



Fieldbus Power Hub, Basic Diagnostic Module



HD2-DM-B

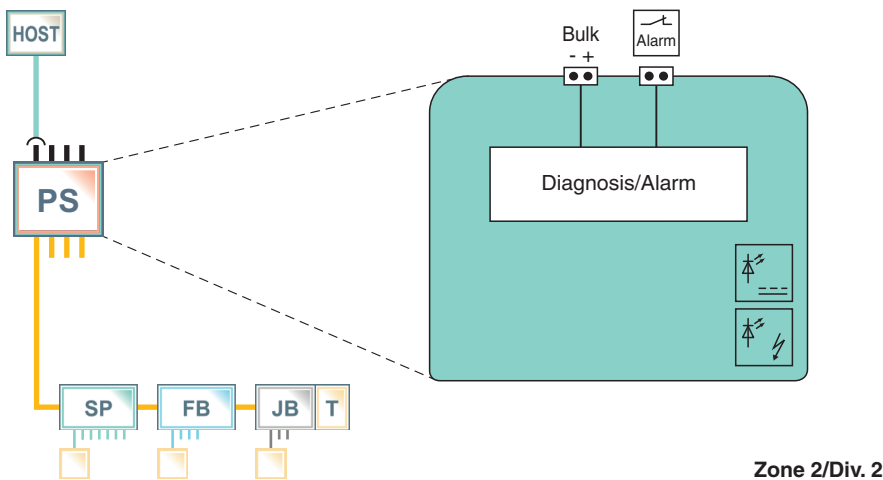
- Basic monitoring for power supply output and health
- Plug-in Module for the FieldConnex Power Hub
- Plug and play - no engineering required
- For online monitoring
- For FOUNDATION Fieldbus H1 and PROFIBUS PA
- Installation in Zone 2/Class I, Div. 2
- System state and fault indication via LEDs



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

Supply

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

Indicators/operating means

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

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

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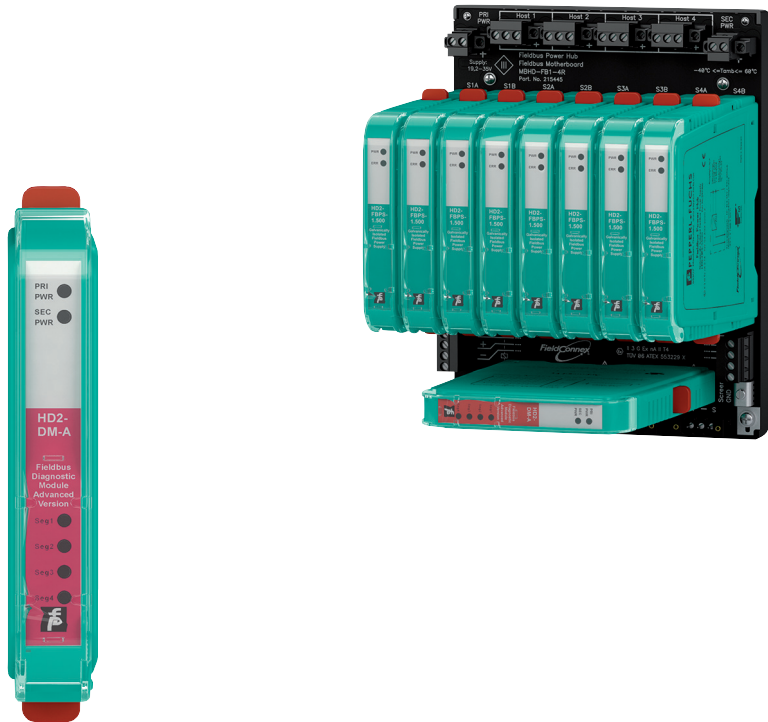
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Technical Data

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		
Connection type		motherboard specific
Core cross section		motherboard specific
Housing material		Polycarbonate
Housing width		18 mm
Housing height		106 mm
Housing depth		128 mm
Degree of protection		IP20
Mass		approx. 70 g
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 60079-0:2012 , 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		AEx/Ex nA nC IIC T4
IECEX approval		
IECEX certificate		IECEX TUN 13.0038X
IECEX marking		Ex nA IIC T4 Gc
Certificates and approvals		
Marine approval		DNV A-14038
General information		
Supplementary information		Observe the certificates, declarations of conformity, instruction manuals, and manuals where applicable. For information see www.pepperl-fuchs.com .

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Product Photo



Matching System Components

	<p>FBTA-228-BPFB-R-8R</p>	<p>Compact Fieldbus Power Hub Motherboard for Invensys FBM 228</p>
	<p>MBHC-FB-8R.IOM</p>	<p>Fieldbus Power Hub, Compact Motherboard, Common Interface</p>

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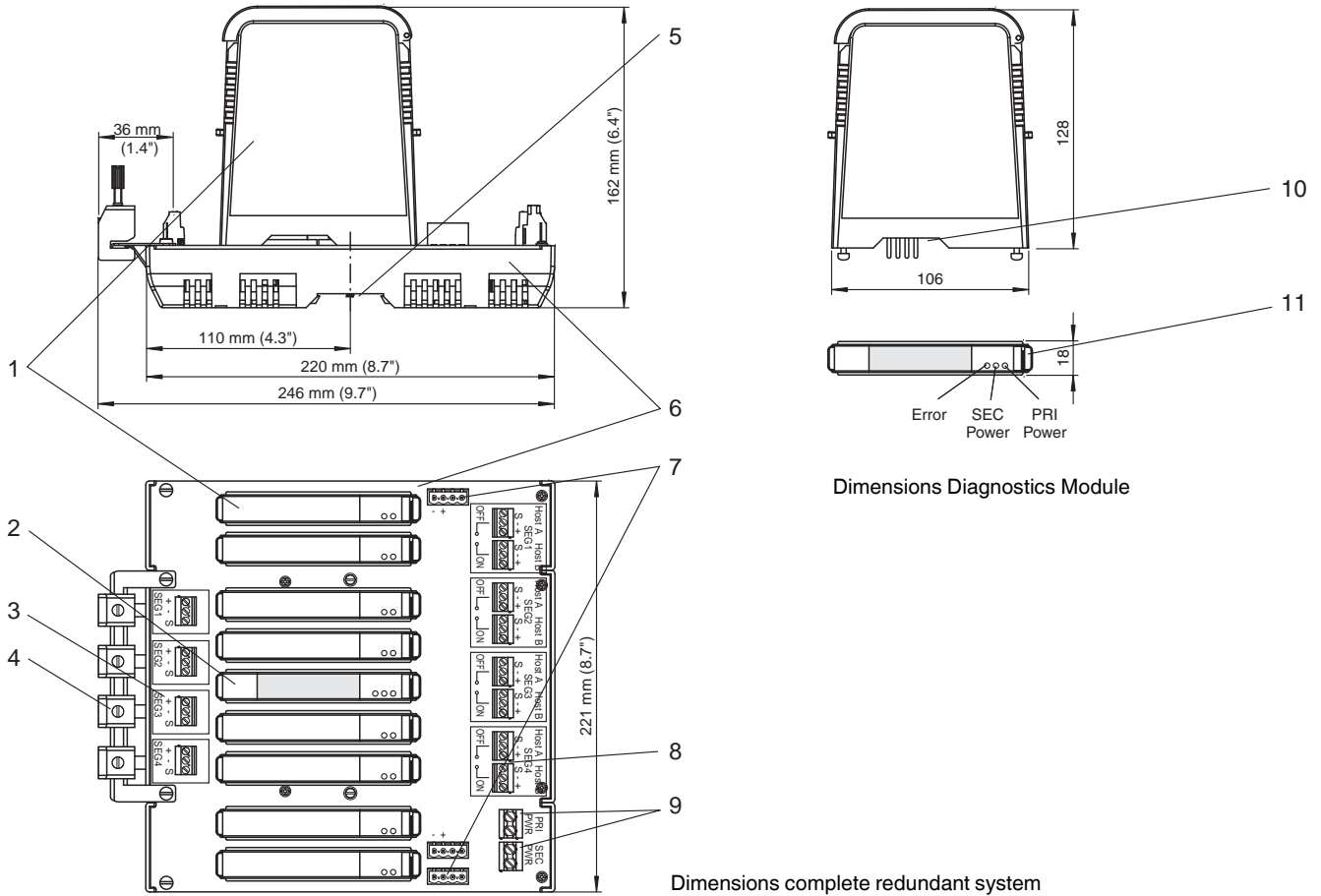
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Additional Information

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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