



# PS3500 Diagnostic Module

## PS3500-DM

- Real-time input and output power monitoring
- Diagnostics and fault indication
- Modular and hot swappable
- Configurable alarms
- R/S 485 HART communication
- Asset management integration - EDDL/DTM
- ATEX, IECEx, and cULus approvals for Div 2/Zone 2

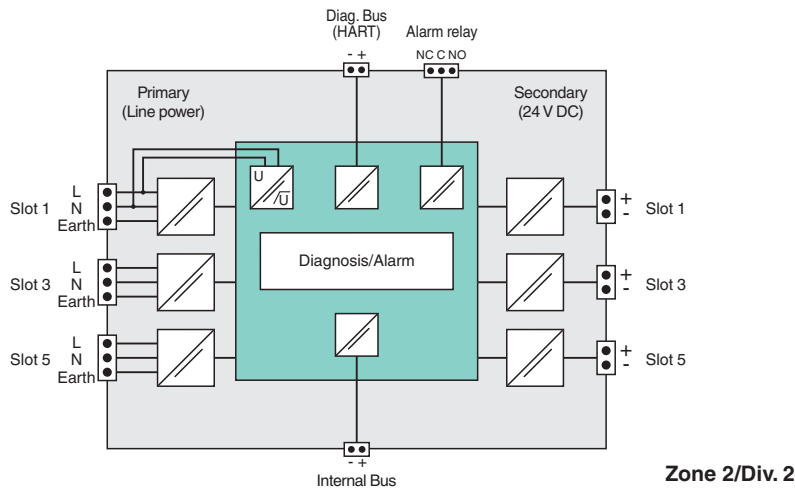
PS3500 diagnostic module for use with PS3500 power supplies



### Function

Having an advanced warning of a potential power failure could eliminate long hours of downtime and lost revenue. The diagnostic module continuously monitors the health of the PS3500 power supplies. As part of the PS3500 power supply system, the diagnostic module monitors the input, internal, and output parameters. The diagnostic module displays values of various measurement points along with warning and alarm messages for out-of-tolerance values.

### Connection



Zone 2/Div. 2

### Technical Data

<b>Interface</b>	
Type	diagnostic bus: RS 485
<b>Output</b>	
Rated voltage	$U_r$ 90...250 V AC, 44 ... 66 Hz; 90 ... 300 V DC
Rated current	$I_r$ 100 mA max
Fault signal	Form C Relay 50 V DC @ 0.6 A 30 V DC @ 2 A
<b>Galvanic isolation</b>	
Input/Output	4.25 kV DC

Release date: 2024-01-15 Date of issue: 2024-01-15 Filename: 9111107\_eng.pdf

## Technical Data

Field circuit/control circuit	Primay to Diagnostic Module Isolation: 4.25 kVDC External RS485 to primary isolation: 4.25 kVDC Internal RS485 to primary isolation: 4.25 kVDC Secondary to Diagnostic Module: 2.12 kVDC External RS485 to secondary isolation: 2.12 kVDC Internal RS485 to secondary isolation: 2.12 kVDC
<b>Indicators/settings</b>	
Display elements	LCD Status Screen Diagnostic Module LED Primary (AC Input) Monitors LED Secondary (DC Output) Monitors LED Power Supply Module LED
<b>Directive conformity</b>	
Electromagnetic compatibility	Refer to DoC for all directives and standards met.
<b>Conformity</b>	
Electromagnetic compatibility	NE 21:2006
Degree of protection	IEC 60529
Shock resistance	EN 60068-2-27
Vibration resistance	EN 60068-2-6
<b>Ambient conditions</b>	
Ambient temperature	-20 ... 60 °C (-4 ... 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 , 58 ... 150 Hz
<b>Mechanical specifications</b>	
Connection type	motherboard specific
Housing material	Powder Coated, 1010 Cold Rolled Steel
Degree of protection	IP20
Mass	approx. 1.16 kg (2.56 lbs)
Dimensions	134 x 33 x 268 mm (5.3 x 1.3 x 10.6 inch)
Height	134 mm
Width	33 mm
Depth	268 mm
<b>Data for application in connection with hazardous areas</b>	
Certificate	DEMKO 12 ATEX 1103387X
Marking	⊕ II 3 G Ex ic ec nC IIC T4 Gc
Directive conformity	
Directive 2014/34/EU	EN IEC 60079-0:2018; EN IEC 60079-7:2015+A12018; EN 60079-11:2012; EN 60079-15:2019
<b>International approvals</b>	
UL approval	cULus Listed E230669 E350173
Approved for	Class I/Div 2, ABCD Class I, Zone 2, Grp IIC T4
IECEx approval	IECEx UL 13.0082X Ex ic ec nC IIC T4 Gc
<b>General information</b>	
Supplementary information	Statement of Conformity, Declaration of Conformity, Attestation of Conformity and instructions have to be observed where applicable. For information see <a href="http://www.pepperl-fuchs.com">www.pepperl-fuchs.com</a> .

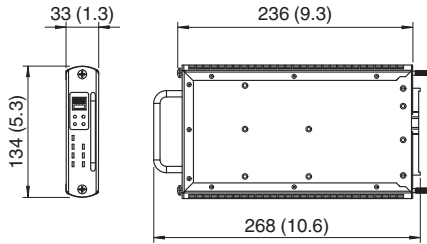
Assembly



Release date: 2024-01-15 Date of issue: 2024-01-15 Filename: 911107\_eng.pdf

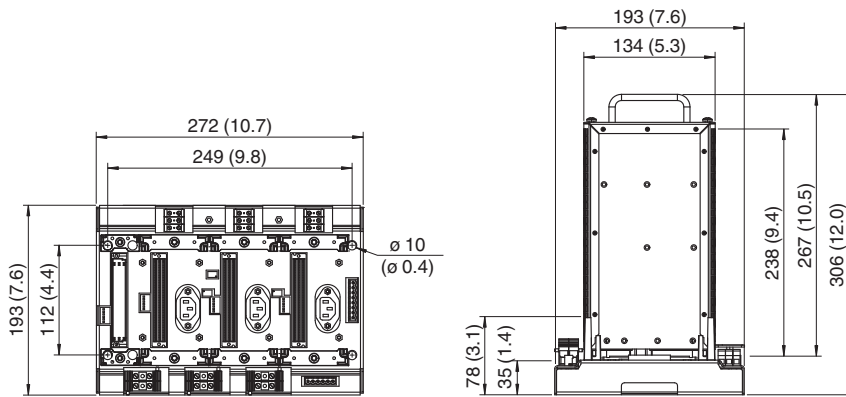
**Dimensions**

**Device Dimensions mm (in)**

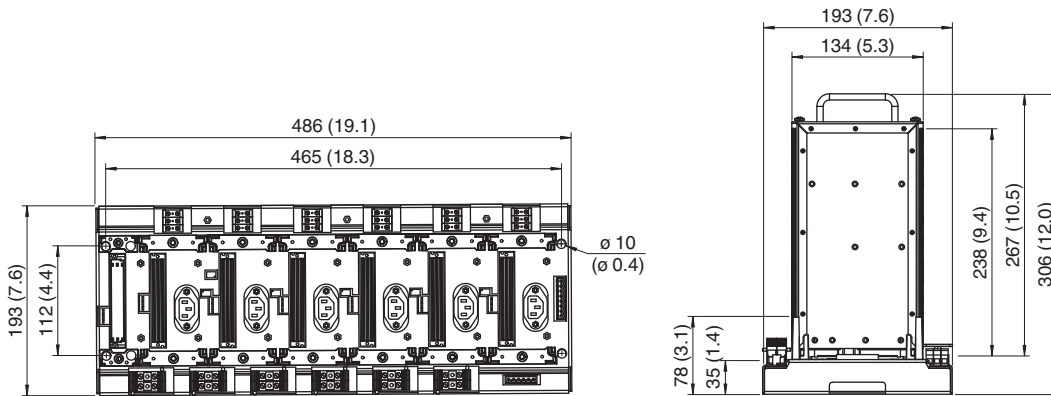


**System Dimensions mm (in)**

**PS3500-TB-3**



**PS3500-TB-6**



Release date: 2024-01-15 Date of issue: 2024-01-15 Filename: 911107\_eng.pdf