

L-Scan 400 Interrogation Unit and Software Package



BASIC CHARACTERISTICS

- Easy to use cost-effective interrogator for FBG-based measurements with one channel
- Ideally suited for engionic Fiber Optics FBG sensors, due to the dynamic range and wavelength bandwidth
- Complete package including measurement Software package Sentinel
- Upgrade options with switch modules to 4, 16 or 36 measurement channels

PHYSICAL PROPERTIES

- Dimensions: 300x200x42mm
- Weight: 2,25kg
- Connector type: FC/APC
- Power consumption: 6W (9-18V) (universal adapter included)
- Interface: USB, ModBus RTU
- Packaging Cardboard box with dimensions: 364x351x140mm
Optional: ruggedized transportation case with dimensions: 555x428x211mm

SPECIFICATIONS

- Number of channels: 1
- Scanning frequency: 0.5Hz
- Wavelength range: 40nm (1528-1568nm)
- Operational Temperature range: -5°C to +50°C
- Storage Temperature range: -10°C to +60°C
- Dynamic range: 15dB
- Accuracy: ± 20 pm
- Repeatability (Precision) @ 25°C: 8pm
- Resolution: 1pm
- Laser Class: IEC 60825-1 1

All parameters tested with FBG's FWHM 200pm and 40% Reflectivity

BASIC CHARACTERISTICS

- Enhanced and easy-to-use data acquisition software developed for L-Scan interrogators, providing tools for management, data storage and analysis of FBG based sensing systems and communication with external control systems
- Provides tools for collection, storage, broadcasting, analysis of FBG based sensing data
- Is supplied free of charge with each L-line Scan interrogator

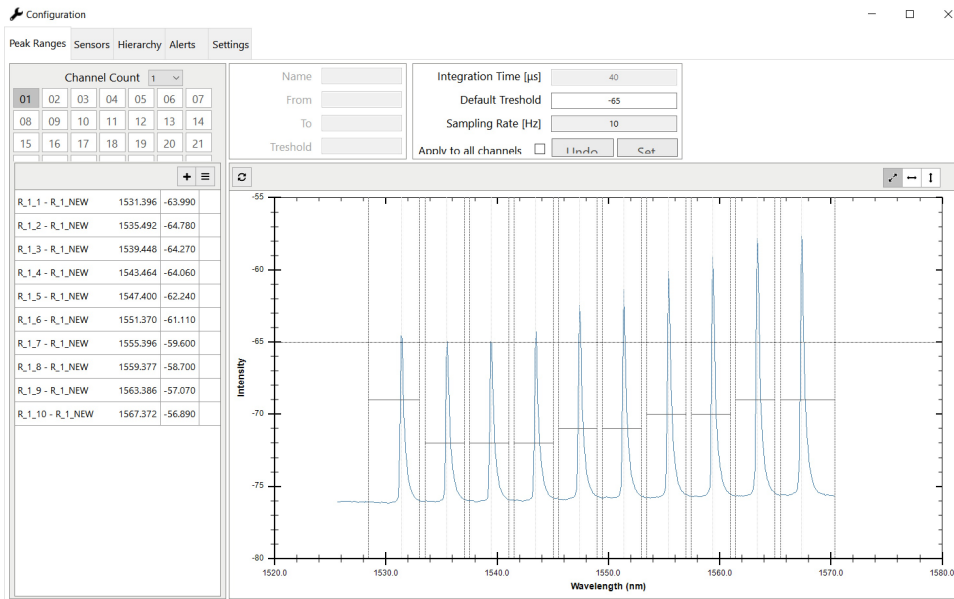
BENEFITS

- API for third-party applications: Measurements can be accessed from external applications using the API
- Auto-recovery after accidental power outage: All project settings are reloaded, monitoring runs again automatically
- Post-processing - Application of rolling functions on the sensor values: Floating average, Rolling minimum, Rolling maximum, Rolling standard deviation
- Notifications: Email notifications, Assignment of alert and warning limits
- Reliable identification of FBG's by defining their wavelength regions: Regions can be defined either manually or using the automated tool. Graphical tools for further tweaking of the wavelength regions. Each wavelength region can have its own threshold value
- Refined sensor definition interface: Referencing of values can be done in click, Advanced filtering of the sensor list, Alert and warning levels can be edited either manually or in graphical mode, Cloning of existing sensors
- Improved power budget: Subtraction of the noise level resulting in 18dB dynamic range

FEATURES

- Automatic recognition and configuration of the connected interrogator
- Sophisticated sensor template editor
- Works in static mode only
- Datalogging of Wavelength values and Sensor values
- Remote datalogging through FTP with downsampling option
- Export of interrogator and sensor configurations

PEAK DEFINITION



SENSOR CHART

