



Basic Diagnostic Module FieldConnex® Fieldbus HD2-DM-B

- Basic monitoring for power supply output and health
- Plug-in Module for the FieldConnex Power Hub
- Plug and play - no engineering required
- For online monitoring
- For FOUNDATION Fieldbus H1 and PROFIBUS PA
- Installation in Zone 2/Class I, Div. 2
- System state and fault indication via LEDs

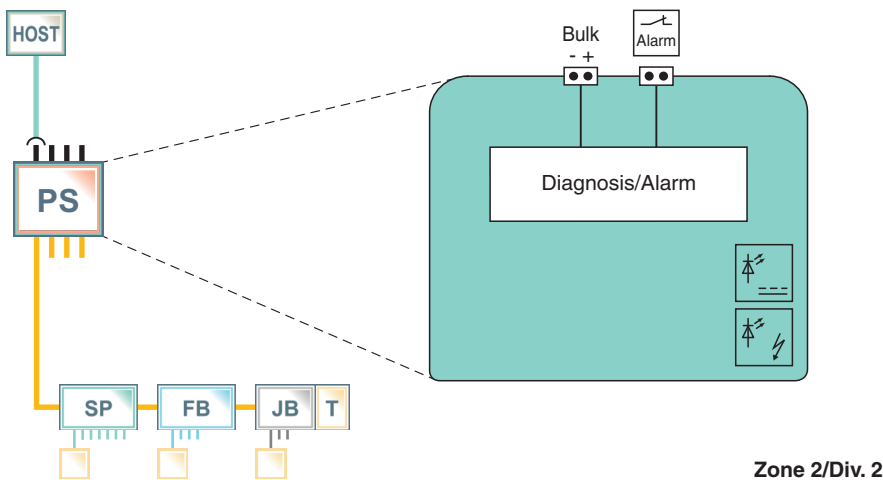
Basic diagnostic module, base module for fieldbus power hub physical layer diagnostics



Function

Designed as a plug-in module for the FieldConnex® Power Hub, the Basic Diagnostic Module HD2-DM-B provides basic system diagnostics. It checks for proper operation of bulk power supplies and monitors the connected trunks for overload or short-circuit conditions. All Power Hub modules are checked for proper function. On redundant power modules it indicates mismatching pairs. The module indicates a fault condition via voltage-free contact. It provides monitoring "plug-and-play" without additional engineering. LED signals indicate a fault for easy detection.

Connection



Technical Data

General specifications

Design / Mounting	Motherboard based
Installation in hazardous area	Zone 2 / Div. 2

Supply

Rated voltage	U_r	19.2 ... 35 V
Rated current	I_r	20 mA
Power dissipation		max. 0.5 W

Fieldbus connection

Number of segments	4
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Indicators/operating means

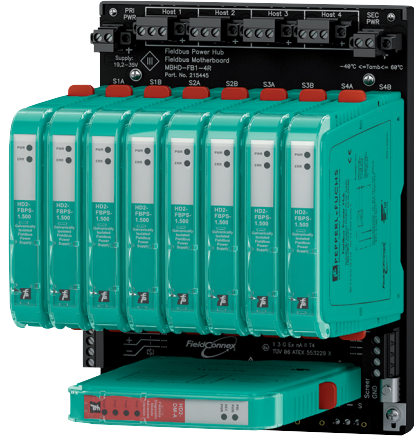
LED PRI PWR	green: on, primary bulk power supply connected
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Technical Data

LED SEC PWR	green: on, secondary bulk power supply connected
LED ERR	red: 2 Hz flashing, power supply fault (short-circuit, undervoltage), redundancy fault
Fault signal	VFC alarm 1 A, 50 V DC, normally closed
Galvanic isolation	
Fieldbus segment/Fieldbus segment	functional insulation acc. to IEC 62103, rated insulation voltage 50 V _{eff}
Directive conformity	
Electromagnetic compatibility	
Directive 2014/30/EU	EN 61326-1:2013
Standard conformity	
Electromagnetic compatibility	NE 21:2011
Degree of protection	IEC 60529
Shock resistance	EN 60068-2-27
Vibration resistance	EN 60068-2-6
Ambient conditions	
Ambient temperature	-40 ... 70 °C (-40 ... 158 °F)
Storage temperature	-40 ... 85 °C (-40 ... 185 °F)
Relative humidity	< 95 % non-condensing
Shock resistance	15 g 11 ms
Vibration resistance	1 g , 10 ... 150 Hz
Pollution degree	max. 2, according to IEC 60664
Corrosion resistance	acc. to ISA-S71.04-1985, severity level G3
Mechanical specifications	
Core cross section	motherboard specific
Housing material	Polycarbonate
Degree of protection	IP20
Mass	approx. 70 g
Dimensions	
Height	106 mm
Width	18 mm
Depth	128 mm
Mounting	motherboard mounting
Data for application in connection with hazardous areas	
Certificate	TÜV 04 ATEX 2500 X
Marking	Ⓔ II 3 G Ex nA nC IIC T4 Gc
Directive conformity	
Directive 2014/34/EU	EN IEC 60079-0:2018+AC:2020 , EN 60079-11:2012 , EN 60079-15:2010
International approvals	
FM approval	
FM certificate	FM 19 US 0015 X and FM 19 CA 0011 X
FM marking	Class I, Division 2, Groups A, B, C, D, T4 / Class I, Zone 2, AEx/Ex nA nC IIC T4
IECEx approval	
IECEx certificate	IECEx TUN 13.0038X
IECEx marking	Ex nA IIC T4 Gc
General information	
Supplementary information	Observe the certificates, declarations of conformity, instruction manuals, and manuals where applicable. For information see www.pepperl-fuchs.com .

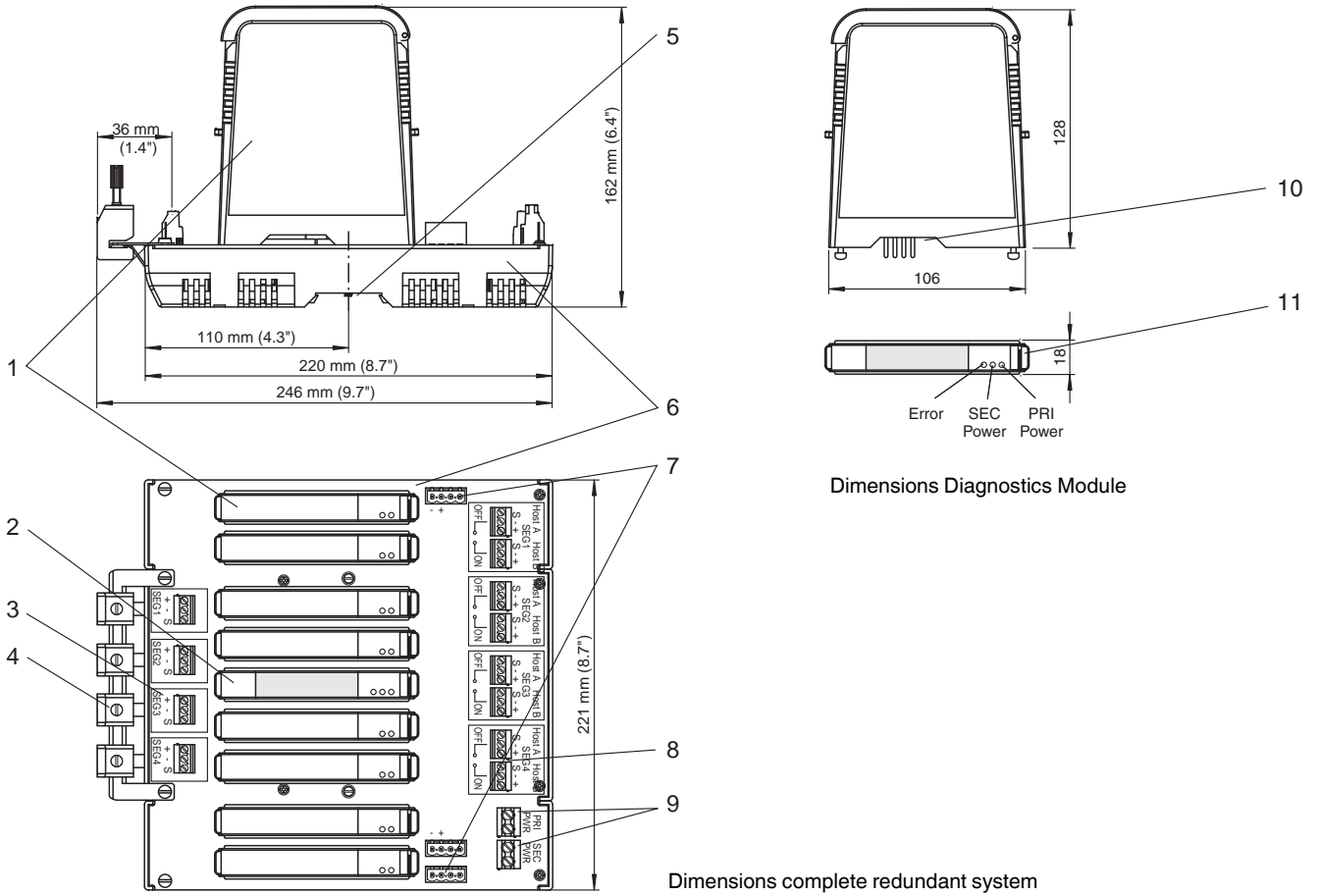
Product Photo



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Additional Information

Dimensions



Dimensions Diagnostics Module

Dimensions complete redundant system

Description:

- 1 Power Supply Modules, see separate data sheets
- 2 Diagnostics Module
- 3 Connections for fieldbus trunk, terminator switch
- 4 Screening/earthing kit for trunk cables shield, optional accessory
- 5 Mounting slot for DIN rail
- 6 Motherboard, see separate data sheets
- 7 Connections for alarm, voltage free contact and diagnostics bus
- 8 Connections for redundant host
- 9 Connections for redundant bulk power supply
- 10 Plug connections to Motherboard
- 11 State and fault indication LEDs

Installation

see manual

Accessories

see system datasheet

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