

## PROFINET Monitor

Stationary Monitoring Tool for Early Detection of PROFINET Network Problems

The PROFINET Monitor is a powerful tool for continuously monitoring the status of PROFINET networks based on configurable trigger definitions. Notifications about changes in the network behavior can be used for identifying possible future network failures. Logged telegrams provide access to additional information.

### **PREVENTING PRODUCTION LOSS BY EARLY DETECTION OF NETWORK PROBLEMS**

The PROFINET Monitor allows the continuous monitoring of PROFINET networks for configured events. For instance, it detects events like faulty telegrams, deviations of cycle times, loss of available nodes, or changes in the network load. When a user-defined number of events per time unit is exceeded, the PROFINET Monitor sends an alarm to the PLC via a signaling contact or to an SNMP agent. Up to 100 alarms are shown in an alarm list. For each alarm, the associated telegram traffic can be logged. Based on this information the reason of the alarm can later be found using the Softing NetSpector product. In the case of an alarm, the PROFINET Monitor allows the analysis of the event cause while the communication is still running. This way the escalation of the observed events to more serious communication problems, which may end up in production losses, can be prevented.

### **PLANNING OF PREVENTIVE MAINTENANCE ACTIVITIES**

The experience gained in analyzing the causes of the individual events that occurred can be used to implement a condition-based maintenance strategy. This reduces operator intervention to when it is needed. As a result, appropriate preventive maintenance actions can be performed during routine system downtimes, making best use of maintenance resources.

### **EASY-TO-USE DEPLOYMENT AND WEB SERVER INTERFACE**

The use of the PROFINET Monitor causes no communication interferences and does not affect data traffic. On connection to the PROFINET network, the PROFINET Monitor immediately starts monitoring. All the telegrams are transmitted even in case of a power failure at the device. For installation and commissioning only basic PROFINET communication know-how is required.




The complete PROFINET Monitor configuration can be performed via Ethernet using an integrated web server. This web server interface also provides the graphical representation of the individual settings as well as all the recorded information.

### **CUSTOMER BENEFITS**

- > Prevention of Production Losses
- > Planning of Preventive Maintenance Activities
- > Easy-to-Use Deployment and Web Server Interface



## TECHNICAL DATA

PROFINET	Conformance Classes	Conformance Class A, Conformance Class B
Connectors	PROFINET	2 x RJ45, 10/100Mbit/s, Integration into Network Without Any Interference
	Ethernet	1 x RJ45, 10/100Mbit/s, for Network Integration and Access to Web Server and SNMP Agent
	Mirror Port	1 x RJ45, 1000Mbit/s
	RS232	Reserved
	Control Signals	Potential-free Contact, 3 Inputs 24VDC, Active High
	Parameterization	Via Integrated Web Server
	Access to Information	Via Integrated Web Server or via SNMP access to MIB
	Snapshot Analysis	Via PC Protocol Analysis Software NetSpector, see Separate Datasheet
Environment / Dimensions	Operation / Storage Temperature	5°C...+55°C / -20°C...+70°C
	Dimensions	131mm x 110mm x 111mm
	Weight	Approximately 600g
	Mounting	35mm DIN Rail
	Protection Class	IP20
Power Supply	Supply Voltage	24VDC (±20%) 
	Current Consumption	Typically <1A 
Conformity		

## SCOPE OF DELIVERY

PROFINET Monitor	Hardware	PROFINET Monitor, Connectors for Power Supply and Signal Output, Ethernet Cable
	Documentation	Manual

## ORDER NUMBERS

DDA-AA-005000	BC-502-PN Basic Line - PROFINET Analysis, Web User Interface, Notification Via Potential-free Contacts, Snapshot
DDL-AA-005001	BC-502-PN Comfort Line - BC-502-PN Basic Line Functionality Plus Mirror Port
DDL-AA-005002	BC-502-PN Premium Line - BC-502-PN Basic Line Functionality Plus SNMP Query
DDL-AA-005003	BC-502-PN Comfort Line Plus - BC-502-PN Basic Line Functionality Plus SNMP Query, Mirror Port
LRA-AA-005011	License Upgrade BC-502-PN Basic Line to BC-502-PN Comfort Line
LRA-AA-005012	License Upgrade BC-502-PN Basic Line to BC-502-PN Premium Line
LRA-AA-005013	License Upgrade BC-502-PN Basic Line to BC-502-PN Comfort Line Plus

## ADDITIONAL PRODUCTS AND SERVICES

100-2265-03	Ethernet Protocol Analyzer NetSpector
FDI-AY-1000	Industrial Ethernet Tester BC-200-ETH
TRA-PN-TECH	Training "PROFINET - Technology"
TRA-PN-CERTENG	Training "PROFINET Certified Engineer"

Softing Industrial Automation is a world leading provider of industrial communication products and technologies for manufacturing and process automation. Our products are tailored to the requirements of system integrators, device vendors, machine and equipment manufacturers or end users and are known for their ease-of-use and functional advantages.

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