

Features

- Interface between the I/O modules and the DCS/PLC
- Com unit for 80 analog or 184 digital channels
- Communication via PROFIBUS DP
- HART communication via PROFIBUS DP V1 or service bus
- Configuration via FDT 1.2 DTM
- Non-volatile memory for configuration and parameter settings
- Self configuration in redundant systems
- Permanently self-monitoring
- Outputs drive to safe state in case of failures
- Installation in Zone 2, Zone 22, Div. 2, or safe area
- Module can be exchanged under voltage

Function

The Remote I/O ComUnit, bus coupler or gateway links intrinsically safe and safe inputs and outputs from sensors and actuators to the PROFIBUS.

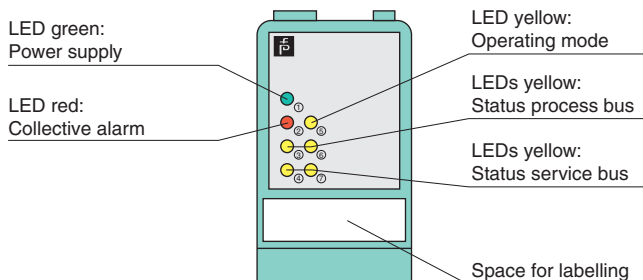
It makes use of all the regular I/O modules and thus transports signals to and from NAMUR and switch type inputs and high power IS solenoids or even power relays as well as sounders, and alarm LEDs.

The system supplies 4-20 mA transmitters and accepts inputs from 20 mA current sources or temperature sensors. It drives I/P converters and proportional valves and positioners.

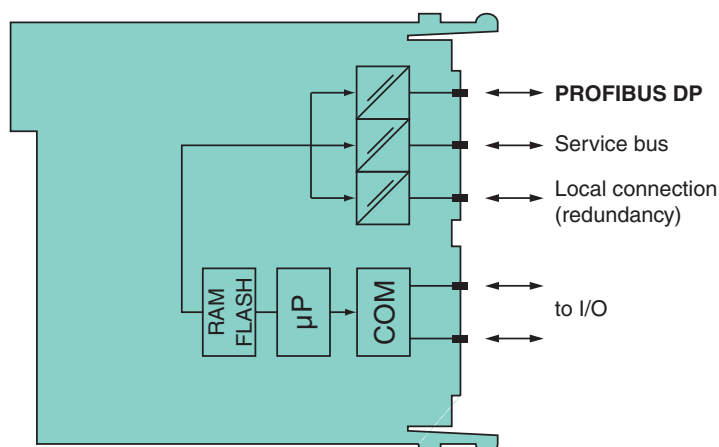
The ComUnit supports ONLINE configuration as well as redundancy and HART. It is well integrated into all renowned DCS and PLC systems.

Assembly

Front view



Connection



Zone 2
Div. 2

Supply		
Connection		backplane bus
Rated voltage	U _n	5 V DC , only in connection with the power supplies LB9***
Power consumption		2 W
Fieldbus interface		
Fieldbus type		PROFIBUS DP/DP-V1
PROFIBUS DP		
Connection		9-pin Sub-D socket via backplane
Baud rate		up to 1.5 MBit/s
Protocol		PROFIBUS DP/DP V1 read/write services
Number of stations per bus line		≤ 125 (PROFIBUS), ≤ 119 (service bus)
Number of channels per station		≤ 80 analog, ≤ 184 digital (standard configuration)
Number of stations per bus segment		≤ 31 (RS-485 standard)
Number of repeaters between Master and Slave		max. 3
Supported I/O modules		all LB remote I/O modules
Bus length		≤ 1000 m (FOL, 1.5 MBaud), ≤ 1000 m (copper cable, 187.5 kBd), ≤ 200 m (copper cable, 1.5 MBd)
Addressing		via configuration software
PROFIBUS address		0 ... 126 (ex works standard: 126)
GSE file		CGV61710.gsd/gse
HART communication		via PROFIBUS or service bus
Internal bus		
Connection		backplane bus
Redundancy		via backplane
Indicators/settings		
LED indicator		LED 1 (power supply): On = operating, fast flash = cold start, slow flash = HCIR loading active LED 2 (collective alarm): On = internal fault, flashing = no PROFIBUS connection LED 3 (status process bus): flashing = PROFIBUS receive channel active LED 4 (status service bus): flashing = service bus receive channel active LED 5 (operating mode): flashing 1 (1:1 ratio) = active, normal operation; flashing 2 (7:1 ratio) = active, simulation LED 6 (status process bus): flashing = PROFIBUS response channel active LED 7 (status servicebus): flashing = service bus response channel active
Directive conformity		
Electromagnetic compatibility		
Directive 2004/108/EC		EN 61326-1
Conformity		
Electromagnetic compatibility		NE 21
Degree of protection		IEC 60529
Fieldbus standard		IEC 61158-2
Environmental test		EN 60068-2-14
Shock resistance		EN 60068-2-27
Vibration resistance		EN 60068-2-6
Damaging gas		EN 60068-2-42
Relative humidity		EN 60068-2-56
Ambient conditions		
Ambient temperature		-20 ... 60 °C (-4 ... 140 °F)
Storage temperature		-25 ... 85 °C (-13 ... 185 °F)
Relative humidity		95 % non-condensing
Shock resistance		shock type I, shock duration 11 ms, shock amplitude 50 m/s ² , number of shock directions 6, number of shocks per direction 100
Vibration resistance		frequency range 5 ... 500 Hz, amplitude 5 ... 13.2 Hz ± 1.5 mm, 13.2 ... 100 Hz 1g, sweep rate 1 octave/min, duration 10 sweeps 5 Hz - 100 Hz - 5 Hz
Damaging gas		for plugs: 21 days in 25 ppm SO ₂ , at 25 °C and 75 % rel. humidity, device G3
Mechanical specifications		
Degree of protection		IP20 (module) , mounted on backplane
Connection		via backplane
Mass		approx. 120 g
Dimensions		32 x 100 x 103 mm (1.26 x 3.9 x 4 in)
Data for application in connection with Ex-areas		
Statement of conformity		PF 08 CERT 1234 X
Group, category, type of protection		⊕ II 3 G Ex nA IIC T4 Gc
Directive conformity		

Release date 2015-01-30 13:04 Date of issue 2015-01-30 t35025_eng.xml

Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

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Directive 94/9/EC	EN 60079-0:2009 EN 60079-11:2007 EN 60079-15:2010
International approvals	
UL approval	E106378
IECEx approval	BVS 09.0037X
Approved for	Ex nAc II T4
General information	
System information	The module has to be mounted in appropriate backplanes (LB9***) in Zone 2 or outside hazardous areas. Here, the corresponding declaration of conformity has to be observed. For use in hazardous areas (e. g. Zone 2, Zone 22 or Div. 2) the module must be installed in an appropriate enclosure.
Supplementary information	EC-Type Examination Certificate, Statement of Conformity, Declaration of Conformity, Attestation of Conformity and instructions have to be observed where applicable. For information see www.pepperl-fuchs.com .

Versions

Bus couplers are available with different firmware versions. The type code extension * designates the firmware version.

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