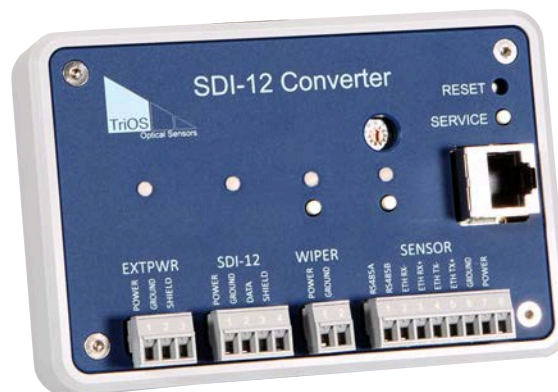




SDI-12 Converter

11C100001



The SDI-12 converter translates the Modbus protocol used by TriOS sensors into SDI-12 (Serial-Digital Interface) and thus serves as an interface between the sensors and the SDI-12 interface of the peripherals.

Thanks to its low standby power (< 20 mW), the converter is ideally suited for operation with a battery as a power supply. Four status LEDs continuously inform the user about the current operating mode and the power supply. Both measurements with G2 sensors and cleaning cycles using wipers can be controlled via the converter.

The implemented Ethernet interface allows for data export and sensor configuration via the web interface.

Sensor scan, wiper cleaning and service mode can be activated with three manual buttons. The position of the rotary encoder determines which sensor address is used to address the sensor.

Advantages

- Low standby power
- Implemented Ethernet interface
- Simple handling

Suitable for

- nanoFlu
- NICO
- OPUS*
- OSCAR
- RAMSES-G2
- TpH
- TpH-D
- TTurb
- VIPER*
- Wiper W55 V2
- Other peripheral devices

*No transmission of spectra data.



Further information on the SDI-12 protocol standard can be found in this document: "SDI-12 - A Serial-Digital Interface Standard for Microprocessor-based sensors; Version 1.4; January 10, 2019"



SDI-12 Converter

Technical specifications

External power supply

Power supply	12 - 24 VDC ($\pm 10\%$)	
Connection terminal	1.5 mm ²	AWG 16

SDI-12 interface

Power supply	10 - 24 VDC ($\pm 10\%$)	
Power consumption during standby	< 20 mW	
Protocol	SDI-12	

Wiper interface

Connection terminal	1.5 mm ²	AWG 16
Standard	Wiper W55 V2	

Sensor interface

Connection terminal	1.5 mm ²	AWG 16
Standard	RS-485	
Protocol	Modbus RTU	

Network*

Standard	Ethernet	
Connection	RJ-45	

* Only available if the connected sensor has an Ethernet interface.

Environment

Operating temperature	-10...+40 °C	~ +14 to +104 °F
Storage temperature	-10...+70 °C	~ +14 to +158 °F
Relative humidity	0...95 % (non-condensing)	
Protection type	IP30	

SDI-12 Converter

Display

LED	4 x RGB status LED
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Mechanics

Housing material	PVC, PERSPEX®	
Dimensions (L x W x H)	120 mm x 80 mm x 45mm	~ 4.7" x 3.2" x 1.8"
Weight	250 g	~ 0.6 lbs

Maintenance effort	-	
Calibration/ maintenance interval	-	
System compatibility	SDI-12	
Warranty	1 year (EU & US: 2 years)	