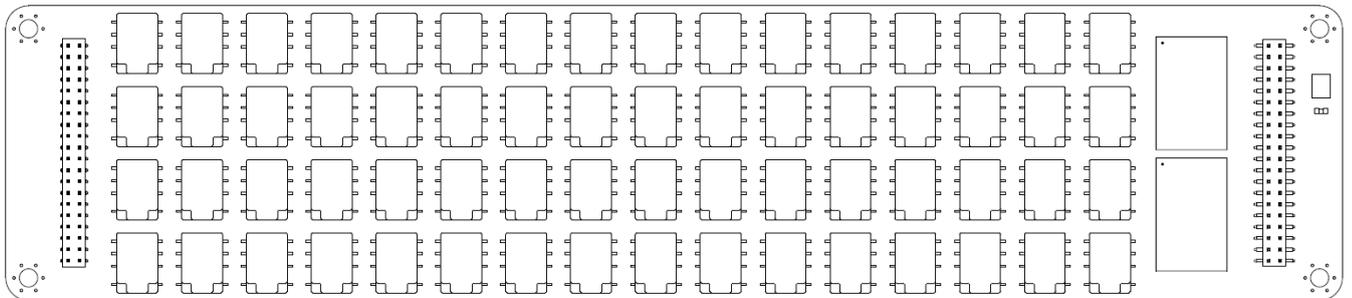


TECHNICAL DESCRIPTION

SET-2310 Line Fault Module

4 Line Fault Channel Multiplex 16 differential / 32 Single Ended Channels.



This document 9040TDD0340 is a technical description of the SET-2310.

 **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

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.

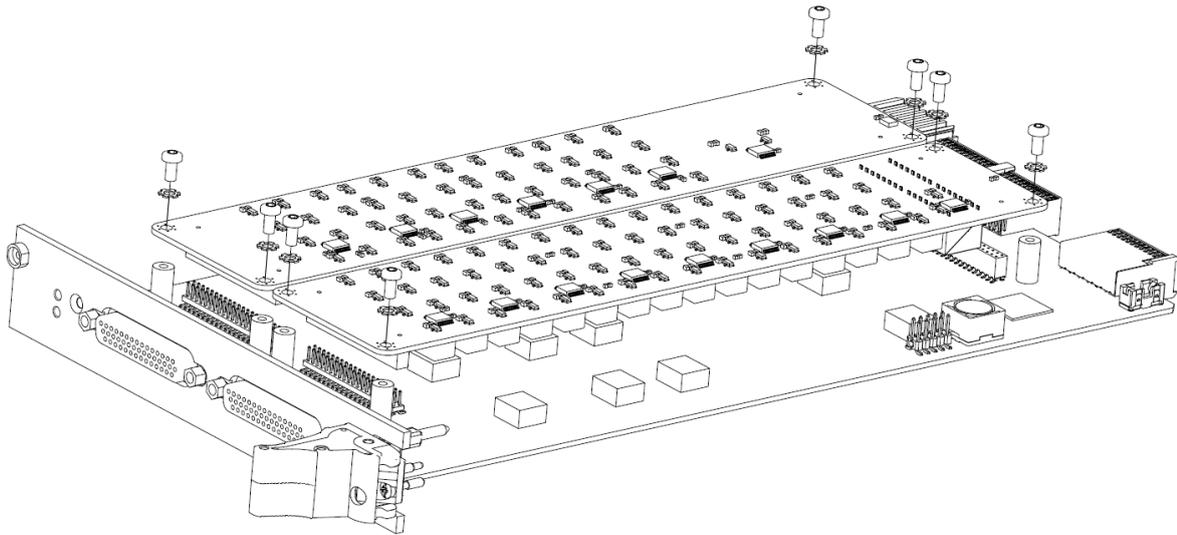
Furthermore, any changes or modifications to the product not expressly approved by SET GmbH could void your authority to operate it under your local regulatory rules.



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



How to mount



Note insert the module straight.



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



Caution max. torque 0.5 Nm.

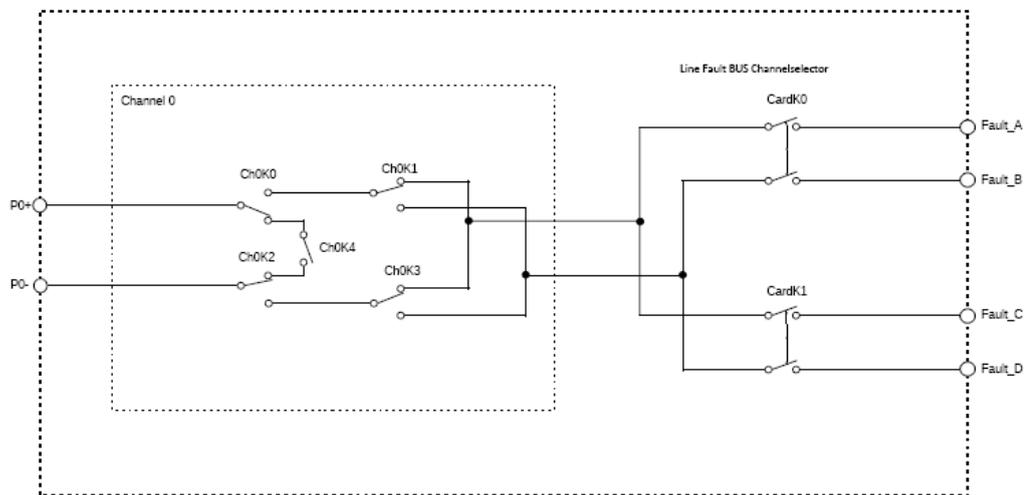
Description

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.

Circuitry



 **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.

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	60 Vdc	Transient 65 V, Limited by connector
Min. Input Voltage	Any Pin	-60 Vdc	Transient -65 V Limited by connector
Max. Switching Power	DC, Resistive load	60 W	
Max. Current rating (Channel Relais)		1.5 A	
Max. Current rating (BUS Relais)		8 A	

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

Physicals Characteristics			
Property	Condition	Value	Comment
Module dimensions		10 mm x 52 mm x 235 mm (H x W x D)	Standard Module size
Connector to Front		2x20 pin female socket terminal strip	
Connector to Back		2x20 pin 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		2000 m	

