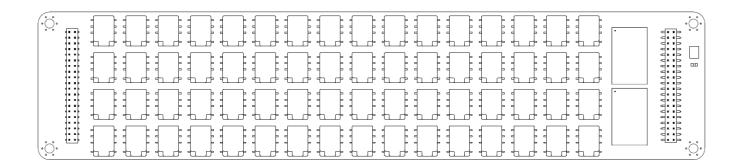
#### TECHNICAL DESCRIPTION SET-2310-Line Fault Module

4 line fault channel multiplex 16 differential / 32 single-ended channels.



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**Note** This module is not independent. It can be operated with a daughter card approved by the company SET GmbH.

**Note** The guidelines in this document are specific to the SET-2310 Instrument Module. The other components in the system might not meet the same safety ratings. Refer to the documentation of each component in the system to determine the safety and EMC ratings for the entire system.

#### MORE INFORMATION ON OUR WEBSITE:

www.smart-e-tech.de/slsc

www.smart-e-tech.com SET-2310 Technical Description





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01/08/2019

# Safety Guidelines



**Caution** Do not operate the SET-2310 fault module in a manner not specified in this document. Product misuse can result in a hazard. You can compromise the safety protection built into the product if the product is damaged in any way. If the product is damaged, return it for repair.

## **Electromagnetic Compatibility Guidelines**

This product was tested and complies with the regulatory requirements and limits for electromagnetic compatibility (EMC). These requirements and limits provide reasonable protection against harmful interference when the product is operated in the intended operational electromagnetic environment.

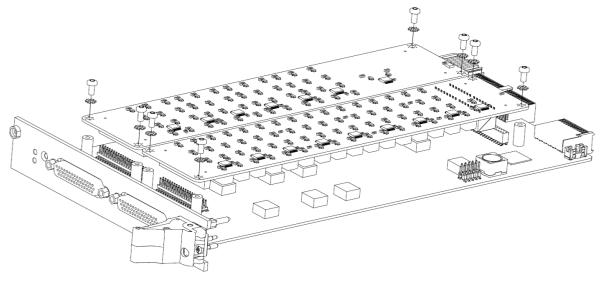
This product is intended for use in industrial locations. However, harmful interference may occur in some installations, when the product is connected to a peripheral device or test object, or if the product is used in residential or commercial areas. To minimize interference with radio and television reception and prevent unacceptable performance degradation, install and use this product in strict accordance with the instructions in the product documentation.

Furthermore, any changes or modifications to the product not expressly approved by SET GmbH could void your authority to operate it under your local regulatory rules.



**Caution** To ensure the specified EMC performance, operate this product only with shielded cables and accessories.

#### <u>How to mount</u>





**Note** insert the module straight.

Note for mounting use 4x screw M3x6 DIN7985, 4x washer M3 DIN137



Caution max. torque 0.5Nm.

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# **Description**

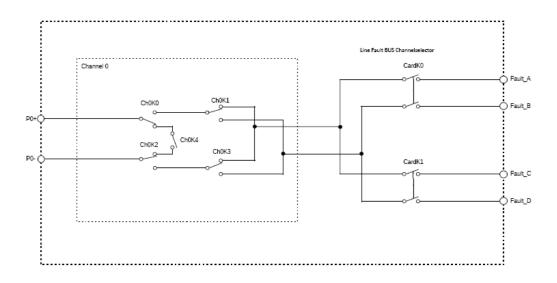
The SET-2310-Line Fault Module is a plug-in module and can be easily mounted on SLSC Cards with a plug-in module slot.

The main function of the module is to multiplex signals on the fault buses.

With 32 single-ended signals or 16 differential channels, the SET-2310 provides fault connection capabilities in a small form factor.

The fault bus leads to the base cards connector to connect any fault device. It is possible to connect two fault signals to the 2 channel line fault bus.

#### <u>Circuitry</u>



**Note** Diagram only shows one out of 16 channels. Per daughter module one line fault Bus can be selected.

All voltages are relative to GND unless otherwise noted.

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## **Hardware Specifications**

Absolute Maximum Ratings					
Property	Condition	Value	Comment		
Relative humidity		5% to 95%	Non-condensing		
Temperature		0°C – 85°C			
Storage		-40°C-85°C			
Max. Input Voltage	Any Pin	60Vdc	Transient 65V, Limited by connector		
Min. Input Voltage	Any Pin	-60Vdc	Transient -65V Limited by connector		
Max. Switching Power	DC, Resistive load	60W			
Max. Current rating (Channel Relais)		1.5A			
Max. Current rating (BUS Relais)		8A			

Technical Data				
Property	Condition	Value	Comment	
Update Time		10ms		
Max Initial contact resistance	X1 -> X2,	300 mOhm		
Expected Electrical Lifetime	1A, 30Vdc resistive	Min 10 <sup>5</sup> operations		
Expected Electrical Lifetime	1,5A, 30Vdc resistive	Min 10 <sup>4</sup> operations		

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Physicals Characteristics				
Property	Condition	Value	Comment	
Module dimensions		10mm x 52mm x 235mm (H x W x D)	Standard Module size	
Connector to Front		2x20pin female socket terminal strip		
Connector to Back		2x20pin pin terminal strip		

Environmental					
Property	Condition	Value	Comment		
Operating humidity	Relative, non-condensing	10%-90%			
Storage humidity	Relative, non-condensing	5%-95%			
Operating temperature	Forced-air cooling from chassis	0°C-40°C			
Storage temperature		-40°C-85°C			
Maximum altitude		2000m			



