

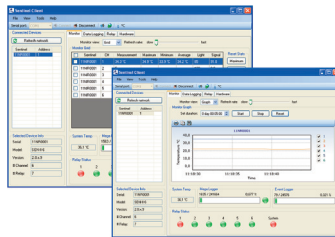


MULTI-CHANNEL FIBEROPTIC OPTIC MONITOR FOR ENERGY APPLICATIONS

Accurate, Reliable & Cost Effective Winding Hot Spot Temperature Monitoring Solution for Transformers and Reactors.

Description

The Nortech Sentinel II is a cost effective, flexible, multi-channel fiber optic signal conditioner designer for direct, accurate and real-time temperature monitoring.



The new Nortech Client Software allows full configuration and monitoring of your system.

It is now possible to consult the data logging information live on your computer without downloading the complete file.

The Sentinel II offers on-board self diagnostic for easier system installation.

For over 15 years, FISO Technologies Inc. has been the leader in Fiber Optic white light technology. The Sentinel II is using the temperature dependent bandgap shift of the GaAs crystal to provide fast and accurate measurement.

Inherent to the technology, the system will not drift nor require any recalibration for the life of the transformer.

Key Features

- Real-time Temperature Monitoring
- Robust Design
- Large LCD Screen
- Internal Memory
- Relays & Analog Output
- Nortech Client Software
- IEC 61850, IEC 61870-5-104 or DNP 3.0
- No Calibration Required
- Light Source Good for the Life of the Transformer
- 5 Year Warranty

Applications

- EHV/UHV/HVDC Transformers
- Power Transformers
- Distribution Transformers
- Reactors, Generators
- Load Tap Changer
- Switchgears
- Power Cables



Specifications

Number of channels	2, 4 & 6
Reading temperature range	-40 °C to 225 °C
Temperature accuracy	±1°C
Resolution	0.1°C
Sampling rate	1 Hz
Operating temperature	-20°C to 65°C
Storage temperature	-30°C to 85°C
Light source life	Life of the Transformer.
EMI/RFI susceptibility	Completely Immune
Humidity	95% RH Non-Condensing
Display	Large LCD screen

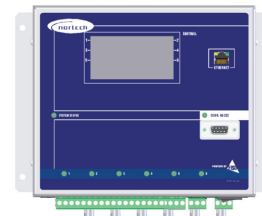
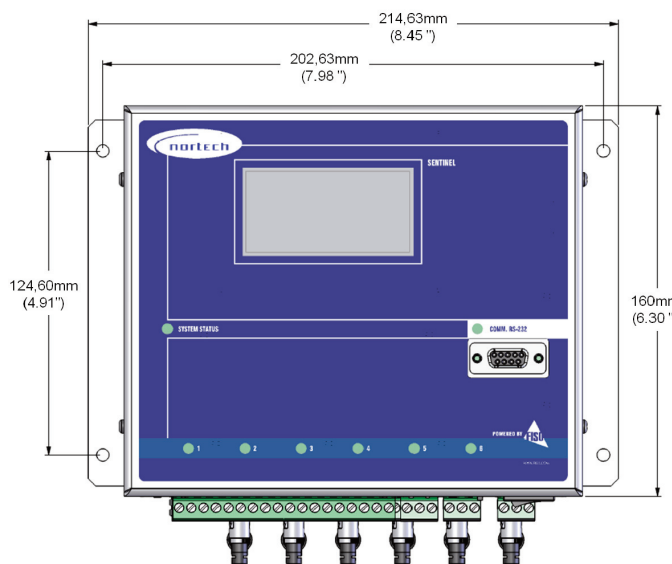
Communication port	RS-232,RS-485 & RJ45 (Optional)
Communication	Protocol Modbus, Nortech IEC61850*, IEC60870-5-104*,DNP3.0* TCP/IP/Modbus*, TCP/IP/Serial*
Analog output	4 -20 mA Configurable, 0 -1 mA also Available
Relays	6 Programmable Form-C
System fault relay	1 Dedicated System Fault Relay
System Status Indicator	LED
Memory	> 300 Days at 1 Measurement/Minute 262,000 Logs
Auto-Diagnostic	Light Level, Signal Level
Input Power	12-24 VDC (13W)

Environmental standards

IEC 600068-1	Environmental testing: General Test A: Cold Test B: Dry heat Test N: Change of temperature Test Db and guidance: Damp Test Cab: Damp heat, steady Vibration and shock
IEC 600068-2-1	
IEC 600068-2-2	
IEC 600068-2-14	
IEC 600068-2-30	
IEC 600068-2-78	
MIL-STD-810F	

IEEE C37.90.1-2002 (4000V) Surge protection	
EN 61326	
EN 55011 Class A (Industrial)	
EN61000-4-2	EN61000-4-5
EN61000-4-3	EN61000-4-6
EN61000-4-4	EN61000-4-11

*Optional



Sentinel with Ethernet Connection

