



Gateway for PROFINET LB8122A.1.EL

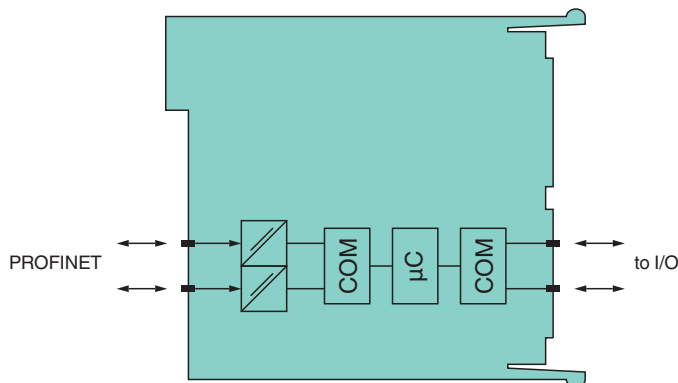
- Communication via PROFINET
- Mounting in Zone 2, Class I/Div.2 or in the safe area
- Interface between the I/O modules and the PCS/PLC
- Non-volatile memory for configuration and parameter settings
- Permanently self-monitoring
- MRP and S2 redundancy
- HART communication via HART-IP
- Shared Device und Dynamic Reconfiguration



Function

The PROFINET gateway is the interface between the I/O modules on the backplane and the control system.
HART communication is via PROFINET or HART-IP.
In addition to the input/output data of the I/O modules, the HART auxiliary variables can also be accessed in the process image.

Connection



Zone 2
Div. 2

Technical Data

Supply

Connection	backplane bus	
Rated voltage	U _r	12 V DC , only in connection with the power supplies LB9***
Nominal voltage		12 V DC ,
Power dissipation		4.53 W
Power consumption		4.53 W

Fieldbus connection

Fieldbus type	PROFINET
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Ethernet Interface

Connection type	RJ-45 , via front connector
Transfer rate	10BASE-T, 100BASE-TX 100 MBit/s
Station connection	directly to PCS or PLC or via hubs or switches

Technical Data

Cable type	SFTP in accordance with ISO/IEC 11801 for Cat 5e or better
Bus length	max. 100 m per link
Addressing	DHCP, via controller (DCP) or fixed IP address
Ethernet address	IP V4 address (preset: DHCP on, changeable via display)
Supported I/O modules	LB1x01*...LB1x03*, LB1x08*, LB1x09*, LB2x01*...LB2x17*, LB3x01*...LB3x06*, LB4x01*, LB4x02*, LB4x04*...LB4x06*, LB5x01*, LB5x02*, LB5x04*...LB5x06*, LB6x01*, LB6x05*, LB6x06*, LB6x08*, LB6x10*...LB6x17*, LB7x04*
PROFINET conformance class	CC B
Internal bus	
Connection	backplane bus
Galvanic isolation	
Ethernet/other circuits	basic insulation according to IEC/EN 61010-1, rated insulation voltage 35 V _{eff} or 50 V DC
RS 485 interface/other circuits	basic insulation according to IEC/EN 61010-1, rated insulation voltage 35 V _{eff} or 50 V DC
Insulation voltage	1500 V AC acc. to IEEE 802.3u
Electrical isolation	
Power supply, internal bus/other circuits	basic insulation according to IEC/EN 61010-1, rated insulation voltage 30 V DC
Directive conformity	
Electromagnetic compatibility	
Directive 2014/30/EU	EN 61326-1:2013
Conformity	
Degree of protection	IEC 60529
Fieldbus standard	IEEE 802.3
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 60068-2-78
Ambient conditions	
Ambient temperature	-20 ... 60 °C (-4 ... 140 °F)
Storage temperature	-25 ... 85 °C (-13 ... 185 °F)
Relative humidity	95 % non-condensing
Altitude	max. 2000 m
Shock resistance	shock type I, shock duration 11 ms, shock amplitude 15 g, number of shocks 18
Vibration resistance	frequency range 10 ... 150 Hz; transition frequency: 57.56 Hz, amplitude/acceleration ± 0.075 mm/1 g; 10 cycles frequency range 5 ... 100 Hz; transition frequency: 13.2 Hz amplitude/acceleration ± 1 mm/0.7 g; 90 minutes at each resonance
Damaging gas	designed for operation in environmental conditions acc. to ISA-S71.04-1985, severity level G3
Mechanical specifications	
Degree of protection	IP20 (module) , mounted on backplane
Connection	via backplane
Mass	approx. 150 g
Dimensions	32.5 x 100 x 102 mm (1.28 x 3.9 x 4 inch)
Data for application in connection with hazardous areas	
Certificate	DEMKO 16 ATEX 1780 X
Marking	Ⓔ II 3 G Ex ec IIC T4 Gc
Directive conformity	
Directive 2014/34/EU	EN IEC 60079-0:2018+AC:2020 EN 60079-7:2015+A1:2018
International approvals	
ATEX approval	DEMKO 16 ATEX 1780 X
IECEx approval	IECEx UL 16.0141 X
Approved for	Ex ec IIC T4 Gc

Release date: 2024-08-29 Date of issue: 2024-08-29 Filename: 70120382_eng.pdf

Technical Data

General information		
System information		The module has to be mounted in appropriate backplanes (LB9***) in Zone 2 or outside hazardous areas. Here, observe the corresponding declaration of conformity. 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 .

Assembly

