

Diagnostic Switch PROmesh P10+

PROmesh P10+



Art.-Nr.: 114110203-SL

HIGHLIGHTS

- Online line monitoring
- Network monitoring:
 - Network load
 - TCP / IP retransmissions
 - Discards
 - Errors
- Environmental monitoring:
 - Leakage current
 - Vibration
 - Humidity
 - Light
- High performance:
 - Transmission rates up to 2.5 Gbit/s
 - Quality of service
 - 8 priority queues

Your advantages

- Continuous diagnostics of the connected lines during operation.
- The PROmesh P10+ 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.
- Increased network security through integrated firewall function
- Connect your machines and production network using NAT
- Extensive diagnostic functions: Find out about your network status, the interference reserve of cables as well as EMC and environmental influences (e. g. vibration, humidity, ...) at any time.

Diagnostic Switch PROmesh P10+

technical details

network interfaces	
RJ45 ports	
■ interfaces	8
■ transfer rate	10 Mbps 100 Mbps 1 Gbps
■ status LED	link + data communication
SFP ports	
■ interfaces	2
■ transfer rate	100 Mbps 1 Gbps 2.5 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 parameter	
■ switch mode	store & forward

Diagnostic Switch PROmesh P10+

technical details

function	
basic parameter	
■ MAC address table	16 K
■ package storage	2 Mbit
■ backplane capacity	26 Gbps
■ throughput	19,3 Mpps
Quality of Service (QoS)	
■ Queues per port	8
■ prioritization methods	strict prioritization weighted prioritization
■ bandwidth limitation	incoming and outgoing
■ COS: class of service	yes
■ port prioritization	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
■ file transfer	TFTP
■ e-Mail	SMTP
■ time synchronization	SNTP client NTP server
■ neighborhood	LLDP
■ IP setting	static PROFINET ETHERNET/IP
■ multicast/broadcast	Static Multicast IGMP Snooping Broadcast Limitation
■ redundancy	MRP master MRP client STP RSTP MSTP static link aggregation dynamic link aggregation
■ eventlog	syslog
■ routing	NAT

Diagnostic Switch PROmesh P10+

technical details

application specific	
PROFINET	
■ standard	V 2.4
■ conformance class	B
■ net load class	III
■ real-time-class	1
ETHERNET/IP	
■ ETHERNET/IP:	yes
diagnosis	
■ online line diagnostics	yes
■ port statistics	errors discards network load/ms + network load/s neighborhood TCP/IP retransmission
■ leakage current monitoring:	sampling rate 18 kHz bandwidth 25.6 kHz measuring range -25 – 25 A resolution 6.25 mA
■ supply voltage	sampling rate 1 Hz measuring range 12 – 48 VDC resolution 0.3 V
■ temperature	measuring range -40 – 120°C resolution 1°C
■ port mirroring	incoming or incoming and outgoing packets multiple source ports possible
■ environmental sensors	vibration light humidit
alerting	
■ triggers	port (down, status change) cable quality network load leakage current neighborhood supply voltage temperature MRP error discard TCP/ IP retransmission vibration humidity light

Diagnostic Switch PROmesh P10+

technical details

standards, guidelines, approvals	
EMC	
■ policy	2014/30/EU
■ interference emission	EN 55032
■ noise immunity	EN 61000-6-2
mechanical stability	
■ vibration	IEC 60068-2-6
■ shock	IEC 60068-2-27
■ Freefall	IEC 60068-2-32
permit	
■ Europe	CE
■ USA	UL
■ Canada	CSA
environment	
■ RoHS	2011/65/EU
■ REACH	1907/2006/EG