



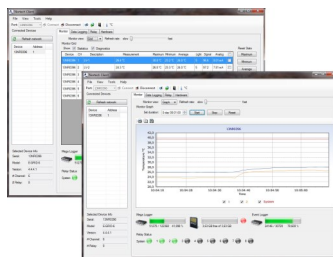
**New Monitor**  
Flexible & Cost Effective  
Fits your Requirements

**MULTI-CHANNEL FIBER-OPTIC  
MONITOR / CONTROLLER  
FOR ENERGY APPLICATIONS**

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

**Description**

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



The 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 EasyGrid LT is available as a full-featured monitor to match your requirements and it offers on-board auto-diagnostic for easier system installation.

Select the relay option and use it as a fully configurable controller with complete communication capabilities.

For over 20 years, FISO Technologies Inc. has been the leader in Fiber Optic white light technology. The EasyGrid-LT is using the temperature dependent bandgap shift of the GaAs crystal to provide fast and accurate measurement. Inherent to the technology, the system will neither 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 60870-5-104 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 or 8
Reading temperature range	-40 °C to 225 °C
Temperature accuracy	±1 °C
Resolution	0.1 °C
Sampling rate (per channel)	500 ms
Operating temperature	-20°C to 60°C
Storage temperature	-30°C to 85°C
Light source life	Life of the Transformer
Humidity	95% RH Non-Condensing
Display	Large LCD
Auto-Diagnostic	Light Level, Signal Level

\* Optional

Communication ports	USB, RS-485, RS-422 & Ethernet (RJ45)*
Communication Protocols	Nortech, Modbus (ASCII / RTU), Modbus TCP-IP*, IEC 61850*, IEC 60870-5-104*, DNP3.0*.
Analog Output	4 -20 mA, User Configurable
Relays	8 Form-C Relays, User Configurable Also Available without Relays
System fault relay	1 Dedicated System Fault Relay
System Status Indicator	LED
Memory	> 1 .8 Years at 1 Measurement / 1 Min. > 9 Years at 1 Measurement / 5 Min.
Input Power	24 VDC
Power consumption	15W (maximum)
Surge Protection	4000V (IEEE C37.90.1 -2002)

## Environmental standards

MIL-STD-810G	Transport vibrations
IEC 60255-21-1	Vibration: response , endurance
IEC 60255-21-2	Shock
IEC 60255-21-3	Seismic test

## Immunity standards

EN 61326	IEC 61000-4-6	IEC 60255-22-3
EN 55011	IEC 61000-4-8	IEC 60255-22-4
IEC 61000-4-2	IEC 61000-4-9	IEC 60255-22-5
IEC 61000-4-3	IEC 61000-4-11	IEC 60255-22-6
IEC 61000-4-4	IEC 61000-4-18	IEC 60255-5
IEC 61000-4-5	IEC 60255-22-2	IEC 60255-22-1

