FOTEMP T30 MULTI-CHANNEL TEMPERATURE MONITOR
FIBER OPTIC TEMPERATURE SENSOR MEASUREMENT FOR INDUSTRIAL APPLICATIONS

Monitoring up to 16 measurement channels, the COMEM FOTEMP T30 series 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

FOTEMP T30 Monitor

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

FOTEMP TS Series Temperature Probes

TS2p   TS3   TS4   TS5   TS5m   TST2

Full range of COMEM application-specific FOTEMP GaAs Sensors

AVAILABLE WITH COMEM SMART SPACER·
All 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.

DESIGNED, BUILT, AND TESTED BY COMEM

The FOTEMP T30 hot spot fiber optic temperature monitoring system is designed and manufactured by COMEM Opticon, the global leader in transformer instrumentation and safety devices.

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.

Certified Smart Spacer with TST2 sensor– design example

FOTEMP T30 System Key Specifications

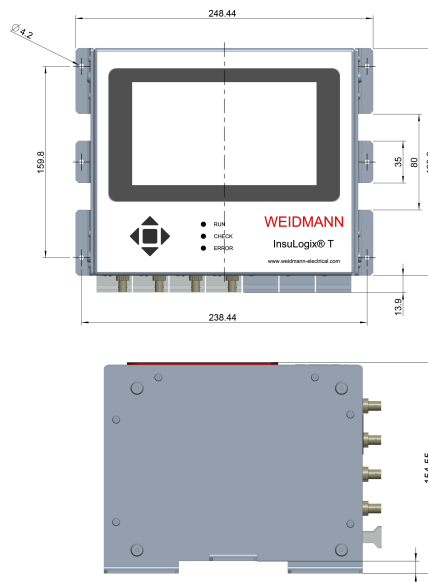|	
Instrument number of channels	4, 8, 12, or 16
Fiber optic protection	PTFE sheath, **optional** PTFE spiral wrap
Temperature measuring range	-40 °C to 200 °C
Accuracy	< ± 1 K
Resolution	0.1 K
Measuring time/channel	250 ms
Operating temperature	-20 °C to 70 °C
Light source lifetime	Life of transformer
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 **I**nterfaces and **P**rotocols	Standard=ModbusRTU/ModbusTCP Optional=DNP3, IEC61850; IEC60870-104
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 FOTEMP T30 controller only.
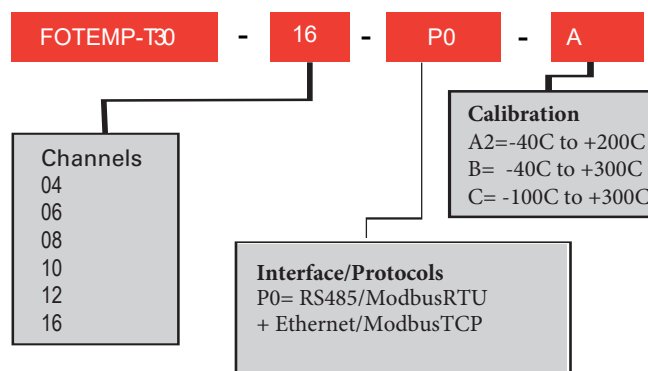
Specifications subject to change without notice.

98-OPTC-29_B1

FOTEMP T30 INSTRUMENT ORDERING CODE

FOTEMP-T30	-	16	-	P0	-	A

Channels
04
06
08
10
12
16

Interface/Protocols
P0= RS485/ModbusRTU
+ Ethernet/ModbusTCP

Calibration
A2=-40C to +200C
B= -40C to +300C
C= -100C to +300C

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

TST2J Series TEMPERATURE SENSOR ORDERING CODE

TST2J	02

Factory Stock Lengths in Meters
02= 2m
05= 5m
Other lengths upon request, Max length=20m

FO Extension Cables also available from 3m to 100m, DIST-C900-XX where XX=length in meters.

micronor sensors