APPLICATIONS

- Multi-point continuous sequential monitoring
- Civil engineering long-term field monitoring

TECHNICAL DESCRIPTION

The FODL-1600/3200 datalogger is a multi-channel universal fiber optic field datalogger ideally suited for performing multi-point temperature, pressure, strain and displacement measurements.

The FODL-1600/3200 datalogger is designed for applications that require continuous monitoring of a large number of measuring points. The FODL-1600/3200 datalogger is capable of measuring the absolute cavity length of Fabry-Perot fiber optic transducers with great accuracy, providing highly reliable measurements. It is compatible with fiber optic transducers, including temperature, strain, pressure, displacement and force and load. Roctest's transducers feature complete immunity to microwave and RF radiation, high-temperature operating capability, intrinsic safety and non-invasive use.

The FODL-1600/3200 has a 0.01% F.S. resolution (without averaging) and 0.025% F.S. precision. Use of a Flash ROM allows the user to easily upgrade the signal conditioner firmware. The FODL-1600/3200 has a non-volatile memory buffer that can store up to 50 000 data samples and datalogging sequences. Duration and other operational parameters are easily programmable using RS-232 remote control and user-friendly.

The FODL-1600/3200 datalogger comes standard in a NEMA-4 enclosure that accommodates 16 to 32 channels. The RS-232 I/O port is standard with the FODL-1600/3200 system, for control and data downloads.

FEATURES

- 16 to 32 channels
- 50 000 samples datalogger
- Programmable datalogger
- NEMA-4 enclosure
- Integrated modem for remote monitoring
- LED indicators for FODL-1600/3200 status

SPECIFICATIONS

Accuracy	0.025% of F.S.
Resolution	0.01% of F.S.
Number of channels	16 or 32
Sampling rate	20 Hz
Switching time	150 ms (in scan mode: time to switch between two channels)
Averaging	1 to 500 samples
Display	None
Operating mode	RS-232 (software included)
Datalogging	50 000 samples; programmable datalogger
Analog outputs	None
Communication	RS-232
Diagnostic	Yes
Upgradeability – firmware	Flash ROM upgradeable
Upgradeability – channels	No
Light life expectancy	~40 000 hours of continuous use (MTBF)
Fiberglass enclosure	NEMA-4 enclosure (other enclosures available)
System power requirements	
Voltage	9 to 15 V (AC/DC adapter included)
Minimum current capacity	500 mA
Consumption	5 W
Operating temperature	-20 to +40°C
Enclosure dimensions	445 x 495 x 225 mm (w x d x h)
Weight	17 kg

NOVA METRIX