



LOW-TEMPERATURE FIXED-MOUNTED INFRARED TEMPERATURE SENSOR WITH EMBEDDED DATA ACQUISITION/PROCESSING SYSTEM

MODEL 4500.1ZL

1891 North Oracle Road Tucson, AZ 85705 • P.O. Box 5276 Tucson, AZ 85703-0276
Toll Free: (800) 422-4342 • Phone: (520) 792-4545 • Fax: (520) 792-4546
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NEW MODEL 4500.1ZL

The NEW low-temperature Model 4500.1ZL infrared sensor has an embedded data logger for saving time/date stamped records to be downloaded into a computer as a batch at a later time.

The Model 4500.1ZL measures temperatures from -40°C to 100°C , with accuracy of $\pm 0.5^{\circ}\text{C}$. The standard output is RS-232C to the computer where the end-user can read the time/date stamped records in tabular form or as a graph.

The Model 4500.1ZL is an excellent choice when an application involves measuring the surface temperature of an object in the natural environment. It is small enough and lightweight enough to mount and run continuously or to measure temperatures at given intervals. It is also an excellent choice of sensor for OEM applications where a fixed-mounted sensor is desirable or necessary.

The Model 4500.1ZL is housed in a stainless steel body and comes with armored cable, making the instrument very rugged.

- EMBEDDED DATA
LOGGER/PROCESSOR
- STORES DATE/TIME
STAMPED RECORDS
- RUGGED STAINLESS STEEL
CONSTRUCTION
- STAINLESS STEEL CASE
- IDEAL FOR OEM
APPLICATIONS



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www.**EVEREST**INTERSCIENCE.com



LOW-TEMPERATURE FIXED-MOUNTED INFRARED TEMPERATURE SENSOR WITH EMBEDDED DATA ACQUISITION/PROCESSING SYSTEM SPECIFICATIONS

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TEMPERATURE MEASUREMENT

Scale Range:	-40°C to 100°C
Resolution:	0.1°C
Accuracy:	±0.5°C
Repeatability:	±0.1°C
Temperature:	All Functions in °C
Noise Effective Temperature:	±0.2°C

OPTICAL CONSIDERATIONS

Optical Configuration:	Robust, Aerospace-Quality, Double-Coated Zinc Selenide Optics per Military Specification MIL-C-13508
Spectral Pass Band:	8 < Wavelengths < 14 Microns
Sighting:	Line of Sight
Field of View:	Standard: 4° or 15°

OPERATING CONDITIONS

Operating Environment:	-20°C to 70°C or +14°F to 160°F, up to 99% Relative Humidity, Non-Condensing
Storage Temperature:	Same as Operating Environment Temperature

ELECTRICAL INTERFACE

Power Requirements	5V to 26V DC (Current Draw: 10 mA + Current Signal)
Output Signal:	Standard: RS-232C

GENERAL

Response Time:	0.1 Second
Emissivity Compensation:	Preset at 0.98 or End-User's Request
Operating Distance:	2 cm to 300 Meters
Dimensions:	2" Diameter by 3" Length
Mounting:	Ball & Socket Swivel Mount
Warranty:	One Year Limited Warranty on Parts & Labor

EMBEDDED DATALOGGER

Channel:	Single Channel
No. of Records Stored:	Up to 32,000 Date/Time Stamped Records

Everest Interscience, Inc., has a policy of continued design upgrade. Therefore, we reserve the right to change specifications without notice.