

# INTERROGATION UNIT

## L-Scan 836 Interrogation Unit and Software Package



### BASIC CHARACTERISTICS

- Easy to use cost-effective interrogator for parallel FBG-based measurements with four channels
- Ideally suited for Loptek FBG Sensors, due to the dynamic range and wavelength bandwidth
- Complete package including measurement Software package Sentinel

### PHYSICAL PROPERTIES

- Dimensions: 300x200x126mm
- Weight: 6,27kg
- Connector type: FC/APC
- Power consumption: 6W (9-18V) (universal adapter included)
- Interface: USB
- Packaging Cardboard box with dimensions: 364x351x140mm  
Optional: Ruggedized transportation case with dimensions: 555x428x211mm

### SPECIFICATIONS

- Number of channels: 36
- Scanning frequency: 0.5Hz
- Wavelength range: 80nm (1510-1590nm)
- Operational Temperature range: -5°C to +50°C
- Storage Temperature range: -10°C to +60°C
- Dynamic range: 30dB
- Accuracy:  $\pm 13\text{pm}$
- Repeatability (Precision) @ 25°C: 6pm
- 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

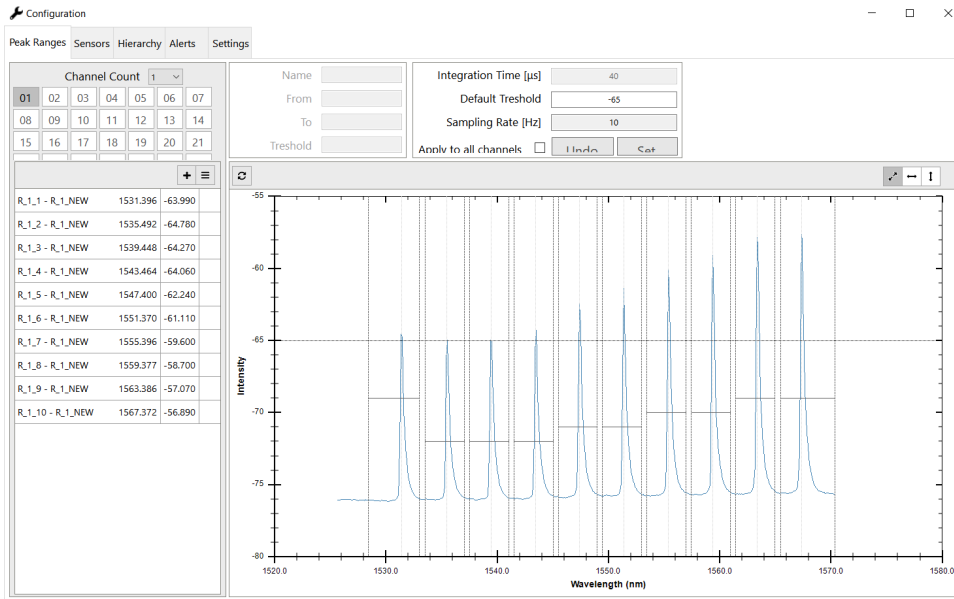
## BENEFITS

- 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

