

Diagnostic Switch PROmesh P9+

PROmesh P9+



Art. No.: 114110193

HIGHLIGHTS

- Online cable monitoring
- Network monitoring:
 - Network load
 - Discards
 - Errors
- Leakage current monitoring
- High performance:
 - Transmission rates up to 1.0 Gbps
 - Quality of service
 - 8 priority queues

Your advantages

- Continuous diagnostics of the connected lines during operation
- The PROmesh P9+ is a fully managed Industrial Ethernet/PROFINET/Ethernet IP switch for industrial automation systems.
- You can configure it easily and conveniently via its integrated web interface.
- The compact design, the simple attachment to the DIN rail and its optimized thermal properties save you space in the control cabinet.
- Extensive diagnostic functions:
Find out about your network status, the interference reserve of cables and EMC at any time.

Diagnostic Switch PROmesh P9+

technical details

Network interfaces	
RJ45 ports	
■ interfaces	9
■ transfer rate	10 Mbps 100 Mbps 1 Gbps
■ status LED	link + data communication
Power supply, current consumption, power loss, alarm contact	
Connections	
■ power supply	2 x 0,2 – 2,5 mm ²
■ redundant power supply	2 x 0,2 – 2,5 mm ²
■ PE-connection	1 x 0,2 – 2,5 mm ²
■ alarm contact	2 x 0,2 – 2,5 mm ²
Operating parameters	
■ power supply (nominal value)	24 VDC, redundant
■ power supply (min.)	12 VDC
■ power supply (max.)	48 VDC
Environmental parameters	
■ operating temperatur	-40°C ... 75°C
■ storage temperature	-40°C ... 75°C
■ humidity (relative)	<95% RHD, non-condensing
Design, dimensions, weights	
■ design	compact passive cooling
■ material (housing)	anodized aluminum
■ fastening	35 mm DIN rail (0°, 90°)
■ broad	60 mm
■ height	110 mm
■ depth	132 mm
■ installation distance (vertical)	50 mm
■ installation distance (horizontal)	20 mm
Other device interfaces	
■ status LED	VDC1 VDC2 Status Error
■ data storage	SD card
■ reset	button
function	
Basic parameters	
■ switch mode	store & forward
■ MAC address table	16 K
■ package storage	2 Mbit
■ backplane capacity	18 Gbps
■ throughput	13,4 Mpps

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Function	
Quality of Service (QoS)	
■ queues per port	8
■ prioritization methods	strict prioritization weighted prioritization
■ bandwidth limitation	incoming and outgoing
■ port prioritization	yes
■ COS: class of service	yes
■ TOS: type of services	yes
VLAN	
■ portbased	yes
■ tagged	yes
■ number	4096
Protocols/services	
■ management access	HTTP HTTPS webmanagement CLI PROmanage NT®
■ network	SNMPv1 SNMPv2c SNMPv3
■ e-Mail	SMTP Client
■ time synchronization	SNTP Client NTP Server
■ neighborhood	LLDP
■ event log	syslog
■ file transfer	TFTP
■ redundancy	MRP master MRP client STP RSTP MSTP static link aggregation dynamic link aggregation
■ IP setting	static PROFINET ETHERNET/IP
■ multicast/broadcast	Static Multicast IGMP Snooping Broadcast Limitation
Application specific	
PROFINET	
■ standard	V 2.4
■ conformance class	B
■ net load class	III
■ real-time-class	1
Diagnosis	

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Application specific	
ETHERNET/IP	
<ul style="list-style-type: none"> ETHERNET/IP 	yes
Diagnosis	
Function	
<ul style="list-style-type: none"> online line diagnostics 	yes
<ul style="list-style-type: none"> port statistics 	errors discards network load/ms + network load/s neighborhood
<ul style="list-style-type: none"> Leake current monitoring: 	sampling rate 18 kHz bandwidth 25.6 kHz measuring range -25 – 25 A resolution 6.25 mA
<ul style="list-style-type: none"> supply voltage 	sampling rate 1 Hz measuring range 12 – 48 VDC resolution 0.3 V
<ul style="list-style-type: none"> temperature 	measuring range -40 – 120°C resolution 1°C
<ul style="list-style-type: none"> port mirroring 	incoming or incoming and outgoing packets multiple source ports possible
Alerting	
<ul style="list-style-type: none"> triggers 	port (down, status change) cable quality network load leakage current neighborhood supply voltage temperature MRP error discard
<ul style="list-style-type: none"> recipient 	PROFINET email SNMP trap alarm contact (relay)
Security	
<ul style="list-style-type: none"> security 	User accounts (individual login) IP filter port alarm
Standards, guidelines, approvals	
EMC	
<ul style="list-style-type: none"> policy 	2014/30/EU
<ul style="list-style-type: none"> interference emission 	EN 55032
<ul style="list-style-type: none"> noise immunity 	EN 61000-6-2
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"> Freefall 	IEC 60068-2-32

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Standards, guidelines, approvals	
Permit	
■ Europe	CE
■ USA	UL
■ Canada	CSA
Environment	
■ RoHS	2011/65/EU
■ REACH	1907/2006/EG