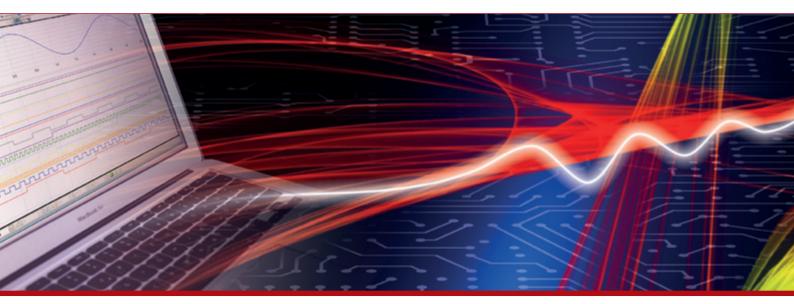# Product Datasheet - Technical Specifications

More information in our Web-Shop at ▶ **www.meilhaus.com**

Your contact

Technical and commercial sales, price information, quotations, demo/test equipment, consulting:

Tel.:   **+49 - (0)81 41 - 52 71-0**

FAX: **+49 - (0)81 41 - 52 71-129**

E-Mail: **sales@meilhaus.com**

www.meilhaus.com

Diagnostic Switch PROmesh P10

Art. No. 114110200

HIGHLIGHTS

Integrated diagnosis:

- Online line monitoring

- Network monitoring
  - Netload
  - Discards
  - Errors

- Leakage current monitoring

High Performance:

- Transfer rates up to 2.5 gbps

- Quality of Service

- 8 priority queues

Your advantages

- Continuous diagnosis of the connected wires during operation.

- The **PROmesh P10** is a full-managed Industrial Ethernet/PROFINET switch for industrial automation plants.

- You can configure it easily and conveniently via its integrated web interface.

- The compact design, flexible mounting on the top-hat rail as well as its optimized thermal properties save space in the control cabinet.

- Extensive diagnostic functions:
  Keep yourself informed at all times about your network status, cable fault reserve and EMC.

Diagnostic Switch PROmesh P10

Technical details

Network Interfaces	
RJ45 Ports	
■ Interfaces	8
■ Transmission rates	10 mbps 100 mbps 1 gbps
■ Status LED	Link + data exchange Portspeed
SFP Slots	
■ Interfaces	2
■ Transmission rates	100 mbps 1 gbps 2,5 gbps
■ Status LED	Link + data exchange Portspeed
Supply voltage, current consumption, power loss, alarm contact	
Interfaces	
■ Power supply	2 x 0,2 - 2,5 mm²
■ Redundant power supply	2 x 0,2 - 2,5 mm²
■ Functional earth (FE)	1 x 0,2 - 2,5 mm²
■ Alarm contact	2 x 0,2 - 2,5 mm²
Operating parameters	
■ Supply voltage (nominal value)	24 VDC
■ Power supply (min.)	12 VDC
■ Power supply (max.)	36 VDC
■ Power consumption (max.)	0,8 A
■ Power loss (max.)	8 W
■ Fuse protection (power supply input)	3,5 A / 125 VDC
■ Fuse (input of the alarm contact)	1,0 A / 24 VDC 0,5 A / 125 VAC
Further device interfaces	
■ Status LED	VDC1 VDC2 Ring Status Error
■ Data memory	SD card max. 32 GByte
■ Reset	Button
Functions	
Basic parameters	
■ Switching technology	Cut-Through
■ MAC address table	16 K
■ Packet buffer	2 Mbit
■ Backplane capacity	51,2 gbps
■ Throughput	19,3 mpps

Diagnostic Switch PROmesh P10
Technical details

Functions	
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
Protocols/services	
■ Web	HTTP
■ Network	SNMPv1 SNMPv2 DHCP Client
■ Data transfer	TFTP
■ E-Mail	SMTP Client
■ Time synchronization	SNTP Client
■ Neighbourhood	LLDP
■ Multicast groups	IGMP Snopping
■ Redundancy	MRP Master MRP Client RSTP
■ Eventlog	Syslog
PROFINET	
■ Standard	PROFINET 2.4
■ Device Class	Device
■ Conformance Class	B
■ Netload Class	III
■ Realtime Class	1
Diagnosis	
Functions	
■ Wire diagnostic	Online quality analysis Online wire test Offline wire test
■ Port statistics	Errors Discards Netload/ms + Netload/s Neighbourhood
■ Neighbourhood	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 - 36 VDC Resolution 0.1 V
■ Temperature	Measuring range -40 - 75°C Resolution 1°C
■ Port Mirroring	Ingress or ingress and egress Multiple source ports possible

Diagnostic Switch PROmesh P10

Technical details

Diagnosis	
Alert	
■ Trigger	Port (Up, Down, Status change)
	Wire quality
	Netload
	Leakage current
	Neighbourhood
	Power supply
	Temperature
	MRP
■ Receiver	PROFINET
	Email
	SNMP Trap
	Alarm contact
Environmental conditions	
■ Operating temperature	-40°C ... 60°C
■ Storage temperature	-40°C ... 85°C
■ Air humidity, rel.	5 - 95% non-condensing
■ Protection Class	IP20
■ MTBF	59 years
Design, Dimensions, Weights	
■ Building type	compact
■ Material (housing)	Aluminium, anodised
■ Mounting	35 mm DIN top-hat rail
■ Width	49 mm
■ Height	105 mm
■ Depth	112 mm
■ Installation distance (vertical)	50 mm
■ Installation distance (horizontal)	50 mm
■ Weight (net)	0,85 kg
Standards, directives, approvals	
EMC	
■ Guideline	2014/30/EU
■ Emitted interference	EN 55032
■ Susceptibility	EN 61000-6-2
Mechanical stability	
■ Vibration	IEC 60068-2-6
■ Shock	IEC 60068-2-27
■ Free fall	IEC 60068-2-32
Approval	
■ Europe	CE
Environment	
■ RoHS	2011/65/EU
■ REACH	1907/2006/EG