PROFIBUS®-Analyzer

➡ Analyzing and optimizing of communication in PROFIBUS networks



The **PROFIBUS-Analyzer** is a tool for analyzing and optimizing communication in PROFIBUS networks. It is ideally suited for continuously monitoring a network, detecting hidden errors early on, optimizing data throughput and analyzing configuration errors.

The tool is connected to the PROFIBUS DP-network via the PROFIBUS Probe USB interface by the RS485 interface

An optional second connector for MBP physics enables a direct link to PROFIBUS PA networks. This means that both sides of a segment coupler can be analyzed and monitored at the same time. A receiver circuit which has been optimized for diagnostic purposes allows errors to be detected on the level of bits, bytes and telegrams.

Online-Diagnosis

A live list (list of all active stations on the bus) in the form of a tree structure displays the communication status of each device on PROFIBUS using a status indicator (traffic light with red/yellow/green) so that the bus state can be evaluated at a glance. Anexpanded live list in matrix form displays a selectable parameter for every single device.

The extensive online diagnosis function continually records all the significant parameters of a PROFIBUS DP system and displays them for each device. Important events are recorded in a log and displayed for the entire bus or individual devices.

Telegram Logging

Of course, the Protocol Analyzer also offers "traditional" telegram logging and display in two different modes of operation.

With "immediate logging", the logged telegrams are managed in the memory as a circular buffer so it is possible to interact with them rapidly. With "longterm logging", the telegrams are continuously stored in files to be analyzed later.

Fields of application

- Analysis, check and installation of PROFIBUS DP/PA-facilities
- Protocol analysis, optimisation, failure diagnosis
- Pro active error recognition
- Recognition of configuration failures

Technical features

- Protocol analysis for PROFIBUS DP and PA networks and devices - parallel as well
- Clear display of the PROFIBUS-network structure for all active devices
- Exact display of bus status by live-list:
 - tree structure with master-slave arrangement
 - status indicator for clear view of communication status
 - matrix for displaying relevant parameters for all devices

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AUTEM GmbH Dithmarscher Straße 29 D-26723 Emden Germany

Tel. +49-4921-9610-0 Fax +49-4921-9610-96 E-Mail: world@autem.de

PROFIBUS®-Analyzer

Technical features (more)

- Extensive online analysis of all key parameters in a PROFIBUS network
 - Target rotation time, errors in bits, bytes and telegrams on the bus level
 - Duration of cyclic data exchange, idle time 1, idle time 2, slot time for each master
 - Communication status, assigned master, identification number, station delay time, I/O data, parameterization data, configuration data, diagnosis messages, statistics on DP-V0 services and repeat telegrams for each slave
- Extensive trigger- and filter functions for
 - Station addresses
 - FDL-telegram formats
 - faulty telegrams
 - repeat telegrams
 - FDL-, DP-, DP-V1 and DP-V2 services
- Long-term logging of telegrams
- Immediate logging (circular buffer)
- Automatic creation of a test protocol
- Time stamp, either absolute or time since start of measurement, as well as telegram intervals and telegram pauses
- Telegram decoding for FDL, DP, DP-V1, DP-V2; display color can be freely selected
- User interface in German and English
- USB-Interface in a stable aluminium casing
 - USB-interface 2.0 (Typ B) for PC-connection
 - RS485-interface for PROFIBUS DP
 - optional: MBP-interface for PROFIBUS PA
 - External trigger interface
 - Status displays (LED) for USB- and bus status
 - Power supply 5 V (USB), < 300 mA
 - Temperature range: 0°C ~ 55°C
 - Dimensions (WxHxD) 69 x 24 x 124 mm
 - CE-, FCC certification

System requirements

PC resp. programming unit CPU at least 1 GHz, harddisk, USB-Port, Windows 2000/XP

Scope of delivery

- PROFIBUS Probe USB interface with RS485 connector for PROFIBUS DP (optional with an additional MBP connector for PROFIBUS PA)
- CD with Analyzer-Software and manual
- USB connection cable (Typ B / Typ A), 3m
- PROFIBUS adapter cable, 20cm
- Manual
- Complete service package



To order

- PROFIBUS-Analyzer DP with RS485-interface (PBA1500)
- PROFIBUS-Analyzer DP/PA with additional MBP-interface (PBA1550)
- Digital Leakage Current Clamp (PBA1050)
- Active connecting cable (PBA1055)



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