

Advanced Diagnostic Gateway with Ethernet and FF-H1 Interface

KT-MB-GT2AD.FF

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



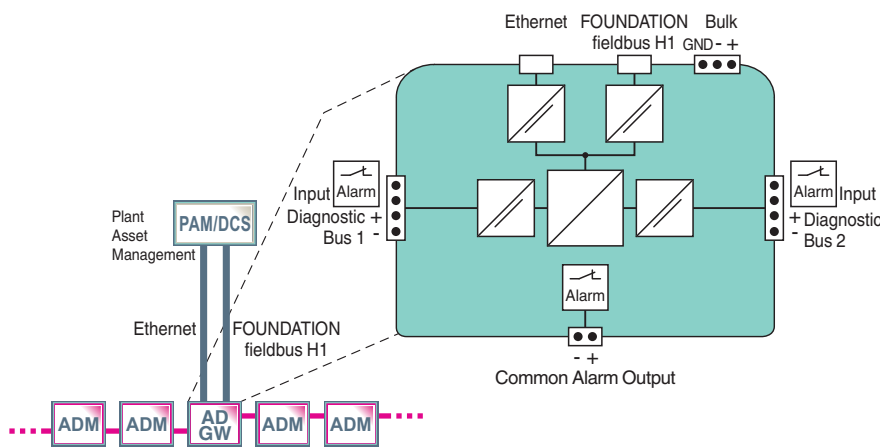
System integration kit for Advanced Diagnostics, PCS integration via Diagnostic Manager or device DTM



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.

Connection



Zone 2/Div. 2

Technical Data

General specifications

Design / Mounting Motherboard based

Supply

Rated voltage U_r 19.2 ... 35 V DC SELV/PELV

Rated current I_r 120 ... 70 mA

Power dissipation max. 2.5 W

Fieldbus interface

Fieldbus type FOUNDATION Fieldbus

Physical layer profile profile type 114

ITK version 6

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

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Technical Data

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		max. 1 A
Output II		alarm output diagnostic bus channel 2 , volt-free contact , NC contact
Voltage		50 V DC
Current		max. 1 A
Output III		common alarm , volt-free contact , NC contact
Voltage		50 V DC
Current		max. 1 A
Galvanic 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 2014/30/EU		EN 61326-1:2013
Standard conformity		
Galvanic 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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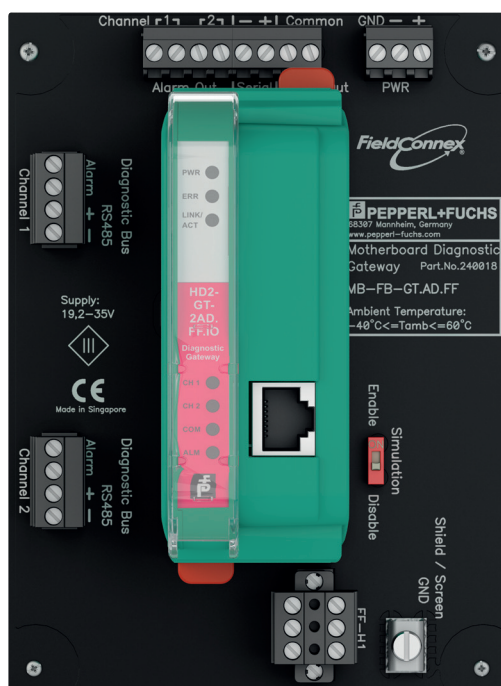
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Technical Data

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 hazardous areas	
Certificate	TÜV 14 ATEX 115980 X
Marking	⊕ II 3 G Ex nA IIC T4 Gc
Directive conformity	
Directive 2014/34/EU	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 .

Assembly



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Matching System Components

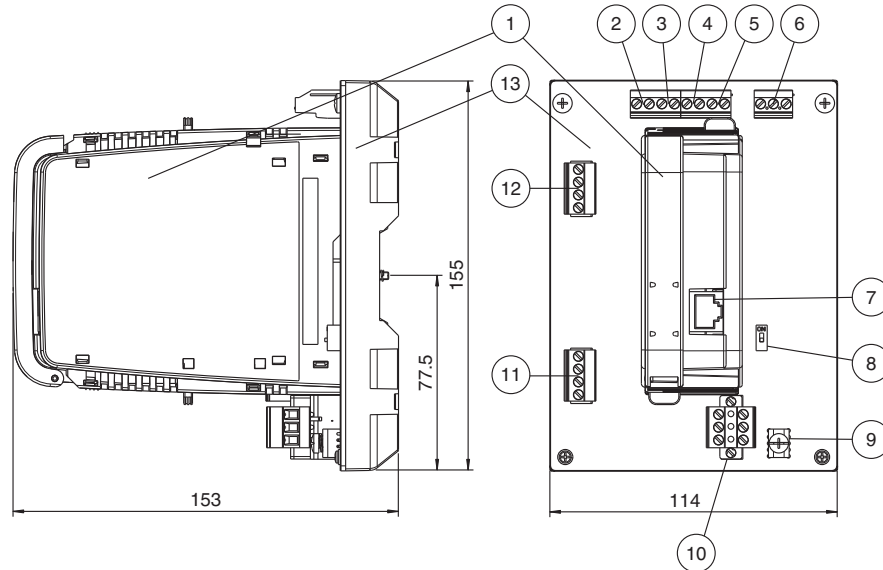
	HD2-DM-A	
	KT-MB-DMA	
	KT-MB-GT2AD.FF.IO	

Accessories

	DTM-FC.AD*	User-Interface for Advanced Diagnostics, Professional Edition
	PACTware 5.X	FDT Framework
	PACTware 4.1	FDT Framework

Additional Information

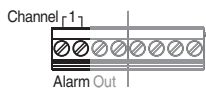
Dimensions and Assembly



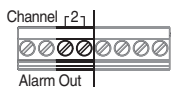
All dimensions in

Description

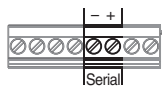
- 1 Diagnostic gateway module HD2-GT-2AD.FF.IO
- 2 Output I:
Alarm output diagnostic bus channel 1, volt-free contact, NC contact



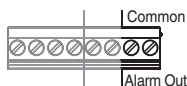
- 3 Output II:
Alarm output diagnostic bus channel 2, volt-free contact, NC contact



- 4 Serial, not used



- 5 Output III:
Common alarm, volt-free contact, NC contact

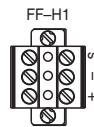


- 6 Bulk power supply connection



- 7 Ethernet, 8-pin RJ45 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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