

Fieldbus Power Supply

FieldConnex® Fieldbus

HD2-FBPS-1.25.360

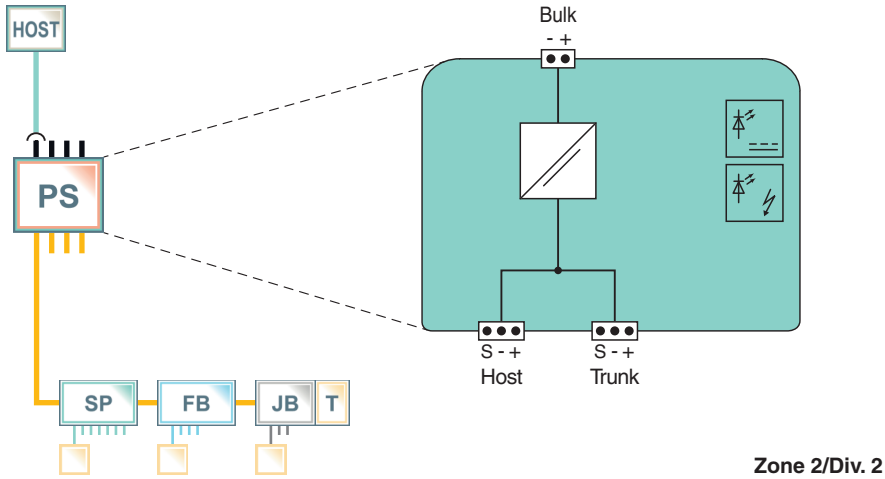
- 2 segments, simplex, individual modules per segment
- Couples PROFIBUS PA devices transparently to PROFIBUS DP
- High-power trunk: Live work on devices in any hazardous area
- Transparent, configuration free
- Optimized for size and quality, low heat dissipation
- Automatically adapts speed on DP - up to 12 Mbit/s
- Output: 25 ... 28 V/360 mA
- Universal power supply for most applications
- With galvanic isolation
- Installation in Zone 2/Class I, Div. 2
- For FOUNDATION Fieldbus H1 and PROFIBUS PA
- High efficiency, low heat dissipation for high packing density
- Hot swappable in redundant configuration
- Module exchange without tools during operation

Fieldbus power supply, module for fieldbus power hub

Function

This Power Supply Module is a system component for the FieldConnex® Power Hub and can be plugged into the motherboard. It adapts current and voltage for the supply of fieldbus segments and field devices.
This power supply satisfies the needs of most fieldbus applications with regards to cable lengths and number of devices.
Reliability of communication is enhanced through galvanic isolation between segment and bulk power supply. Two LEDs indicate power and status. In redundant configuration two modules are connected in parallel via simple circuits ensuring seamless operation.

Connection



Zone 2/Div. 2

Technical Data

General specifications		
Design / Mounting		Motherboard based
Installation in hazardous area		Zone 2 / Div. 2
Supply		
Rated voltage	U_r	19.2 ... 35 V DC
Rated current	I_r	670 ... 360 mA

Release date: 2025-02-07 Date of issue: 2025-02-07 Filename: 189516_eng.pdf

Technical Data

Power dissipation		typ. 2 W
Fieldbus connection		
Rated voltage	U_N	25 ... 28 V
Rated current	I_N	360 ... 10 mA
Short-circuit current		typ. 400 mA
Indicators/operating means		
LED ERR		red flashing: overload error at output
LED PWR		Power LED: green if U_{out} > 25 V
Galvanic isolation		
Fieldbus segment/Supply		functional insulation acc. to IEC 62103, rated insulation voltage 250 V_{eff}
Directive conformity		
Electromagnetic compatibility		
Directive 2014/30/EU		EN 61326-1:2013
Standard conformity		
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
Corrosion resistance		acc. to ISA-S71.04-1985, severity level G3
Mechanical specifications		
Core cross section		motherboard specific
Housing material		Polycarbonate
Degree of protection		IP20
Mass		approx. 150 g
Dimensions		
Height		106 mm
Width		18 mm
Depth		128 mm
Mounting		motherboard mounting
Data for application in connection with hazardous areas		
Certificate		TÜV 06 ATEX 553229 X
Marking		⟨Ex⟩ II 3 G Ex nA IIC T4 Gc
Directive conformity		
Directive 2014/34/EU		EN IEC 60079-0:2018+AC:2020 , EN 60079-15:2010
International approvals		
FM approval		
FM certificate		FM 19 US 0015 X and FM 19 CA 0011 X
FM marking		Class I, Division 2, Groups A, B, C, D, T4 / Class I, Zone 2, AEx/Ex ec IIC T4
IECEx approval		
IECEx certificate		IECEx TUN 11.0003X
IECEx marking		Ex nA IIC T4 Gc
General information		
Supplementary information		Observe the certificates, declarations of conformity, instruction manuals, and manuals where applicable. For information see www.pepperl-fuchs.com.

Release date: 2025-02-07 Date of issue: 2025-02-07 Filename: 189516_eng.pdf

Assembly





Release date: 2025-02-07 Date of issue: 2025-02-07 Filename: 189516_eng.pdf