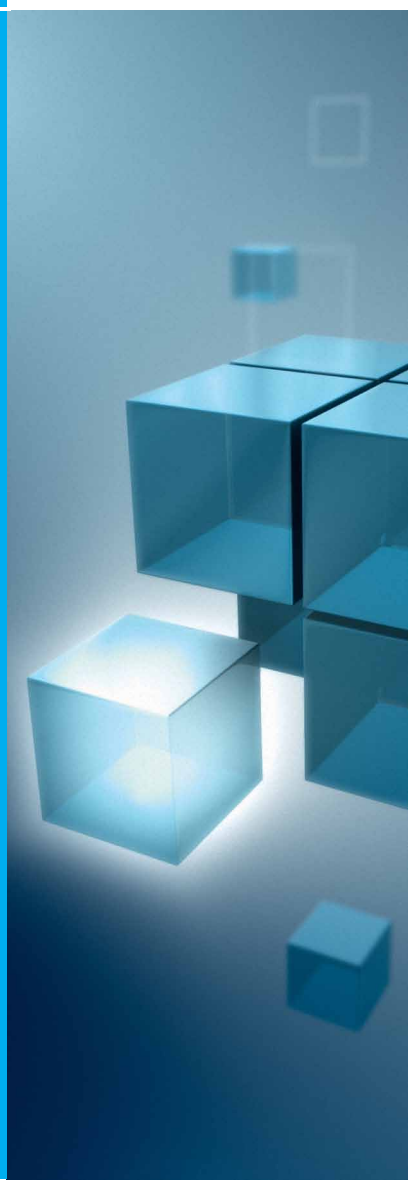
Fieldgate SFG500

Intelligent Ethernet/PROFIBUS gateway



Endress+Hauser
People for Process Automation

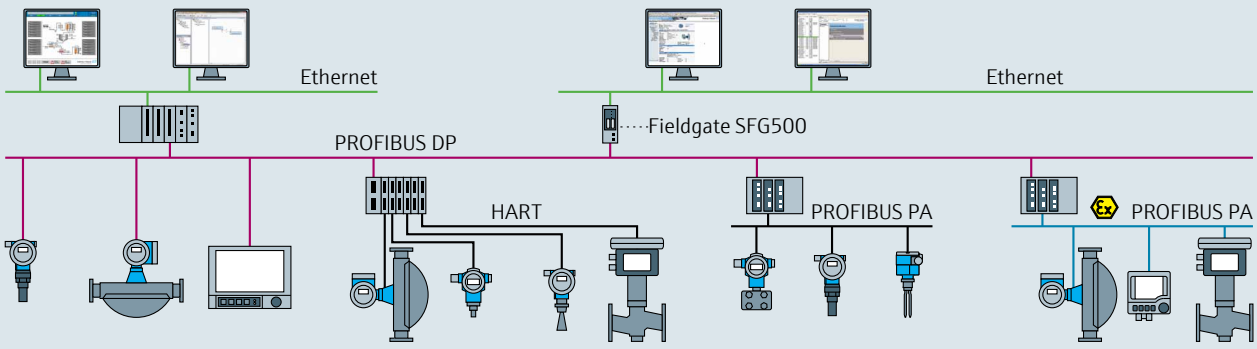
Fieldgate SFG500 at a glance

Parallel access to PROFIBUS networks and monitoring of PROFIBUS device status

Fieldgate SFG500 is a system component that provides an independent access route to a PROFIBUS network. It may be used in a variety of applications that are supported by specific operating modes. The operating modes are determined by the use of an optional memory card, the Fieldgate Module SFM500. Without a memory card, Fieldgate SFG500 operates as a plant access point.

System architecture with bypass access to PROFIBUS

PROFIBUS automation topology with Fieldgate SFG500



- Combined advantages of PROFIBUS Listener and Master Class 2
- Auto detection of adequate PROFIBUS settings, no need for configuration
- Serialization of Master Class 2 requests allows multiple clients at time
- Second LAN port provides service access independent from system network
- Optional function modules for advanced features and operating modes

About Fieldgate SFG500

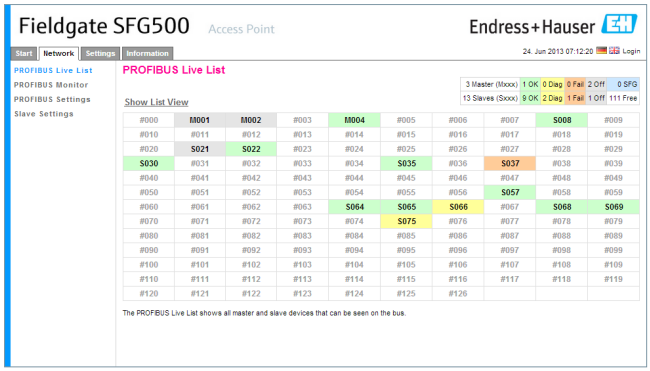
One hardware, multiple options Fieldgate SFG500 is designed to serve a variety of applications. The operating mode of a Fieldgate SFG500 is determined by an optional Fieldgate Module SFM500 which can be plugged into the memory card slot of the Fieldgate SFG500.

Fieldgate Module SFM500

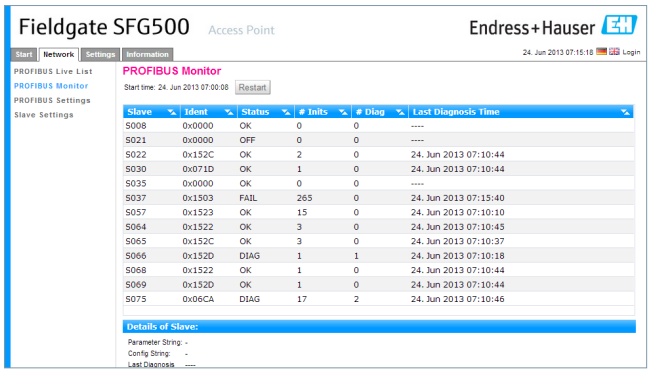
Fieldgate SFG500

Fieldgate SFG500 “Access Point”

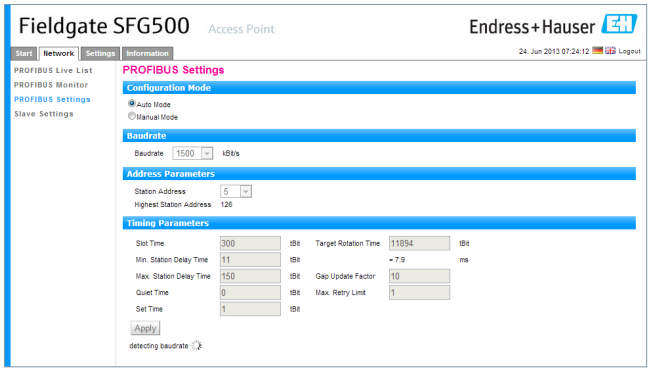
Basic mode



PROFIBUS Live List with indication of communication status



PROFIBUS Monitor counts reconfigurations and diagnostic events



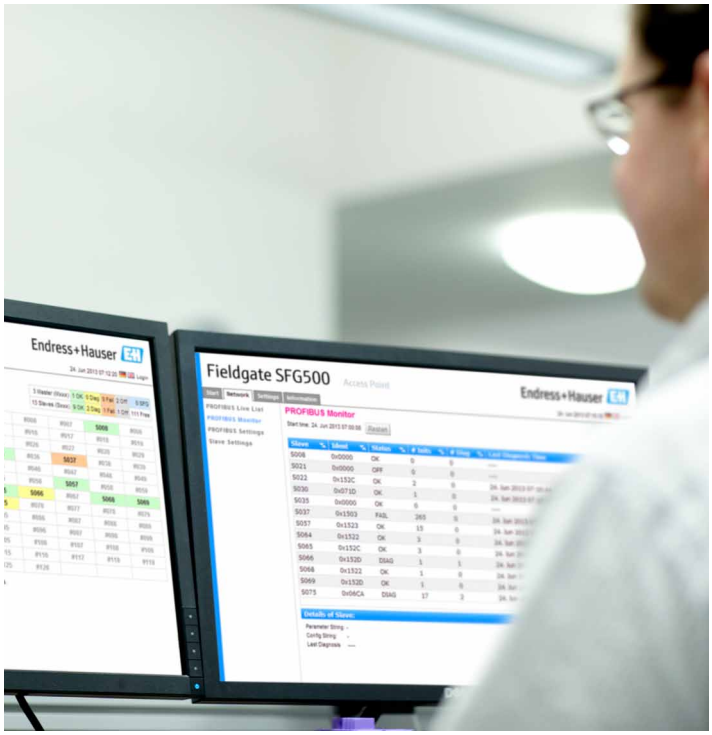
PROFIBUS Settings may be autodetected or user-defined

Fieldgate SFG500 “Access Point”

Fieldgate SFG500 without Fieldgate Module SFM500 runs its basic operating mode “Access Point”. In this mode the Fieldgate SFG500 utilizes its means as a PROFIBUS Listener to automatically detect adequate bus settings as required to startup as a Master Class 2. This ensures a hassle free commissioning without any need for configuration.

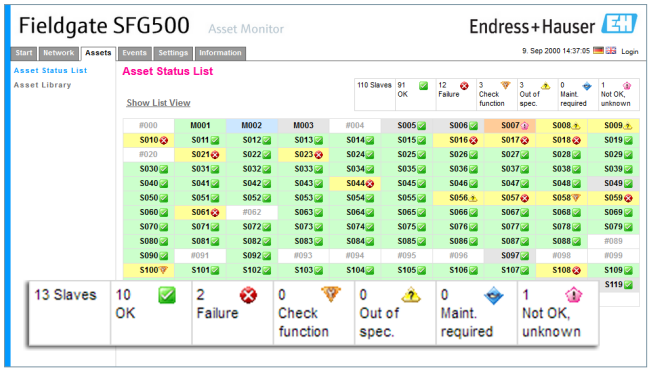
The embedded Web server of the Fieldgate SFG500 provides a brief overview of master and slave devices which can be detected on a connected PROFIBUS network. All information displayed is kept up to date by means of a PROFIBUS Listener to the bus traffic, and can be forwarded on request to any client software based on FDT/DTM technology.

Utilizing this proactive support of the Fieldgate SFG500 can help to improve Plant Asset Management applications, e.g. with FieldCare.



Fieldgate SFG500 “Asset Monitor”

Advanced mode

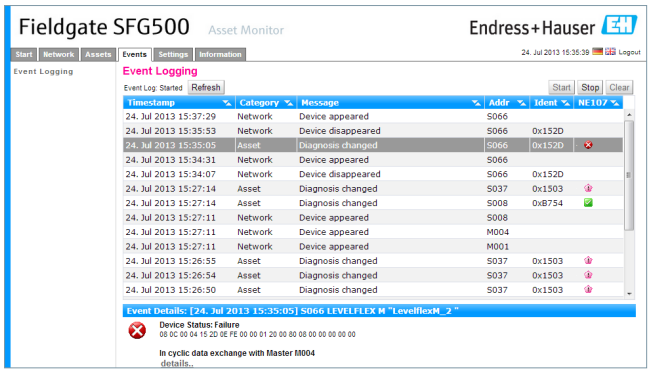


Asset Status List with indication of NE 107 status

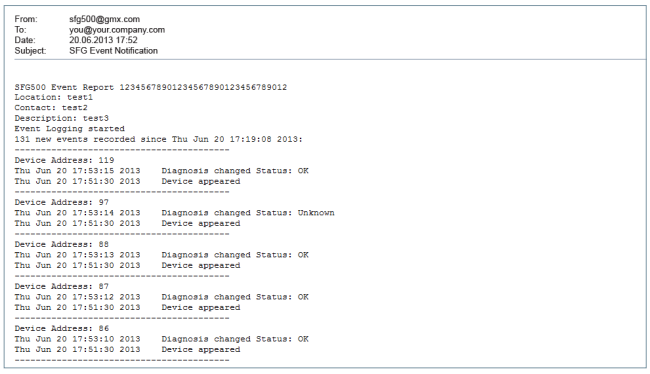
Fieldgate SFG500 “Asset Monitor”

Any Fieldgate SFG500 may be upgraded with a Fieldgate Module SFM500-A1 to run the advanced operating mode “Asset Monitor”.

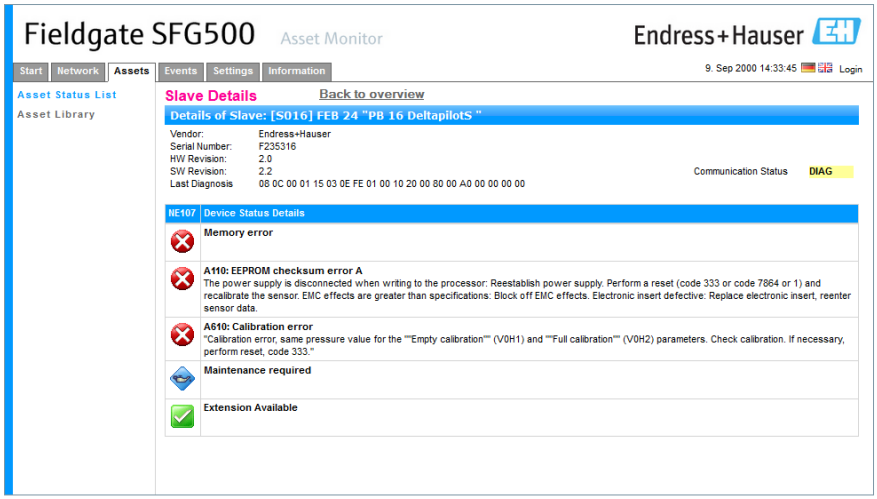
In this mode the Fieldgate SFG500 still serves as an access point for client software based on FDT/DTM technology. In addition it provides outstanding features like monitoring of device health status according to NAMUR NE 107, as well as logging and alarming on diagnostic events.



Event Logging for device diagnostic messages and other changes versus a defined baseline



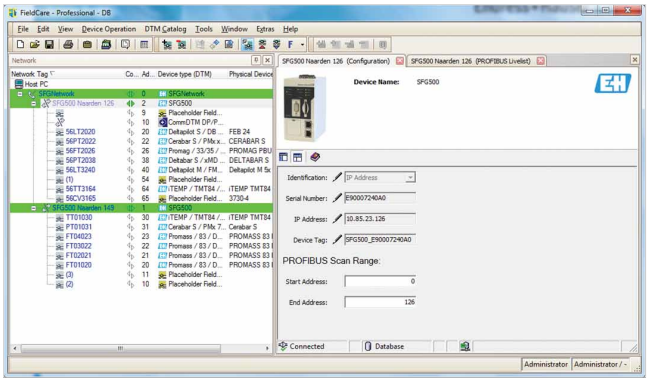
Event e-mail notification listing all events of a certain time period



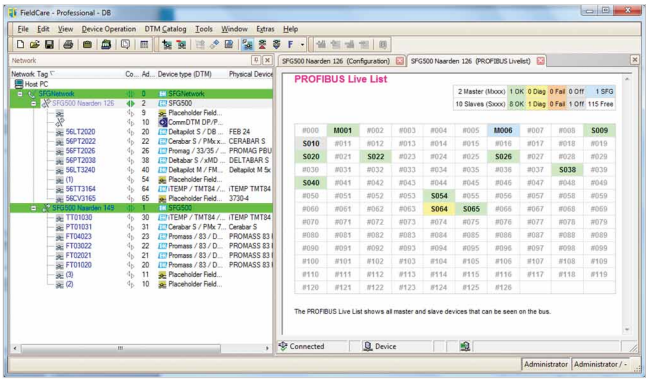
Slave Details showing device status with cause and remedy information

Integration with FieldCare

For basic and advanced mode



- SFG Network DTM scans for all Fieldgates within a local area network
- SFG500 CommDTMs manage the communication path per Fieldgate
- SFG500 Web server provides additional functions to FieldCare



Technical data at a glance

Power supply
- Supply voltage: 18 to 36 VDC
- Current: 0.35 to 0.20 A
- Power 7.2 W
- Battery (for memory) 3V lithium manganese dioxide battery type CR2450

Housing
- Body material: Aluminium alloy (EN AW 5754) with transparent passivated surface finish (conducting)
- Front panel: ABS

Overall dimensions [W x H x D]
142 x 70 x 114 mm / 5.6 x 2.8 x 4.5 inch

Weight
Approx. 0.7 kg

Degree of protection
IP 20; NEMA Type 1 (General Purpose)

Temperature ranges
Ambient temperature range
- General: 0°C to +60°C / +32°F to 140°F

Storage temperature range
- With lithium battery: -20°C to +60°C / -4°F to +140°F
- Without lithium battery: -25°C to +70°C / -13°F to +158°F

Relative humidity
Storage and operation: 10% to 90%, non-condensing

Certificates and approvals
- CE Mark CE to EN/IEC 61131-2: 2007
- Safety approval TÜV NRTL to EN/IEC/UL/CAN/CSA C22.2-No 61010-1

Supplementary documentation

- Plant Asset Management
  Field of Activities Brochure – FA00024S/04/en
- Fieldgate SFG500
  Technical Information – TI00029S/04/en
- Fieldgate SFG500, Operation as Access Point
  Operating Instructions – BA00071S/04/en
- Fieldgate SFG500/SFM500, Operation as Asset Monitor
  Operating Instructions – BA00072S/04/en

www.addresses.endress.com

IN01041S/04/EN/01.13

Endress+Hauser

People for Process Automation