Features

- 4 segments, redundant, individual modules per segment
- Supports all PLC and PCS hosts
- High-power trunk: Live work on devices in any hazardous area
- Features for best signal quality, low heat dissipation
- For FOUNDATION Fieldbus H1 and PROFIBUS PA
- Optional advanced diagnostics
- Passive impedance and CREST technology for high reliability
- Supports Ex ic/nL voltage limitation
- Installation in Zone 2/Div. 2

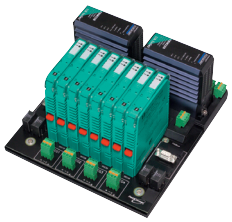
Function

The FieldConnex®Universal Power Hub is a modular fieldbus power supply, providing the most options for most reliable communication. It supports explosion protection e.g. the High-Power Trunk for longest cable run and highest device count. The Power Hub supports optional Advanced Diagnostics for fast fieldbus commissioning and online monitoring.

The motherboard is the wiring interface and mounting plate with sockets for redundant FBM-228 host modules. Individual power modules enable simple installation and replacement without tools. For power redundancy with seamless transfer, pairs of modules feed each segment.

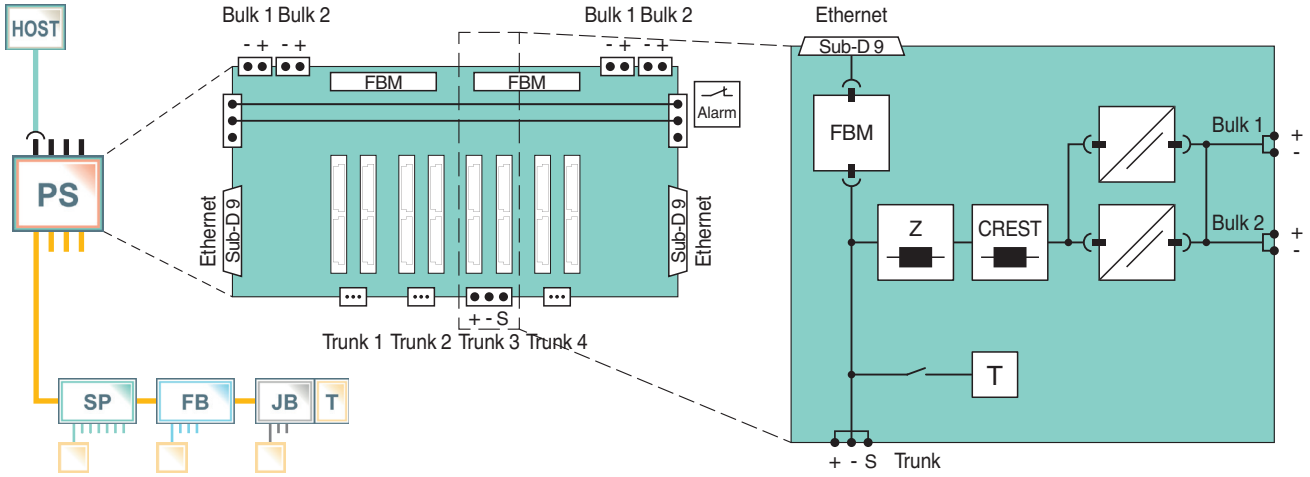
Availability and a long service life are achieved through: only one passive impedance filter per segment with CREST for superior signal transmission, optimized design for low power dissipation and high-availability fieldbus termination. Any mounting direction allows optimized and space-saving cabinet layout.

Assembly





Connection

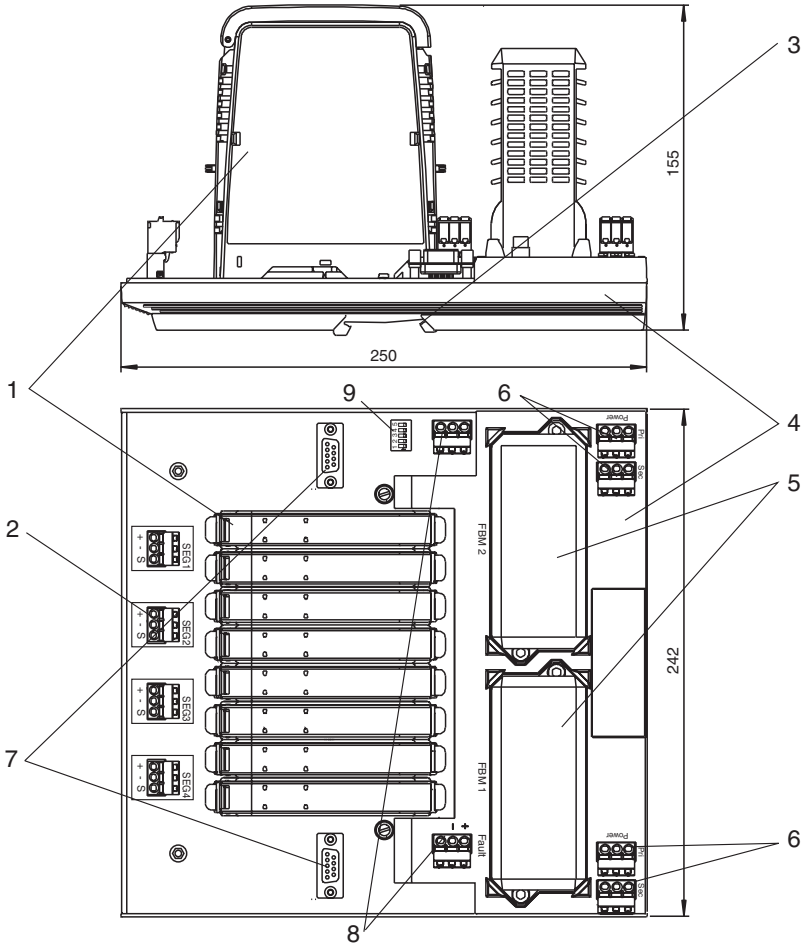


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General specifications		
Design / Mounting		Motherboard based
Supply		
Connection		redundant
Rated voltage	U_r	21.6 ... 25.2 V
Rated current	I_r	16 A
Fieldbus interface		
Number of segments		
Redundant		4
Host-side		redundant Invensys FBM 228
Terminating resistor		fixed
Indicators/operating means		
Fault signal		open collector, switched low
Galvanic isolation		
Fieldbus segment/Fieldbus segment		functional insulation acc. to DIN EN 50178, rated insulation voltage 50 V_{eff}
Fieldbus segment/Supply		functional insulation acc. to DIN EN 50178, rated insulation voltage 50 V_{eff}
Directive conformity		
Electromagnetic compatibility		
Directive 2004/108/EC		EN 61326-1:2006
Standard conformity		
Electromagnetic compatibility		NE 21:2006
Degree of protection		IEC 60529
Fieldbus standard		IEC 61158-2
Shock resistance		EN 60068-2-27
Vibration resistance		EN 60068-2-6
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
Mechanical specifications		
Connection type		Cage tension spring terminals
Core cross-section		≤ 2.5 mm^2
Housing material		ABS
Housing width		242 mm
Housing height		250 mm
Housing depth		55 mm
Degree of protection		IP00
Mass		approx. 1.15 kg
Mounting		DIN mounting rail
Data for application in connection with hazardous areas		
Certificate		TÜV 05 ATEX 2890 X
Marking		⟨Ex⟩ II 3G EEx nA II T4
Directive conformity		
Directive 94/9/EC		EN 60079-15:2003
International approvals		
FM approval		
FM certificate		FM 19 US 0015 X and FM 19 CA 0011 X
FM marking		AEx/Ex ec IIC T4
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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Dimensions



Description:

1 Power Supply Modules, see separate data sheets
2 Fieldbus trunk connections
3 DIN rail slot
4 Motherboard
5 INVENSYS FBM 228 FOUNDATION Fieldbus modules
6 Connections for bulk power supply
7 Ethernet trunk Fieldbus connection
8 Fault output
9 ID DIP switch array

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Compatible power modules

		HD2-FBPS-1.17.500	HD2-FBPS-1.23.500	HD2-FBPS-1.25.360	HD2-FBPS-1.500	HD2-FBCL-1.500	
Power Output							
Voltage (V)		15 ... 17	21 ... 23	25 ... 28	28 ... 30	-[1]	
Current (mA)		500	500	360	500	500	
Limit U_0 (V)		17.5	24	-	-	-	
Device in ...	**Type of Protection**						**Required Installation Components**
Zone 0/Div. 1	Intrinsically safe Ex ia			■	■	■	FieldBarrier
Zone 1/Div. 1	Intrinsically safe Ex ia			■	■	■	FieldBarrier
Zone 1/Div. 1	Flameproof Ex d			■	■	■	Segment Protector R-SP-E12 or any Segment Protector installed in Zone 2
Div. 2	Non-incendive	■	■	■	■		Any Segment Protector; power module selection depends on voltage of field device
Safe Area	No specific type of protection			■	■	■	Segment Protector recommended

[1] follows bulk power supply

Accessories

Type code	Description
KT-MB-DMA	Advanced Diagnostic Module, Kit for stand-alone Operation

Installation note

see manual

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