

Features

- 4 segments, redundant - individual modules per segment
- Supports all DCS and PLC hosts
- High-Power Trunk: Live work on devices in any hazardous area
- Optimized for size and quality, low heat dissipation
- For FOUNDATION Fieldbus H1
- Optional Advanced Diagnostics
- Passive impedance for high reliability
- Installation in Zone 2/Div. 2
- Voltage limitation for Ex ic/nL

Function

The FieldConnex® High-density Power Hub is a modular fieldbus power supply for four segments, fulfilling the needs of the majority of applications. The motherboard is the mounting plate and wiring interface.

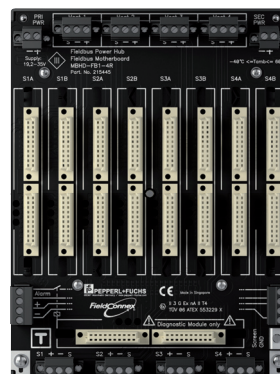
Connections are provided for all DCS and PLC host systems. Sockets for all modules enable simple installation and replacement without tools. For power redundancy with seamless transfer, pairs of modules feed each segment.

Availability and a long service life is achieved through: Only one passive impedance filter per segment, optimized design for low power dissipation, high-availability fieldbus termination and plug-in connectors with retaining screws. Any mounting direction allows optimized and space-saving cabinet layout.

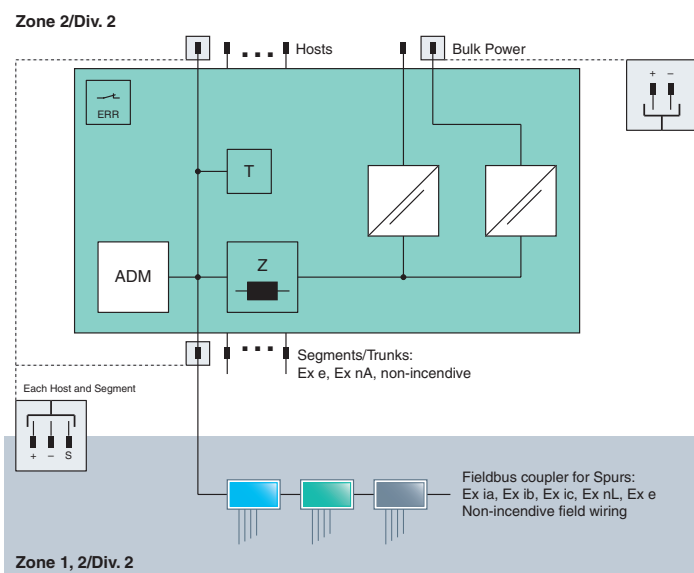
The Power Hub feeds high power to the trunk for maximum cable lengths and highest number of devices. Fieldbus couplers provide explosion protection for live work at the spur connection in any hazardous area. For Zone 2/Div. 2, selected Power Modules/Segment Protectors limit voltage/current respectively. In combination they provide FISCO/Entity Ex ic or Ex nL at the spur with selectable safe voltage level.

Advanced diagnostic options (ADM) monitor the physical layer. The ADM enables faster plant start-up automating repetitive pre-commissioning processes and increases the availability of the fieldbus segment.

Assembly

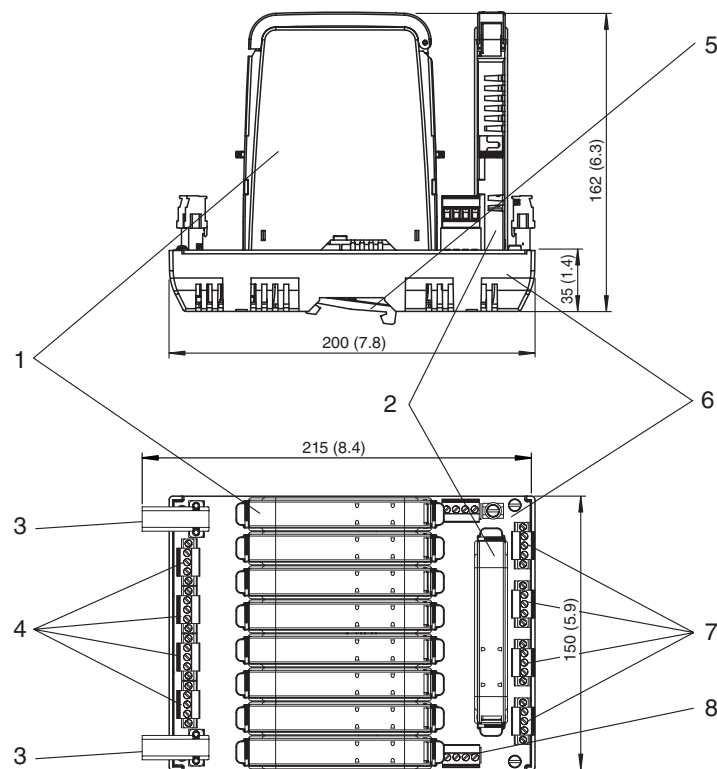


Connection



Supply	
Connection	redundant
Rated voltage	19.2 ... 35 V
Rated current	16 A
Power loss	typ. 0.39 W per segment
Fieldbus interface	
Number of segments	4 redundant
Host-side	redundant general purpose host
Terminating resistor	100 Ω integrated
Indicators/operating means	
Fault signal	VFC alarm output via connectors
Electrical isolation	
Fieldbus segment/Fieldbus segment	functional insulation acc. to IEC 62103, rated insulation voltage 50 V _{rms}
Fieldbus segment/Supply	functional insulation acc. to IEC 62103, rated insulation voltage 250 V _{rms}
Directive conformity	
Electromagnetic compatibility	
Directive 2004/108/EC	EN 61326-1:2006
Standard conformity	
Electromagnetic compatibility	NE 21:2006
Protection degree	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 (233 ... 333 K)
Storage temperature	-40 ... 85 °C (233 ... 358 K)
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
Mechanical specifications	
Connection type	plug with retaining screws
Core cross-section	2.5 mm ²
Housing material	Polycarbonate
Housing width	150 mm
Height of housing	200 mm
Housing depth	65 mm
Protection degree	IP20
Mass	approx. 740 g
Mounting	DIN rail
Data for application in conjunction with hazardous areas	
Statement of conformity	TÜV 06 ATEX 553229 X
Group, category, type of protection, temperature classification	⊕ II 3 G Ex nA II T4
Directive conformity	
Directive 94/9/EC	EN 60079-0:2006 , EN 60079-11:2007 , EN 60079-15:2006
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
Certificates and approvals	
Marine approval	DNV A-10798
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 .

Dimensions



All dimensions in millimeters and inches (values in brackets) and without tolerance indication.

Description:

- 1 Power Supply Modules, see separate data sheet
- 2 Diagnostic Module, see separate data sheets
- 3 Connections for bulk power supply with mounted connector covers for Ex ic installations, redundant.
- 4 Host connections
- 5 Mounting slot for DIN rail
- 6 Motherboard
- 7 Connections for fieldbus trunk
- 8 Connections for alarm voltage free contact and diagnostic bus
Diagnostic link cable, optional accessory

Installation note

see manual

Accessories

ACC-MB-HDC: Diagnostic link cable, length 6 cm

ACC-MB-CC: Set of two connector cover for Ex ic hazardous area applications, two special connectors inclusive.

Compatible Power Hub Modules

Power Modules:

- HD2-FBPS-1.500
- HD2-FBPS-1.25.360
- HD2-FBPS-1.23.500
- HD2-FBPS-1.17.500

Diagnostic Modules:

- HD2-DM-A
- HD2-DM-B