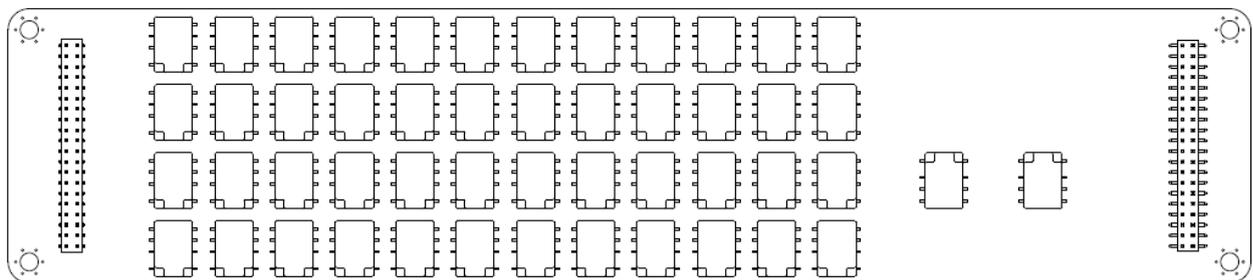


## TECHNICAL DESCRIPTION

# SET-2210 Instrument Module

2 instruments channel multiplex 16 differential / 32 single ended channels.



This document is a technical description of the SET-2010 Instrument Daughter Module.



**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-2210 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](http://www.smart-e-tech.de/slsc)



# Safety Guidelines

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**Caution** Do not operate the SET-2210 instrument 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

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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.

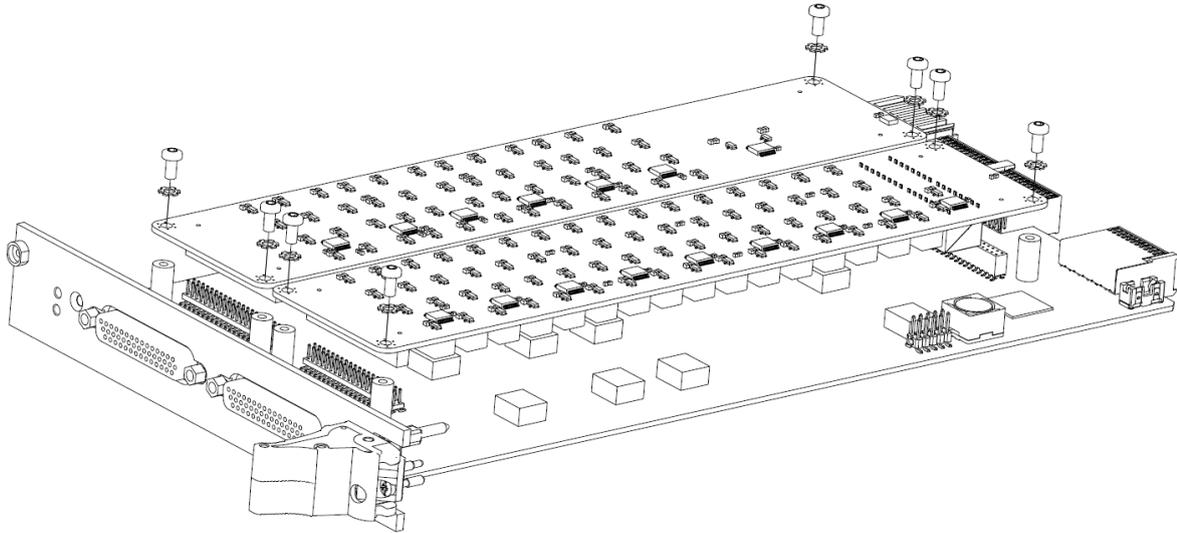
Furthermore, any changes or modifications to the product not expressly approved by SET GmbH could void your authority to operate it under your local regulatory rules.



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

# How to mount

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**Note** Insert the module straight.



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

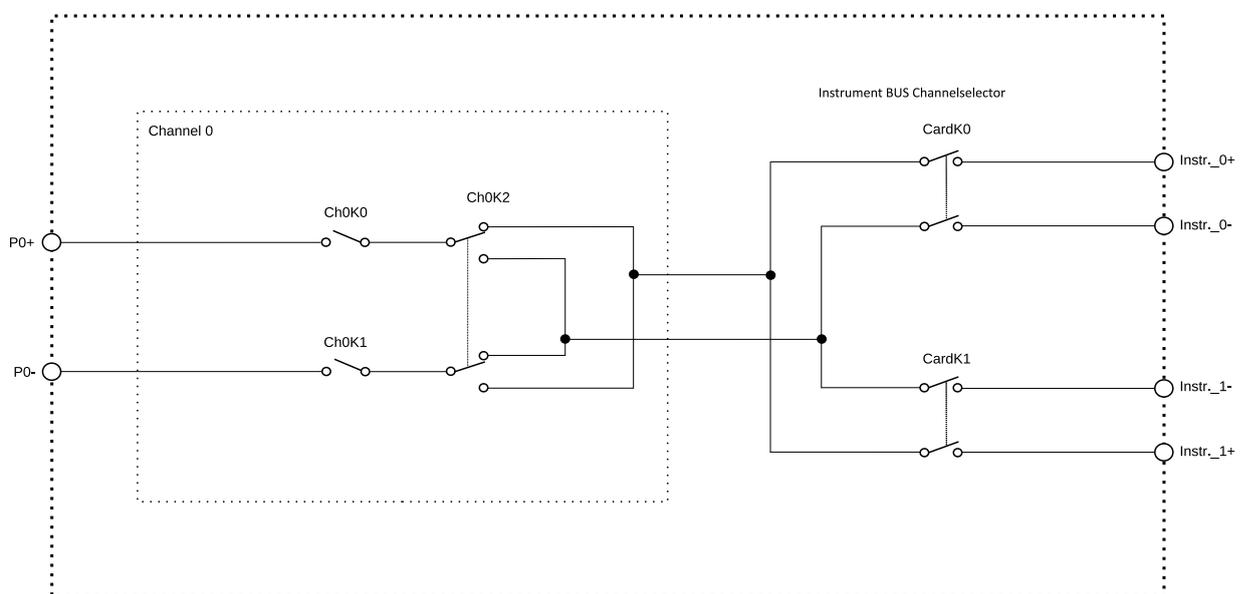


**Caution** max. torque 0.5 Nm.

# Description

The main function of the plugin SET-2210 Instrument Daughter Module is to multiplex test signals on the instrument buses. On any SET approved SLSC Card with a plugin module slot, the Instrument Daughter Module can be easily mounted. With 32 single-ended or 16 differential channels, the SET-2210 provides instrument connection capabilities in a small form factor. The instrument bus of the Daughter Module directs to the base cards connector to connect any instrument device. It is possible to connect two instrument signals to the two-channel instrument bus.

# Circuitry



**Note** Diagram only shows one out of 16 channels. Per daughter module one instrument 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	
Min. Input Voltage	Any Pin	-60 Vdc	
Max. Switching Power	DC, Resistive load	60 W	
Max. Current Rating		1.5 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 <sup>5</sup> operations	
Expected Electrical Lifetime	1,5 A, 30 Vdc resistive	Min 10 <sup>4</sup> 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	

