP40 Metal chassis, mini
158653	IFGS-1022HPT	8+2	8x 10/100TX PoE+ (30W) 2x 1000 TP/SFP Combo	RJ45 LC	-40°C bis +75°C	IP30 Aluminium chassis
Unmanaged, DIN-rail, Gigabit Ethernet						
152133	IGS-620TF	4+2	4x 10/100/1000TX 2x 1000FX SFP	RJ45 LC	-40°C to +75°C	IP30 Metal chassis
154183	IGS-500T	5	5x 10/100/1000TX	RJ45	-40°C to +75°C	IP30 Metal chassis, compact
151764	IGS-501T	5				IP30 Metal chassis
151765	IGS-801T	8	8x 10/100/1000TX	RJ45	-40°C to +75°C	IP30 Metal chassis
161216	IGS-1600T	16	16x 10/100/1000TX	RJ45	-40°C bis +75°C	IP30 Metal chassis
161217	IGS-1820TF	16+2	16x 10/100/1000TX 2x 1000X SFP	RJ45 LC	-40°C bis +75°C	IP30 Metal chassis
Unmanaged, DIN-rail, Gigabit Ethernet, PoE+						
155259	IGS-624HPT	4+2	4x 10/100/1000TX PoE+ (30W) 2x 1000X SFP	RJ45 LC	-40°C to +75°C	IP30 Aluminium chassis
152484	IGS-504HPT	5	4x 10/100/1000TX PoE+ (30W) 1x 10/100/1000TX	RJ45	-40°C to +75°C	IP30 Aluminium chassis
Unmanaged, Wall mount, flat						
152488	WGS-803	8	8x 10/100/1000TX	RJ45	-10°C to +60°C	IP30 Metal chassis
152489	WGS-804HP	8	4x 10/100/1000TX PoE+ (30W) 4x 10/100/1000TX	RJ45	-10°C to +60°C	IP30 Metal chassis



5-Port Switch, mini

8-Port Switch, mini

5-Port Switch

8-Port Switch

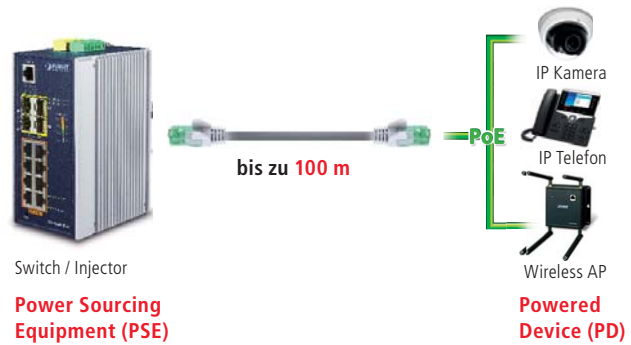
16-Port Switch

16+2-Port Switch

TECHNOLOGY AND DESIGN

POWER OVER ETHERNET

Power over Ethernet (PoE) is a 1-cable technology in which power and data are fed together via the Ethernet cable: Plug in the cable - and it runs. This, compared to a conventional power supply, drastically reduced installation effort, is probably the best known feature of PoE. With PoE components such as injector, splitter and extender, there are further advantages such as Ethernet extension or integration of non-PoE-capable devices.



NETWORK MANAGEMENT SOFTWARE

While access to the switches via web browsers is usually sufficient for the management of small networks, medium and large networks require central network management software. Planet UNI-NMS can manage up to 100,000 nodes via SNMP or ONVIF protocol. It provides administrators with automatic device detection, management, topology view, event reporting and other features to operate a secure and optimized network.



FLAT DESIGN

Planet has developed a switch series with a particularly flat design for installation in switch boxes or wall housings with a shallow installation depth.

In addition to plug-and-play models that cannot be administered, variants with touch display administration are also available. This switch type can be used very flexibly with DIN rail, wall or magnet mounting.



Dual Power Input



flat Design



DIN-rail mount



PoE



Magnet Installation



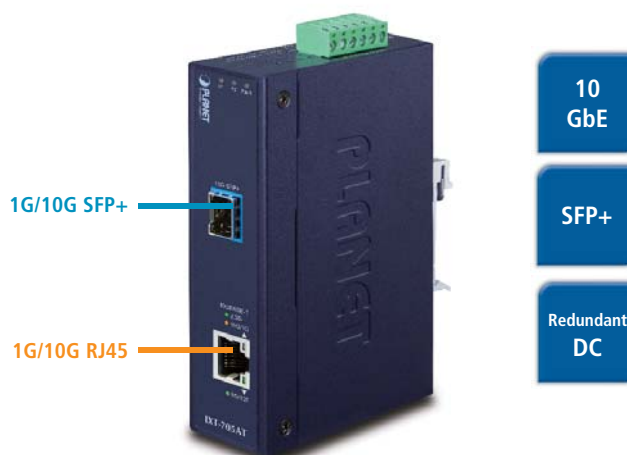
Front access

SMART EXPANSIONS

MEDIA CONVERTER

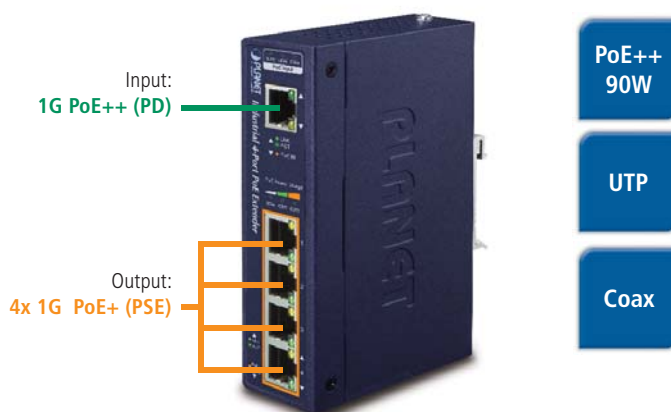
Media converters are Ethernet converters from copper to fibre optic cables. They are used to connect switches without fiber ports and other devices with RJ45 ports to the fiber backbone of the network.

The models support speeds from 10/100 to Gigabit to 10G, both fiber types multi- and single-mode, and SC connectors or SFP ports for corresponding SFP modules.



POE EXTENDER

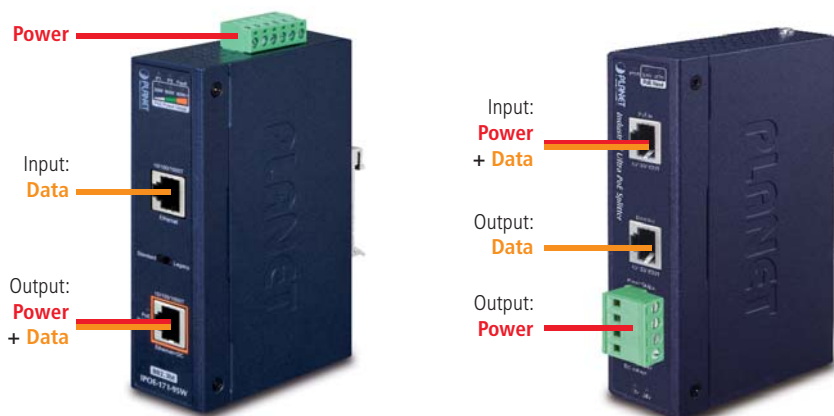
PLANET PoE Extenders extend the maximum Ethernet range from standard 100m to another 100m or, depending on the model, up to 2.4km via UTP or coaxial cable. As Powered Device (PD), the extenders do not need their own power supply, but rather take these from the incoming PoE Connection. At their output they offer one or more PoE ports for the connector of Ethernet devices with or without PoE.



POE INJECTOR / POE SPLITTER

With a PoE injector, a PoE terminal, e.g. an IP camera, can be connected to a switch without PoE ports. Connected at its input to the switch via patch cable, it offers a standard PoE port according to IEEE802.3af, -at or -bt at its output.

A PoE splitter separates the incoming PoE connection into data (RJ45) and power (V+, V-). This allows 12/24 VDC devices to be supplied with up to 48W at remote locations.



MEDIA CONVERTER

Article n°	Model	Beschreibung	Kabel-Interface	LWL-Interface	Feature
10G					
155193	IXT-705AT	Twisted Pair to LWL	1x 100/1000/10G TX, RJ45	1x 10G FX SFP+	IP30 Metal chassis, Wide temperature
Gigabit					
159433	IGT-815AT	Twisted Pair to LWL	1x 10/100/1000TX, RJ45	1x 100/1000FX SFP	IP30 Metal chassis, Wide temperature
154984	IGT-1205AT			2x 100/1000FX SFP	
152594	IGT-905A			1x 1000FX SFP	IP30 Metal, managed
159537	IGTP-815AT	Twisted Pair to LWL	1x 10/100/1000TX PoE+ (30W), RJ45	1x 100/1000FX SFP	IP30 Metal chassis, Wide temperature
Fast Ethernet					
152494	IFT-802T	Twisted Pair to LWL	1x 10/100TX	1x 100FX, Multi Mode, SC, 2km	IP30 Metal chassis, Wide temperature
152593	IFT802TS15			1x 100FX, Single Mode, SC, 15km	
158231	IFT-805AT			1x 100FX SFP	

INJECTOR

Article n°	Model	Eingang	Ausgang	Operating Temperature	Feature
PoE++/PoE+/PoE					
155982	IPOE-171-95W	1x 10/100/1000TX, RJ45, Power 12 to 48VDC	1x 10/100/1000TX PoE++ (95W), RJ45	-40°C to +75°C	IP30 Metal chassis
155981	IPOE-171-60W	1x 10/100/1000TX, RJ45 Power 48 to 56VDC	1x 10/100/1000TX PoE++ (60W), RJ45		
155262	IPOE-162	1x 10/100/1000TX, RJ45 Power 24 to 48VDC	1x 10/100/1000TX PoE+ (30W), RJ45	-40°C to +75°C	IP30 Metal chassis
160787	IPOE-260-12V	2x 10/100/1000TX, RJ45, Power 12 to 56VDC	2x 10/100/1000TX PoE+ (30W), RJ45	-40°C to +75°C	IP30 Metal chassis
161380	IPOE-270-12V	2x 10/100/1000TX, RJ45, Power 12 to 56VDC	2x 10/100/1000TX PoE++ (90W), RJ45	-40°C to +75°C	IP30 Metal chassis

SPLITTER

Article n°	Model	Eingang	Ausgang	Operating Temperature	Feature
PoE++/PoE+					
158638	IPOE-162S	1x 10/100/1000TX PoE+ (30W), RJ45 Data+Power	1x 10/100/1000TX PoE+ (30W), RJ45 Power 24VDC	-40°C to +75°C	IP30 Metal chassis

LONG REACH POE

Article n°	Model	Eingang	Ausgang	Operating Temperature	Feature
PoE+/PoE over UTP					
152590	LRP-101U-KIT	Injector PoE PD 1x 10/100TX PoE+ (30W), RJ45 1x 10/100TX PoE+ (30W), UTP, 500m	Splitter 1x 10/100TX PoE+ (30W), UTP 1x 10/100TX PoE+ (30W), RJ45	-20°C to +70°C	PoE-extension: PoE+ (30W) to 100m, PoE (15W) to 500m, Metal chassis
PoE+/PoE over UTP/COAX					
152592	LRP-104CET	1x 10/100TX PoE+ (25W), RJ45/BNC Power 24 to 48 VDC	4x 10/100TX PoE+ (30W), RJ45	-40°C to +75°C	PoE-extension: PoE+ (30W) to 200m, PoE (15W) to 1000m, IP30 Aluminium chassis

EXTENDER

Article n°	Model	Eingang	Ausgang	Operating Temperature	Feature
PoE++/PoE+					
152493	IPOE-E174	1x 10/100/1000TX PoE++ (60W), RJ45	4x 10/100/1000TX PoE (15W/30W), RJ45	-40°C to +75°C	IP30 Metal chassis
158676	POE-165S	1x 10/100/1000TX PoE+ (30W), RJ45	1x 10/100/1000TX passive PoE+ (30W), RJ45, Power 12/19/24VDC	-40°C to +75°C	Metal chassis
BNC/RJ11					
158658	IVC-234GT	4x 10/100/1000TX, RJ45	1x 10/100/1000TX, BNC/RJ11	-40°C to +75°C	Ethernet over VDSL2, max. 1200m, IP30 Metal chassis

GATEWAY

Article n°	Model	Eingang	Ausgang	Operating Temperature	Feature
Modbus					
158661	IMG-110T	1x 10/100TX, RJ45, Modbus TCP	1x RS-422/485, Modbus RTU, screw terminal	-40°C to +75°C	Web management, RTU Master/Slave, IP40 Metal chassis, Wall mount
158659	IMG-120T		2x RS-422/485, Modbus RTU, screw terminal		
Cellular					
153451	ICG-2420-LTE	4x 10/100/1000TX, RJ45	LTE, 2 SIM-cards 2x RS-232 1x RS-485	-20°C to +70°C	VPN, SNMP, Remote serial, 2DI/1DO, IP40 Aluminium chassis
161388	ICG-2510W-LTE	6x 10/100/1000TX, RJ45	LTE, 2 SIM-cards, WLAN, 2.4/5 GHz 1x RS-232, 1x RS-485	-35°C to +75°C	VPN, SNMP, Remote serial, IP30 Metal chassis

10G ETHERNET SFP MODULES

Model	MTB-RJ	MTB-TLR	MTB-TSR
Article n°	154985	157976	152579



Fiber Mode	--	Single Mode	Multi Mode
max. Distance	30m	10km	300m
Speed (Mbps)	10G		
Connector	Copper	LC	
Wavelength	--	11310nm	850nm
Operating temperature	0°C to +70°C	-40°C to +75°C	

GIGABIT & MEGABIT ETHERNET SFP MODULE

Model	MGB-GT	MGB-TSX	MGB-TLX	MGB-TL30	MFB-TFX	MFB-TF20
Article n°	155074	152481	152588	150506	152482	152483



Fiber Mode	-	Multi Mode	Single Mode		Multi Mode	Single Mode
max. Distance	100m	550m	20km	30km	2km	20km
PHY Mode	1000BASE-TX	1000BASE-SX	1000BASE-LX		100BASE-FX	
Connector	RJ45	LC				
Wavelength	-	850nm	1310nm		1310nm	
Operating temperature	0°C to +60°C	-40°C to +75°C				

powered by individuality



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