

Fiber Optic Winding Hot Spot Temperature Monitor and Temperature Controller for Power Transformers



Key Features

- Temperature Data Storage
- Choice of 2, 4, 6 or 8 Measurement Channels
- Programmable Setpoints and Relays have Individual LED Alarm Indicators
- System Fault Relay and Status Indicator
- Solid State LED Light Source (No Lamp Replacement)
- 3000V Surge Protection (IEEE C37.90.1-1989)
- Ring Lug Connectors for External Electrical Connections
- New PTFE Teflon® Jacketed Quality Probes
- Both Rugged and Quality Probes are Immune to RF and EMI
- No Drift, No Calibration Required
- Light source does not degrade and lasts the life of the transformer
- Modbus and DNP3 Protocol options available



More Control

The ThermAsset®2 controller is designed to measure transformer winding hot spots in real time and activate control of the cooling system. This allows for optimum operation of the transformer at safe load capacity during overload conditions.

Now available for use with our new Quality Probes™ and your choice of 2, 4, 6 or 8 measurement channels, the ThermAsset2 offers reliable and proven features of hot spot winding monitoring and control at a cost-effective price. It is based on our Luxtron WTS-22 Winding Temperature Monitor, which is considered world-wide as the industry standard for fiber optic power transformer winding temperature monitoring and control.

Power transformers often take the brunt of an overload condition and are the most likely to be damaged without proper control and protection. The drift-free, calibration-free nature inherent in our patented Fluoroptic® technology makes the ThermAsset2 ideally suited for use in transformers as a reliable and cost-effective means of protection for these valuable assets. The ThermAsset2 is designed for small, medium and large power transformers.

The ThermAsset2 offers the additional capability of controlling the cooling system (fans and pumps) and activating protective trips with real time measurements originating at the transformer winding. Unlike conventional top oil temperature measurements, which can lag hours behind in response time, fiber optics provide direct, real-time accurate measurements of the transformer winding suitable for dynamic load control or as a valuable input to calibrate thermal models.

The ThermAsset2 comes with six Form-C programmable relays and meets 3000V surge protection requirements (IEEE C37.90.1-1989). The ThermAsset2 system, including either Quality or Rugged probes, provides the most cost-effective comprehensive system in the market for winding hot spot measurements and protection and control of transformer auxiliary systems. With more than 25 years of fiber optic experience, LumaSense temperature measurement systems are considered the industry leader in fiber optic measurements. This experience is incorporated into the design of the ThermAsset2.

ThermAsset[®]2

Specifications

Number of Channels	2, 4, 6 or 8
Temperature Range	-30°C to 200°C
Accuracy	±2°C
Front Panel Display	Large 1" LED for Each Channel
Probe Signal Strength Readout	Single Push Button Accessible for All Channels
Input Power	Universal AC/DC [90-265VAC/DC]
Analog Output	4-20mA or 0-1mA
Serial Output	RS-232 and RS-485
Number of Relays	6 Form-C Programmable Cooling Control and Alarm Setpoints either Factory Programmed or via RS232 and RS482 from Computer
Self Diagnostic	Self Diagnostic and probe errors available on front panel and RS-232
Temperature Data Storage	Retains 300 days of data at 1 minute intervals on all channels and maximum temperature for each Channel Retained until Reset by User
LED Alarm Indicators	One for Each Relay
System Fault Relay	1 Form-C Relay
System Fault Status Indicator	2 LED's (Green=OK, Red=Faulty Condition)
Surge Protection	3000V (IEEE C37.90.1-1989)
Connectors	All Ring-Lug Terminals
Operating Temperature range	-40°C to +70°C
Storage Temperature	-30°C to +75°C
Probes	Accepts all Luxtron Quality and DipTip Rugged Probes [™]
Communications	Modbus and DNP3 options available

Complete ThermAsset Solution Should Include:

- ThermAsset2 Instrument
- 2, 4, 6 or 8 Quality or Rugged Fiber Optic Probes[™]*
- Tank Wall Adapter Plate* with Feedthroughs
- External Fiber Optic Extension Cables*
- Optional Tank Wall Cover Box*

* Indicates items sold separately

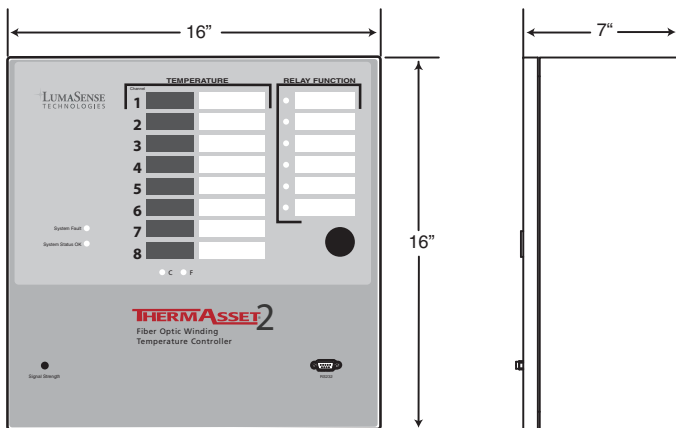
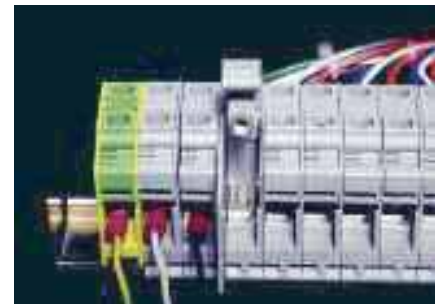
New Leak-proof Welded Tank Wall Penetrators with Bolt-on Tank Wall Plate



More flexible armored probes eliminate probe failure



Ring-lug connectors for external electrical connections



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