

## Features

- Interface between the I/O modules and the DCS/PLC
- Com unit for 20 analog or 40 digital channels
- Communication via FOUNDATION Fieldbus H1
- HART communication via service bus
- Configured via the DCS
- Non-volatile memory for configuration and parameter settings
- Quick communication set-up
- Permanently self-monitoring
- Outputs drive to safe state in case of failures
- Supports multichannel I/O modules
- Installation in Zone 2, Zone 22, Div. 2, or safe area
- Module can be exchanged under voltage

## Function

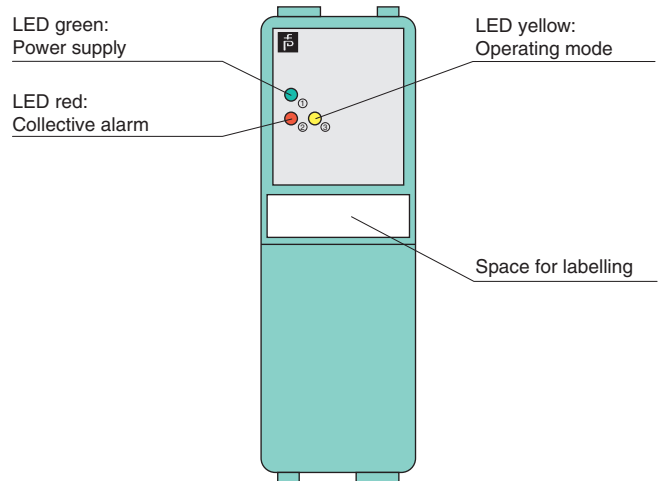
The Remote I/O Com Unit or Gateway links intrinsically safe and safe inputs and outputs from sensors and actuators to FOUNDATION fieldbus.

It makes use of dual width I/O modules and thus transports signals to and from NAMUR sensors, mechanical contacts, high power IS solenoids, power relays, sounders, and alarms LEDs.

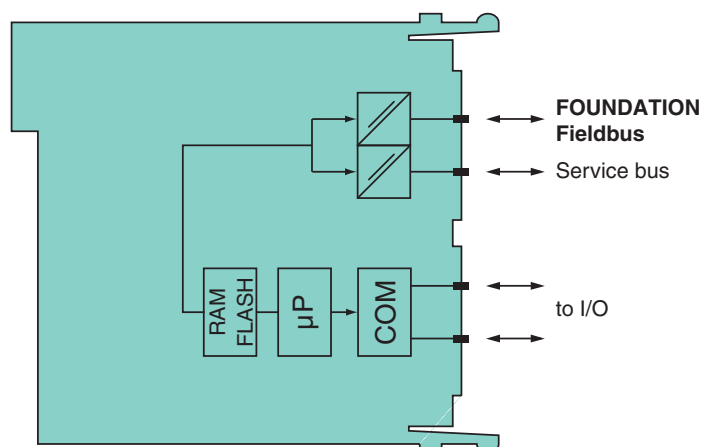
The Com Unit supports online configuration and HART. It is well integrated into renowned DCS and PLC systems.

## Assembly

### Front view



## Connection



Zone 2  
Div. 2

<b>Supply</b>	
Connection	backplane bus
Rated voltage $U_n$	5 V DC , only in connection with the power supplies LB9***
Power consumption	2 W
Auxiliary energy	24 V DC Trunk load 20 mA
<b>Fieldbus interface</b>	
Fieldbus type	FOUNDATION Fieldbus H1
FOUNDATION Fieldbus	
Connection	plug-in screw connector on the backplane
Baud rate	31.25 kBit/s , MBP
Protocol	H1 to IEC 1158-2
Station connection	directly at the trunk or via spur protector
Number of stations per bus line	1 or 2, depending on the required response times
Number of channels per station	≤ 20 analog, ≤ 40 digital
Supported I/O modules	5 slots, to be filled with (combinations possible): 1*08 digital input, 8-channel, NAMUR 3*05 analog input, 4-channel, 20 mA (HART via service bus) 4*05 analog output, 4-channel, 20 mA (HART via service bus) 5*04 Pt100 RTD input, 4-channel 5*05 thermocouple input, 4-channel 6005 relay output, 4-channel, 230 V 6006 relay output, 8-channel, 24 V 6*08 digital output, 8-channel, Ex i 6*10-6*15 digital output, 4-channel, Ex i power * = variable (0=non-IS, 1=IS)
Bus length	≤ 1900 m (must not be exceeded by the sum of all trunk and spur lines)
Spur length	≤ 120 m (depending on the number of field devices. Modular I/O station = 1 field device)
Addressing	via DCS (Software)
<b>Internal bus</b>	
Connection	backplane bus
<b>Indicators/settings</b>	
LED indicator	LED 1 (power supply): On = operating, fast flash = cold start LED 2 (collective alarm): On = internal fault, flashing = no fieldbus LED 3 (operating mode): Flashing = active
<b>Directive conformity</b>	
Electromagnetic compatibility	
Directive 2004/108/EC	EN 61326-1
<b>Conformity</b>	
Electromagnetic compatibility	
Degree of protection	NE 21
Fieldbus standard	IEC 60529
Environmental test	IEC 61158-2
Shock resistance	EN 60068-2-14
Vibration resistance	EN 60068-2-27
Damaging gas	EN 60068-2-6
Relative humidity	EN 60068-2-42
<b>Ambient conditions</b>	
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 <sup>2</sup> , 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 <sub>2</sub> , at 25 °C and 75 % rel. humidity, device G3
<b>Mechanical specifications</b>	
Degree of protection	IP20 (module) , mounted on backplane
Connection	via backplane
Mass	approx. 150 g
Dimensions	32 x 100 x 103 mm (1.26 x 3.9 x 4 in)
<b>Data for application in connection with Ex-areas</b>	
Statement of conformity	PF 08 CERT 1234 X
Group, category, type of protection	⊕ II 3 G Ex nA IIC T4 Gc
Directive conformity	

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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
<b>International approvals</b>	
UL approval	E106378
IECEX approval	BVS 09.0037X
Approved for	Ex nAc II T4
<b>General information</b>	
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 <a href="http://www.pepperl-fuchs.com">www.pepperl-fuchs.com</a> .

### Ordering information

Model / Order No.	Function
LB 8110 H *	Temperature measured in degrees Celsius
LB 8110 C *	Temperature measured in degrees Fahrenheit

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