Features

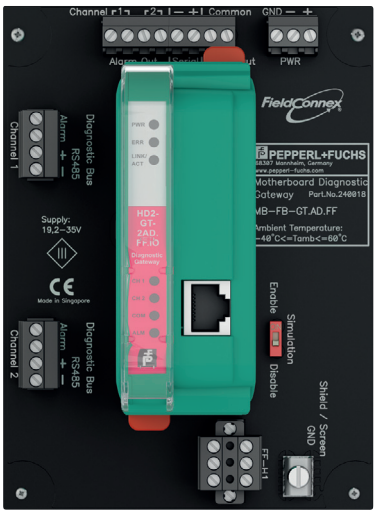
- System integration kit for Advanced Diagnostics
- DCS integration via Diagnostic Manager or device DTM
- Simple automatic setup of Advanced Diagnostics
- Summary alarm handling
- For FOUNDATION Fieldbus and PROFIBUS PA
- Installation in Zone 2

Function

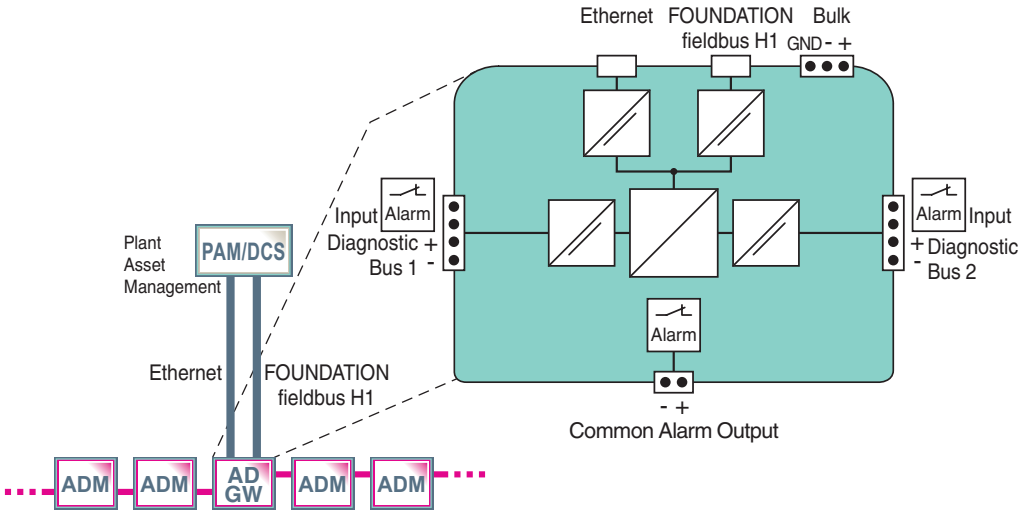
The FieldConnex® Diagnostic Gateway is the interface between stationary Advanced Diagnostic Modules (ADM) and the control system. It offers access to all ADM data in two ways: via Ethernet and the Diagnostic Manager software or via FOUNDATION Fieldbus H1 and DTM/EDD or both.

The gateway configures itself and automatically detects the ADMs. The Diagnostic Manager automatically finds gateways on the same subnet. The setup of the diagnostic bus and all connected modules is automatic. This significantly simplifies engineering of FieldConnex® Advanced Diagnostics.

Assembly



Connection



Zone 2/Div. 2

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Supply		
Rated voltage	U_n	19.2 ... 35 V DC SELV/PELV
Rated current	I_n	120 ... 70 mA
Power loss		max. 2.5 W
Fieldbus interface		
Fieldbus type		FOUNDATION Fieldbus
Physical layer profile		profile type 114
ITK version		6
Implementation		resource block1x RS function block4x MDI, 1x MDO, 1x MAI, 1x DI transducer block16x ADM TB, 1x IO TB
Firmware update		Ethernet
Polarity		polarity-sensitive
Rated voltage	U_N	9 ... 35 V SELV/PELV
Rated current	I_N	0 mA
Ethernet Interface		
Port		100 BASE-TX
Protocol		TCP/IP and UDP/IP
Services		ICMP , DHCP , AutoIP , HTTP
Connection type		RJ-45 socket, 8-pin
Transfer rate		100 MBit/s
Diagnostic Bus		
Number of Diagnostic Bus Channels		2
Number of Diagnostic Modules/Channel		31 Using Ethernet Interface , 8 Using Fieldbus Interface
Termination		integrated
Cable length/Channel		30 m
Indicators/operating means		
LED ERR		red: Hardware fault
LED PWR		green: Power on
LINK/ACT		yellow
CH1, CH2		yellow: diagnostic bus activity
Outputs		
Output I		alarm output diagnostic bus channel 1 , volt-free contact , NC contact
Voltage		50 V DC
Current		≤ 1 A
Output II		alarm output diagnostic bus channel 2 , volt-free contact , NC contact
Voltage		50 V DC
Current		≤ 1 A
Output III		common alarm , volt-free contact , NC contact
Voltage		50 V DC
Current		≤ 1 A
Electrical isolation		
All circuits/FE		functional insulation acc. to IEC 62103, rated insulation voltage 50 V_{eff}
Output I, II/other circuits		functional insulation acc. to IEC 62103, rated insulation voltage 250 V_{eff}
Ethernet/Supply		functional insulation acc. to IEC 62103, rated insulation voltage 50 V_{eff}
Ethernet/other circuits		functional insulation acc. to IEC 62103, rated insulation voltage 50 V_{eff}
Fieldbus/other circuits		functional insulation acc. to IEC 62103, rated insulation voltage 50 V_{eff}
Diagnostic Bus/other circuits		functional insulation acc. to IEC 62103, rated insulation voltage 50 V_{eff}
Directive conformity		
Electromagnetic compatibility		
Directive 2004/108/EC		EN 61326-1:2013
Low voltage		
Directive 73/23/EEC		EN 61010
Standard conformity		
Electrical isolation		IEC 62103
Electromagnetic compatibility		NE 21
Degree of protection		IEC 60529
Fieldbus standard		IEC 61158-2
Climatic conditions		DIN IEC 721
Shock resistance		EN 60068-2-27
Vibration resistance		EN 60068-2-6
Ethernet		IEEE 802.3
Ambient conditions		

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Ambient temperature	-40 ... 60 °C (-40 ... 140 °F) hazardous area -40 ... 70 °C (-40 ... 158 °F) safe area horizontal DIN rail mounting
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	
Housing material	Polycarbonate
Housing width	see dimensions
Housing height	see dimensions
Housing depth	see dimensions
Degree of protection	IP20
Mass	470 g
Mounting	DIN rail mounting
Data for application in connection with Ex-areas	
Statement of conformity	TÜV 14 ATEX 115980 X
Group, category, type of protection, temperature class	Ⓔx II 3 G Ex nA IIC T4 Gc
Directive conformity	
Directive 94/9/EC	EN 60079-0:2012 , EN 60079-11:2012 , EN 60079-15:2010
International approvals	
IECEx approval	IECEx TUN 14.0003X
Approved for	Ex nA IIC T4 Gc
General information	
Supplementary information	Statement of Conformity, Declaration of Conformity, Attestation of Conformity and instructions have to be observed where applicable. For information see www.pepperl-fuchs.com.

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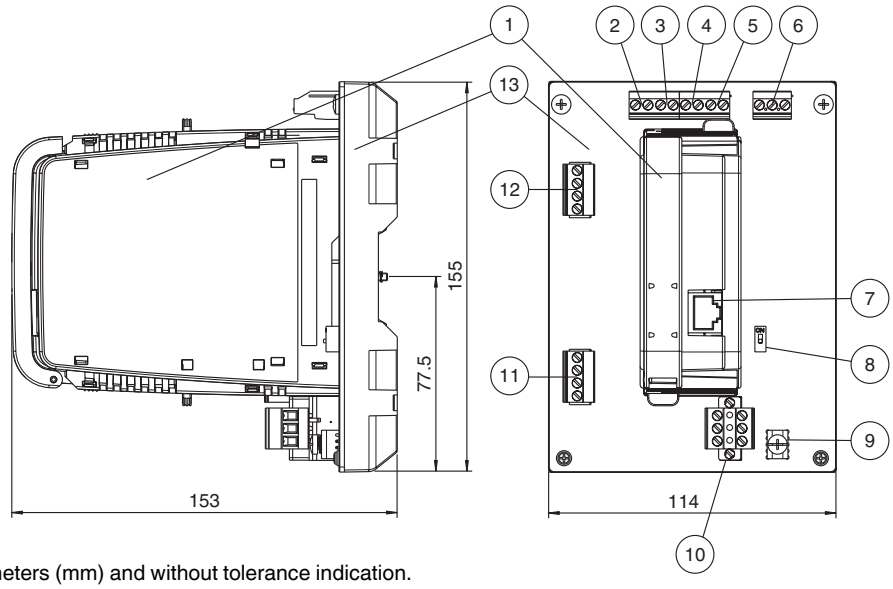
Dimensions

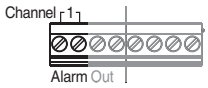


All dimensions in millimeters (mm) and without tolerance indication.

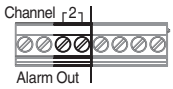
Description

1 Advanced Diagnostic Gateway Module HD2-GT-2AD.FF.IO

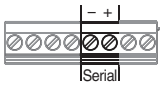
2 Diagnostic bus channel 1 alarm output



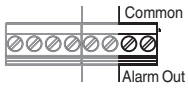
3 Diagnostic bus channel 2 alarm output



4 Serial, not used



5 Common alarm output



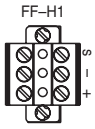
6 Bulk power supply connection

7 Ethernet, 8-pin RJ-45 socket

8 Enable/disable simulation switch

9 Grounding terminal

10 FF-H1



11 Diagnostic bus channel 2

12 Diagnostic bus channel 1

13 Motherboard MB-FB-GT.AD.FF

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