

InsuLogix® T HOT SPOT TEMPERATURE MONITOR

TEMPERATURE MEASUREMENT FOR LIQUID FILLED TRANSFORMERS

Monitoring up to 16 measurement channels, the Weidmann InsuLogix® T offers reliable hot spot winding temperature monitoring, uniquely available with optional Certified Smart Spacer®.

TEMPERATURE MEASUREMENT APPLICATIONS

- EHV/UHV/HVDC Transformers
- Power Transformers
- Distribution Transformers
- Reactors and Generators
- On-Load Tap Changers
- Switchgear
- Bus Bars

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 Smart Spacer®
- 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® T hot spot fiber optic monitoring system is designed and manufactured by Weidmann, the global leader in transformer insulation design and manufacturing.

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 medium and large power transformers on the electric power grid.

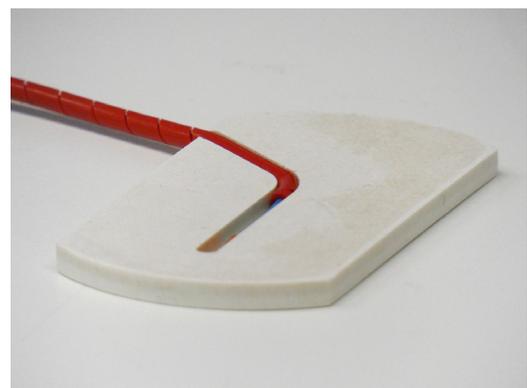


InsuLogix® T Monitor

All Smart Spacer® products are delivered with a certificate of compliance outlining that the assembly has been designed, manufactured, and tested according to a five-part Weidmann certification process as follows:

- Design
- Dielectric analysis
- Functional testing
- Manufacturing processes
- Quality

The Smart Spacer® is subjected to the most stringent tests available today in industry, thus allowing Weidmann to certify the product for use in HV and UHV insulation packages and applications.



Certified Smart Spacer® – design example

WEIDMANN EXPERTISE AND TECHNICAL SUPPORT

As global leader in transformer insulation design and manufacturing, Weidmann can provide unique and quality technical support and training to transformer OEMs for:

- Fiber optic temperature probes embedding process in transformer various insulation components
- Aspects related to determining the fiber optic probes integration with and impact on insulation structure

WEIDMANN

InsuLogix® T System Key Specifications

Instrument number of channels	2 to 16
Fiber optic protection	PTFE sheath, PTFE spiral wrap
Temperature measuring range	-40 °C to 200 °C
Accuracy	< ± 1 °C
Resolution	0.1 °C
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 complete system 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	Optional, one per channel; 4-20 mA or 0-10 VDC
Relays	Optional, one per channel; System health relay comes standard; Relays are rated 5 A/240 VAC or 0.3 A/240 VDC or 8 A/24 VDC
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 shock 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® T controller only

DISCLAIMER – PLEASE READ CAREFULLY

This catalogue is based on Weidmann's knowledge as of the date of its publication. Instructions and explanations, while substantially accurate, are non-binding. Illustrations, specifications and average values are subject to change, do not guaranty actual product characteristics or specifications and are intended only to indicate possible uses of the Weidmann products. Customers alone must determine whether the products are suitable for their particular use and intended application and assume all risk and liability for unsafe or improper use or application. Weidmann shall not be liable for catalogue printing or other errors, for changes to Weidmann products or for any defects in the technical data or use of any information contained in the catalogue. Weidmann reserves the right always to revise the catalogue at any time, without notification. No part of this catalogue can form any part of or amend or alter any provision of any contract with respect to the Weidmann products.

With respect to products in this catalogue, Weidmann disclaims all warranties, express or implied, including but not limited to, implied warranties of merchantability and fitness for a particular purpose.

Weidmann shall not be liable for direct, indirect, special, incidental or consequential damages arising out of the purchase or use of products in this catalogue.

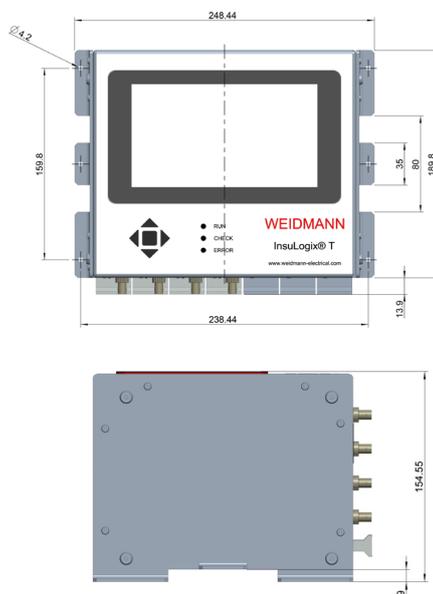
Rev. 06.22

Weidmann Electrical Technology AG
Rapperswil, Switzerland
T +41 55 221 41 11

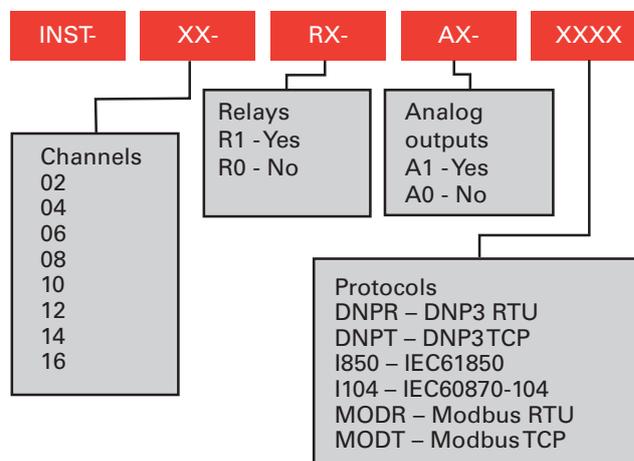
Weidmann Electrical Technology Inc.
St. Johnsbury VT, USA
T +1 802 748 8106

Weidmann Electrical Insulating Systems Co. Ltd.
Shanghai, China
T +86 21 3463 7680

www.weidmann-electrical.com

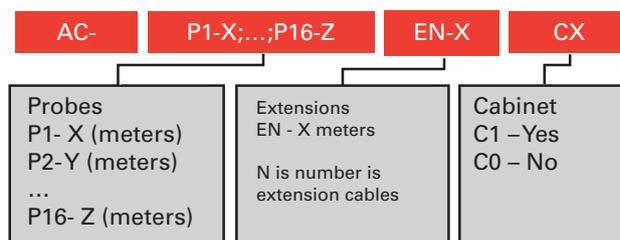


INSULOGIX® T INSTRUMENT ORDERING CODE



Standard instrument ordering code: INST-08-R0-A0-MODR

INSULOGIX® T ACCESSORIES ORDERING CODE



Example of code for 4ch instrument accessories:
AC-P1-5;P2-5;P3-8;P4-8;E4-10;C0