



NEW
IMPROVED RELIABILITY
IMPROVED TOTAL SYSTEM ACCURACY
6 YEAR WARRANTY

**HIGH RELIABILITY
HANDHELD SIGNAL CONDITIONER
FOR GAAS-BASED FIBER OPTIC
TEMPERATURE SENSORS**

Use with Opsens' GaAs (SCB) fiber optic sensors

Key Features

- Compact and rugged design with rubber boot casing protection
- High linearity and precision
- Improved total system accuracy ($\pm 0.8\text{ }^{\circ}\text{C}$)
- Internal reference to guaranty reliability
- Traceable calibration
- Versatile and easy to use with large LCD display
- 50 Hz sampling rate
- $\pm 5\text{ V}$ and RS-232 output interfaces
- 6 year warranty

Applications

- High voltage environments
- EMI, RFI and microwave environments
- Hot spot monitoring in Power transformers
- Microwave and food processing
- Nuclear and hazardous environments
- Civil engineering and geotechnical applications

Description

At the heart of the PicoP is the Opsens' Semiconductor Band Gap (SCBG) technology which provides accurate measurements using the temperature-dependent band-gap shift of a GaAs crystal.

Now fitted with an internal reference, the PicoP allows regular self verification and correction of its fully traceable calibration. The internal reference guarantees long term Total System Accuracy of $0.8\text{ }^{\circ}\text{C}$ in the most adverse conditions encountered in a transformer environment such as temperature variations, component aging, mechanical shocks and transformer vibrations.

The PicoP is equipped with a large visible LCD display and can be battery operated. It comes with a standard $\pm 5\text{ V}$ output and a RS-232 communication port for real-time data acquisition. The PicoP can be controlled directly using the front panel keypad or remotely using the standard RS-232 interface.

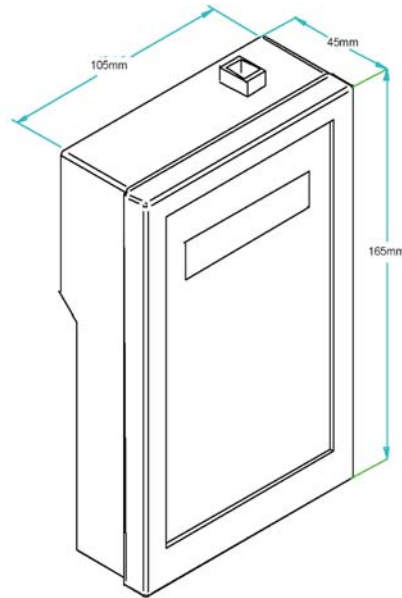
A rugged casing with a removable rubber boot provides good mechanical protection against intensive handling in tough environments.

The PicoP is a compact and portable signal conditioner to be used with any of Opsens' GaAs (SCBG) based fiber optic temperature sensors. With a 50 Hz sampling rate the PicoP delivers the performance needed for a wide range of critical measurement applications

Opsens

2014 Cyrille-Duquet Street
Suite 125
Quebec City QC
G1N 4N6 Canada

☎ 1.418.682.9996
☎ 1.418.682.9939
✉ info@opsens.com
www.opsens.com



Specifications

Number of channels	One
Compatibility	All Opsens SCBG fiber optic sensors (GaAs-based fiber optic temperature sensors)
Accuracy	$\pm 0.8\text{ }^{\circ}\text{C}$ (Total system accuracy over the full range including both signal conditioner and sensors errors — higher accuracy available on demand)
Resolution	$0.1\text{ }^{\circ}\text{C}$
Reliability	Internal reference validation
Sampling rate	50 Hz standard
Output interface	$\pm 5\text{ V}$ and RS-232 standard
Input power	9 to 24 VDC (AC/DC wall-transformer adapter included)
Consumption	1.8 W typical
Battery	9 V
Enclosure	Plastic casing with a removable rubber boot protection
Dimensions (without rubber boot protection)	45 mm (H) x 105 mm (W) x 165 mm (L)
Storage temperature	$-40\text{ }^{\circ}\text{C}$ to $70\text{ }^{\circ}\text{C}$
Operating temperature	$0\text{ }^{\circ}\text{C}$ to $45\text{ }^{\circ}\text{C}$
Humidity	95 % non condensing
Light source life span	>25 years MTBF

All specifications are subject to change without prior notification