



Universal PROFIBUS Power Hub, Gateway Motherboard

MB-FB-GTR

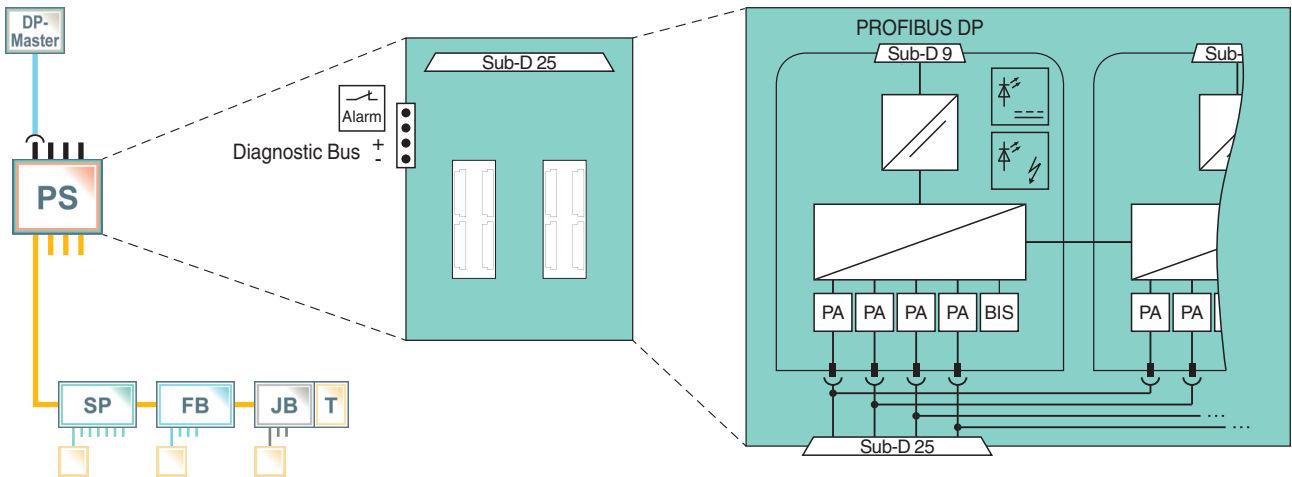
- For 2 PROFIBUS gateway modules
- Redundant configuration
- Part of Segment Coupler 3



Function

The PROFIBUS gateway motherboard is a system component of the FieldConnex® PROFIBUS universal Power Hub system. The combination of gateway, power supply, and respective motherboards form the PROFIBUS Segment Coupler 3 (SK3). The motherboard is the mounting base and wiring interface for 2 PROFIBUS Power Hub gateway modules. Communication is transparent between DP and PA. The gateway of the Segment Coupler makes each PA device appear as if it was connected to DP: This relates to addressing, cyclic/acyclic data exchange, and the transfer rate. Segment design is clear and easy to understand without subnetworks. The gateway itself is configuration-free. All in all, these features significantly reduce engineering work. In redundant configuration 2 PROFIBUS gateway modules operate with handshake between each communication. During redundancy transfer communication is seamless for DP master and field devices, ensuring continued plant operation. Internal status is reported via volt-free contact and via diagnostic telegram on PROFIBUS DP.

Connection



Technical Data

General specifications			
Design / Mounting	Motherboard based		
Supply			
Rated voltage	U_r	19.2 ... 35 V SELV/PELV	
Rated current	I_r	2 ... 3 A	
Indicators/operating means			
Fault signal	VFC alarm output via connectors		
DIP switch	address 0 ... 61		
Directive conformity			

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

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Technical Data

Electromagnetic compatibility	
Directive 2014/30/EU	EN 61326-1:2013
Standard conformity	
Galvanic isolation	IEC 62103
Electromagnetic compatibility	NE 21:2011
Degree of protection	IEC 60529
Fieldbus standard	IEC 61158-2
Shock resistance	EN 60068-2-27
Vibration resistance	EN 60068-2-6
Corrosion resistance	acc. to ISA-S71.04-1985, severity level G3
Ambient conditions	
Ambient temperature	-40 ... 60 °C (-40 ... 140 °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	
Housing material	Polycarbonate
Housing width	95 mm
Housing height	220 mm
Housing depth	65 mm
Degree of protection	IP20
Mass	approx. 300 g
Mounting	DIN mounting rail
Coating	conformal coated
Data for application in connection with hazardous areas	
Certificate	TÜV 04 ATEX 2500 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	
FM approval	CoC 3024816, CoC 3024816C
Approved for	Class I, Division 2, Groups A, B, C, D, T4 / Class I, Zone 2, AEx/Ex nA IIC T4
IECEx approval	IECEx TUN 13.0038X
Approved for	Ex nA IIC T4 Gc
Certificates and approvals	
Marine approval	DNV A-14038
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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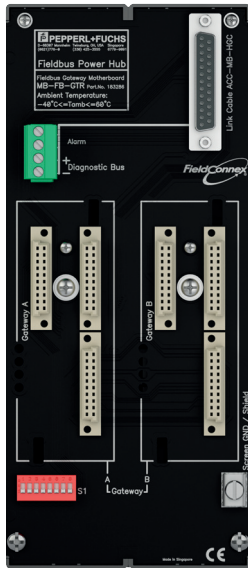
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Assembly



Matching System Components

	HD2-GTR-4PA	PROFIBUS Power Hub, Gateway Module
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Accessories

ACC-MB-HDC	Diagnostic cordset for linking the diagnostic bus of 2 motherboards, length 6 cm
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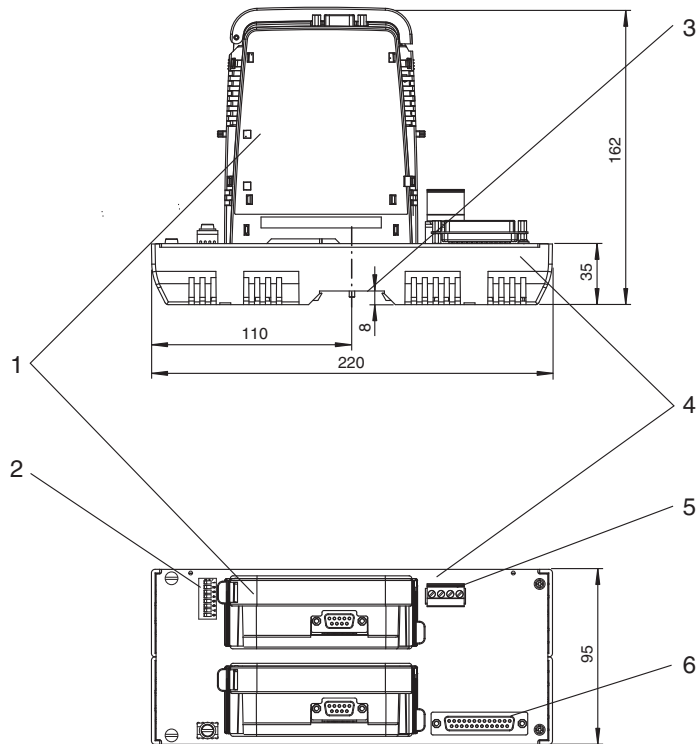
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Additional Information

Dimensions



Description:

- 1 Gateway HD2-GTR-4PA, see separate data sheets
- 2 DIP-Switch for BIS address
- 3 Mounting slot for DIN rail
- 4 Motherboard MB-FB-GTR
- 5 Connections for alarm voltage free contact and diagnostics bus
Diagnostics link cable, optional accessory
- 6 SUB-D interface for the connection of Power Hub motherboards

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