FIELDSENS^G

SIGNAL CONDITIONER FOR (GaAs) TECHNOLOGY

FIELDSENS^G OPSENS SOLUTIONS' (GaAs) TECHNOLOGY

DESCRIPTION

The FieldSens^G is a **compact and robust** multi-channel signal conditioner to be used with any of Opsens Solutions' GaAs fiber optic temperature sensors.

At the heart of the FieldSens^G is the Opsens' Semiconductor Band Gap (SCBG) technology which provides a mean for making accurate measurements of the temperature-dependent bandgap position of GaAs crystal. The FieldSens^G unit is the latest generation of Opsens Solutions' signal conditioners equipped with state-of-the-art technologies. Highly versatile, it supports a broad range of fiber optic temperature sensors and offers measurement **sampling rate of 250 Hz** (when 1 channel is enabled). Maximum number of modules is 32 with up to 12 channels per module. You can stack modules based on the number of sensors to be monitored (up to a maximum of 384 channels).
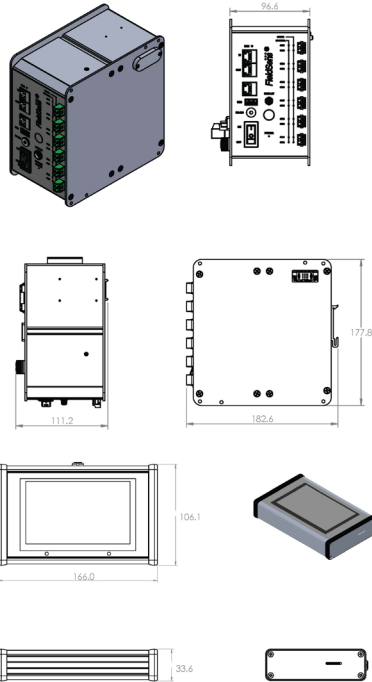
The unit offers multiple interfaces for remote control and real-time data acquisition: EtherCAT®, 10/100 Base-T Ethernet, USB, RS-232 and CAN FD. Open interface for easy integration with existing external data acquisition software. An optional portable touchscreen display is also available for stand-alone configurations (useful for on-site maintenance or remote locations). The unit is equipped with internal storage to provide the necessary autonomy in remote locations, years of recording at low acquisition rates.
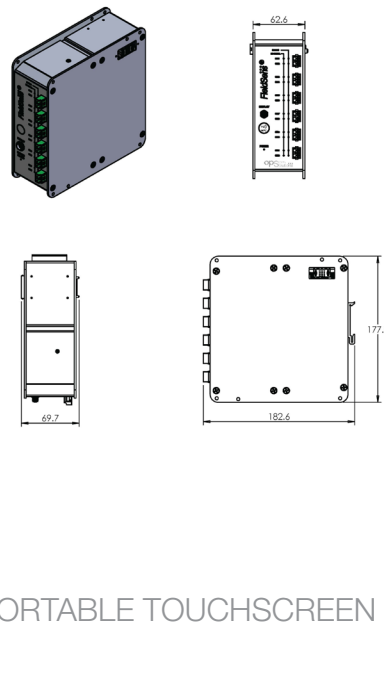
APPLICATIONS

- Power Electronics and Semiconductor

- Electromagnetic Compatibility (EMC) assessment

- Aerospace and Defense

- Portable or benchtop controller

- High voltage conditions

- EMI, RFI and microwave environments

- Industrial: automation and process control

- Autonomous monitoring in remote areas

op**S**ens **S**olutions

Enlightenment through smart measurements

FIELDSENS^G

SIGNAL CONDITIONER FOR (GaAs) TECHNOLOGY

MASTER MODULE

96.6

177.8

111.2 182.6

SLAVE MODULE

62.6

177.8

69.7 182.6

106.1

166.0

33.6

PORTABLE TOUCHSCREEN DISPLAY

All units are in millimiters

SPECIFICATIONS

NUMBER OF CHANNELS	4 or 8 or 12 per module - max of 32 modules
SAMPLING RATE	250 Hz (rate given for a fixed channel), switching time 500 ms.
COMMUNICATION INTERFACES	EtherCAT®, Ethernet Interface 10/100 Base-T, USB, RS-232 and CAN FD.
COMMUNICATION PROTOCOL	Modbus TCP, SCPI, UDP, FTP
INPUT VOLTAGE AND FREQUENCY	8 V to 32 V
CONSUMPTION	Max 8W per module
DIMENSION & WEIGHT	177.8 mm (H) x 111.2 mm (W) x 182.6 mm (L) & 1.40 Kg
DIMENSION & WEIGHT (Additional Slave)	177.8 mm (H) x 69.7 mm (W) x 182.6 mm (L) & 0.900 Kg
STORAGE TEMPERATURE	-40 °C to 70 °C
OPERATING TEMPERATURE	-20 °C to 50 °C
HUMIDITY	95 % non condensing
INTERNAL STORAGE	32 Gigabytes per module (16 bytes per measure)
COMPATIBILITY	All Opsens Solutions' GaAs fiber optic sensors
OPTIONAL ACCESSORY	Portable touchscreen display