Extremely Stable Sensor with No Drift

The Luxtron One is a one-channel fiber optic thermometer, ideally suited for harsh chemical and high electrical noise environments. The Luxtron One comes with a documented National Institute of Standards and Technology (NIST) traceable calibration at 100°C, the most accurate calibration available. The Luxtron One does not drift and does not need recalibration, so you will be assured of accurate measurements for the life of the instrument and probe. The Luxtron One has a measurement range of -10°C to 200°C and an accuracy of 0.5°C.

The Luxtron One has an LCD display with user selectable °C or °F units and 0.1° or 1° resolutions. Other features include display hold and maximum and minimum readings. A USB port is built in the unit to allow continuous data collection through a computer.

NOTE: Due to power requirements, the Luxtron ONE is required to be plugged into a 110-240V AC power outlet to function.

Measure where Thermocouples Fail

The Luxtron One comes with a 2-meter Luxtron One fiber optic probe that is immune to electrical, magnetic (EMI), radiofrequency (RF) and microwave interference. Unlike metallic thermocouples, thermisters or RTDs, Luxtron's fiber optic probes can be used directly in high voltage, electrical, magnetic, and microwave fields without damage to electrical equipment or the fiber optic instrument. The Luxtron One probe is PFA Teflon® coated so it can be used in corrosive chemical environments and is 100% non-metallic, non-sparking for flammable and explosive environments.

Trusted Technology

With over 25 years of experience and thousands of instruments and probes in use daily, Luxtron is the most trusted name in the fiber optic thermometry industry.

Benefits

- EMI, RF, MRI and microwave immune
- Stable Sensor with No Drift
- Intuitive controls for ease of use
- USB connection for ease of data collection
- Portability for ease of transport and setup

Applications

- Monitoring of corrosive chemical reactions
- Monitoring of dielectric heating (RF and microwave) experiments
- Temperature testing of "live" electrical circuits
- Temperature monitoring of high voltage experiments
Specifications

Number of Channels: One
Measurement Range: -10°C to 200°C
Accuracy (Calibrated): <0.5°C within 50°C of calibration point with Luxtron One probe (Standard calibration 100°C)
Repeatability: 0.1°C RMS @ 4 samples/measurement
Measurement Rate: 1 Hz
Output Format: °C, °F or % signal strength
Input Power: 24V 5%, 300mA (Universal Power Supply included)
Digital Output: USB 2.0 mini plug
Dimensions: 86.1mm X 144.8mm X 39.4mm
Storage Temperature: -30°C to 75°C
Unit Operating Environment: 10°C to 50°C, 80% RH (max) non-condensing

Luxtron One Probe

Application: General purpose probe
Temperature Range: -10 to 200°C
Response Time: 1 second
Fiber Type: 200µm all-silica with PFA Teflon® jacket
Crush Resistance: Resist 25lbs on probe tip
Tensile Strength: 2 lbs tensile force on the ST connector
Length: 2 meters
Connector Type: ST

For information on other instruments or OEM development, please contact Luxtron sales at 408.727.1600 or email info@luxtron.com.