InsuLogix[®] T3 MULTI-CHANNEL TEMPERATURE MONITOR FIBER OPTIC TEMPERATURE SENSOR MEASUREMENT FOR INDUSTRIAL APPLICATIONS

Monitoring up to 16 measurement channels, the COMEM Insulogix® T3 offers reliable multichannel temperature monitoring.

TEMPERATURE MEASUREMENT APPLICATIONS

- Power Transformers
- Reactors and Generators
- Switch gear
- Industrial process monitoring
- Magnetic field environments, including MRI
- High voltage and plasma environments, including semiconductor manufacturing
- Remote monitoring and data logging
- Radiation environments

INSULOGIX® T MONITORING SYSTEM DESCRIPTION

- Gallium-Arsenide temperature sensing elements
- Choice of 2 to 16 measurement channels
- Large 7" TFT display
- Data recording in internal memory
- Software function allowing logic definition for channel to relay allocation
- Configurable with one alarm relay per channel
- Configurable with one analog output per channel
- Watchdog function
- System and sensor fault relay
- Modbus, DNP3, IEC61850, IEC60870-104 communication protocols
- Can be supplied with Weidmann Certified SmartSpacer™
- Complete immunity for fiber optic probes and sensors to RFI, EMI, NMR and microwave radiation
- No drift, no re-calibration required
- Comprehensive warranty plan

DESIGNED, BUILT, AND TESTED BY WEIDMANN

The InsuLogix® T3 hot spot fiber optic temperature monitoring system is designed and manufactured by COMEM Opticon, the global leader in transformer insulation design and manufacturing.

TECHNICAL SUPPORT

As global leaders in fiber optic sensors, Micronor Sensors and COMEM can provide unique and quality technical support and training to Endusers and OEMs for:





Full range of COMEM application-specific FOTEMP GaAs Sensors

AVAILABLE WITH WEIDMANN CERTIFIED SMART SPACER[®] All Weidmann Smart Spacer[®] products are certified as individual components that are integral to the liquid-immersed EHV and UHV insulation systems found in high power transformers on the electric power grid.



Certified Smart Spacer[®] with TST sensor- design example



micronor sensors

InsuLogix® T System Key Specifications

Instrument number of channels	4, 8, 12, or 16
Fiber optic protection	PTFE sheath, optional PTFE spiral wrap
Temperature measuring range	-40 °C to 200 °C
Accuracy	<±1 K
Resolution	0.1 K
Measuring time/channel	250 ms
Operating temperature	-20 °C to 70 °C
Light source lifetime	Life of transformer
EMI/RFI susceptibility	Immune
Operation in environment humidity	Up to 95% RH non-condensing
Display	Large 7" TFT display; Allows for system complete configuration
LED	Three operation, health and alarms status LEDs
Data recording	Event log; temperatures recording; capacity sufficient for life of transformer
Communication protocols	Modbus RTU; DNP3*; IEC61850*; IEC60870-104* *Optional
Analog outputs	4-20 mA
Relays	One per channel; System health relay comes standard; Relays are rated 5 A/240 V AC or 0.3 A/240 V DC or 8 A/24 V DCs
Power consumption	Maximum 40 W
Power supply	24 V DC; Can be supplied with power converter to match any requirement
Dimensions and weight	248,44 mm x 203.7 mm x 154.55 mm 1.9 Kg
Standards	Tested for: Vibration and shocks during operation and transportation; Earthquake; Humidity operation; temperature operation; ESD; Radiated emissions; conducted emissions; electrical fast transient/burst; surge; radiated and conducted RF immunity; power frequency immunity; voltage dips and interruptions; damped oscillations; insulation; impulse. Test reports available upon request
Warranty*	5 years; 10 years warranty plan available

*After system installation on transformer the warranty applies to InsuLogix® T3 controller only



INSULOGIX®T3 INSTRUMENT ORDERING CODE



Standard 16-Channel instrument ordering code with standard Modbus RS485 Serial and Ethernet interfaces + A2 Calibration Option: INSULOGIX-T3-16-P0-A

TS3 Series TEMPERATURE SENSOR ORDERING CODE

TS3-15MM-	02	
Length in Meters 02= 2m 05= 5m Other lengths upon request, Max length=20m		
FO Extension Cables also available from 3m to 1000m, DIST-C900-XX where XX=length in m		

DISCLAIMER - PLEASE READ CAREFULLY

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