

Diagnostic Switch PROmesh P10X



Art. No. 114110210

HIGHLIGHTS

Integrated diagnosis:

- Online line monitoring
- Network monitoring
 - Netload
 - Discards
 - Errors
- Leakage current monitoring

High Performance:

- Transfer rates up to 1 Gbps
- Quality of Service
- 8 priority queues

Your advantages

- Continuous diagnosis of the connected wires during operation.
- The **PROmesh P10X** is a full-managed Industrial Ethernet/PROFINET switch for the IP67 area of industrial automation plants.
- You can configure it easily and conveniently via its integrated web interface.
- Thanks to the compact design, the simple attachment outside the control cabinet and its optimized thermal properties, all conceivable installation locations can be used.
- Extensive diagnostic functions:
Keep yourself informed at all times about your network status, cable fault reserve and EMC.

Diagnostic Switch PROmesh P10X

Technical details

Network Interfaces	
M12 D-coded ports	
■ Interfaces	8
■ Transmission rates	10 Mbps 100 Mbps
■ Status LED	Link + data exchange
M12 X-coded ports	
■ Interfaces	2
■ Transmission rates	10 Mbps 100 Mbps 1000 Mbps
■ Status LED	Link + data exchange
Supply voltage, current consumption, power loss, alarm contact	
Interfaces	
■ Power supply (in)	M12 L-coded
■ Console	M12 D-Code
■ Functional earth (FE)	M4 screw connection
Operating parameters	
■ Supply voltage (nominal value)	24 VDC
■ Power supply (min.)	12 VDC
■ Power supply (max.)	48 VDC
■ Power consumption (max.)	1,66 A
■ Power loss (max.)	20 W
■ Fuse protection (power supply input)	6 A
Further device interfaces	
■ Status LED	VDC Status Error
Functions	
Basic parameters	
■ Switching technology	Store and Forward
■ MAC address table	16 K
■ Packet buffer	2 Mbit
■ Backplane capacity	20 Gbps
■ Throughput	14,88 Mpps
■ MTBBF	40 years
Quality of Service (QoS)	
■ Queues per port	8
■ Prioritization functions	Port Class of Service (CoS) Type of Service (ToS)
■ Prioritization methods	Strict prioritization Weighted prioritization
■ Bandwidth control	Incoming and outgoing
VLAN	
■ Protocol function	Port based
■ Amount	4096

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Functions	
Protocols/services	
■ Web	HTTP HTTPS
■ Network	SNMPv1 SNMPv2c SNMPv3 DHCP Client
■ E-Mail	SMTP Client
■ Time synchronization	SNTP Client
■ Neighbourhood	LLDP
■ IP setting	static PROFINET Ethernet/IP
■ Multicast/broadcast	Broadcast limitation IGMP snooping (max multicast group is 512)
■ Redundancy	MRP Master MRP Client STP RSTP MSTP
■ Eventlog	Syslog
Applications	
PROFINET	
■ Standard	PROFINET 2.4
■ Device Class	Device
■ Conformance Class	B
■ Netload Class	III
■ Realtime Class	1
Ethernet/IP	
■ Ethernet/IP	EDS file
Diagnosis	
Functions	
■ Wire diagnostic	Online quality analysis
■ Port statistics	Errors Discards Netload/ms + netload/s Neighbourhood
■ Leakage current monitoring	Sampling rate 25 kHz Bandwidth 25.6 kHz Measuring range 0–10 A Resolution 1 mA
■ Power supply	Sampling rate 1 Hz Measuring range 12–48 VDC Resolution 0.1V
■ Temperature	Measuring range –40–75 °C Resolution 1 °C
■ Port Mirroring	Ingress, egress or ingress and egress Multiple source ports possible
Alert	
■ Receiver	PROFINET Email SNMP Trap

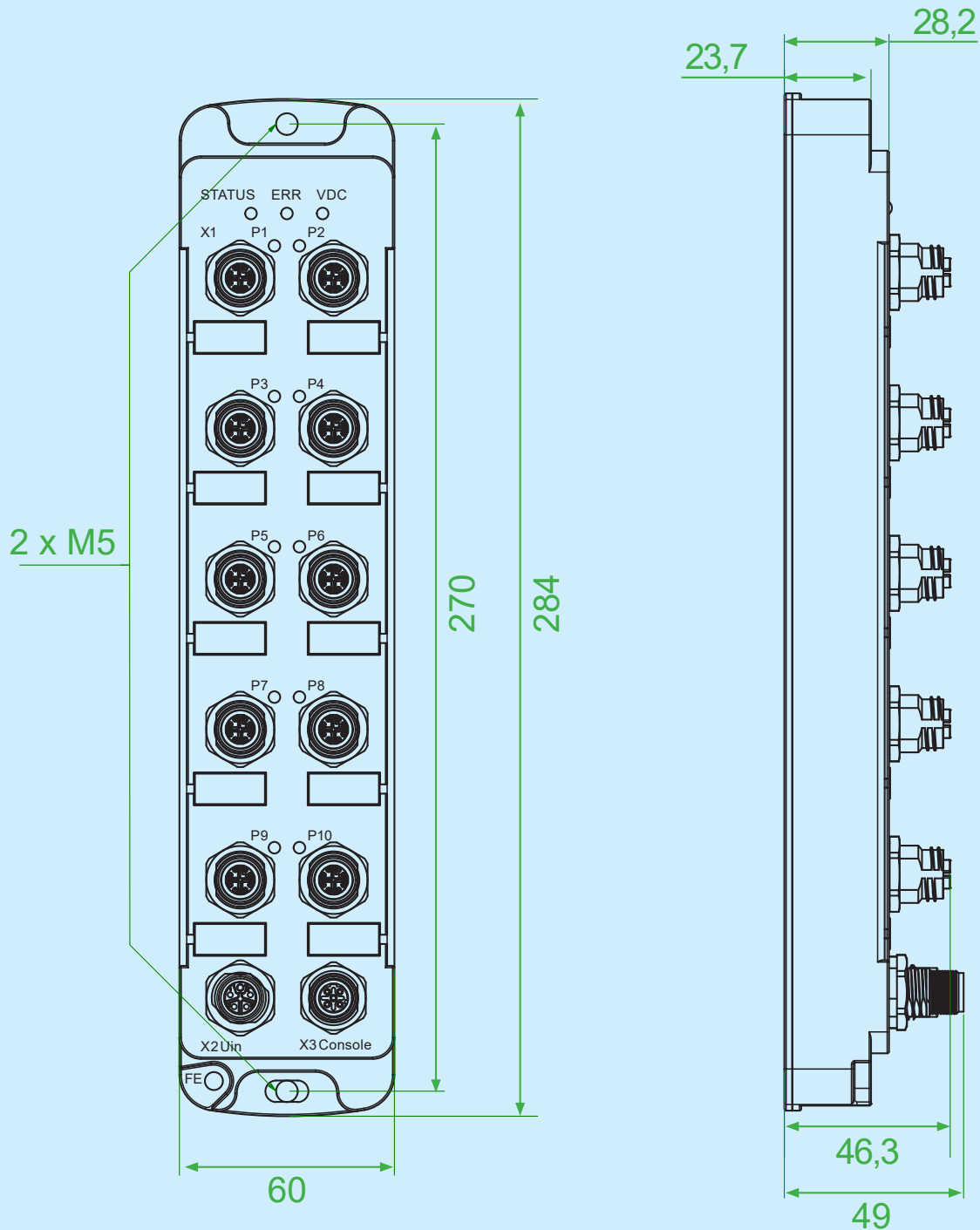
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Technical details

Diagnosis	
Alert	
<ul style="list-style-type: none"> ■ Trigger 	Port (Up, Down, Status change) Wire quality Netload Leakage current Neighbourhood Power supply Temperature MRP Discards Errors
Environmental conditions	
<ul style="list-style-type: none"> ■ Operating temperature 	–40–75 °C
<ul style="list-style-type: none"> ■ Storage temperature 	–40–85 °C
<ul style="list-style-type: none"> ■ Air humidity, rel. 	5–95 % non-condensing
<ul style="list-style-type: none"> ■ Protection Class 	IP67
Design, Dimensions, Weights	
<ul style="list-style-type: none"> ■ Building type 	compact
<ul style="list-style-type: none"> ■ Material (housing) 	Metal
<ul style="list-style-type: none"> ■ Mounting 	Wall mounting
<ul style="list-style-type: none"> ■ Width 	60 mm
<ul style="list-style-type: none"> ■ Height 	284 mm
<ul style="list-style-type: none"> ■ Depth 	28 mm
<ul style="list-style-type: none"> ■ Installation distance (vertical) 	50 mm
<ul style="list-style-type: none"> ■ Installation distance (horizontal) 	50 mm
<ul style="list-style-type: none"> ■ Weight (net) 	0,85 kg
Standards, directives, approvals	
EMC	
<ul style="list-style-type: none"> ■ Guideline 	2014/30/EU
<ul style="list-style-type: none"> ■ Emitted interference 	EN 55032
<ul style="list-style-type: none"> ■ Susceptibility 	EN 61000-6-2
<ul style="list-style-type: none"> ■ ESD 	IEC 61000-4-2
Mechanical stability	
<ul style="list-style-type: none"> ■ Vibration 	IEC 60068-2-6
<ul style="list-style-type: none"> ■ Shock 	IEC 60068-2-27
<ul style="list-style-type: none"> ■ Free fall 	IEC 60068-2-32
Approval	
<ul style="list-style-type: none"> ■ Europe 	CE
<ul style="list-style-type: none"> ■ USA 	UL
<ul style="list-style-type: none"> ■ Canada 	CSA
Environment	
<ul style="list-style-type: none"> ■ RoHS 	2011/65/EU
<ul style="list-style-type: none"> ■ REACH 	1907/2006/EG
FCC	
<ul style="list-style-type: none"> ■ Surge 	IEC 6100045, level 3
<ul style="list-style-type: none"> ■ EFT (electrical fast transient pulse) 	IEC 6100044

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Technical drawing



Technical drawing | Dimensions (mm)

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Pin assignment

