Sensing Analysis Software | ENLIGHT

Features

- Simplified data acquisition from interrogation modules
- Optical wavelength conversion to engineering units and measurement quantities
- Wavelength provisioning tools
- Alarm configurations and alert options
- Graphical and schematic data visualization modes
- Automated archive data storage

Benefits

- Results in engineering units: easily translate wavelength information to the measurements of interest.
- Automatic temperature compensation: build transducers that include multiple FBG wavelengths for temperature compensation or special measurements.
- One tool, many applications: manage data from multiple sensor sites. Store configurations and settings.
- Intuitive data display: use charts, alarm limits, images and three distinct visual indicators to clearly communicate measurement status and condition of structure
- Always on, always reliable data archive; In software database visualization. Remote data access capabilities. No setup required.

Computer Requirements

- Windows OS, minimum 1GHz Pentium v, 1GB RAM, 30GB disk storage, .NET 4 framework
- Optional: Microsoft Silverlight™

Description

ENLIGHT Sensing Analysis Software is a powerful utility that is included with Micron Optics sensing interrogators. It provides a single suite of tools for data acquisition, computation, data-storage, and analysis of optical sensor networks. ENLIGHT combines the useful features of traditional sensor software with the specific needs of the optical sensor system, making it easy to optimize optical properties during the design and implementation phases of an optical sensor system. Intuitive data display, data saving, automatic data archiving, and additional graphing & data visualization features make ENLIGHT easy to use.
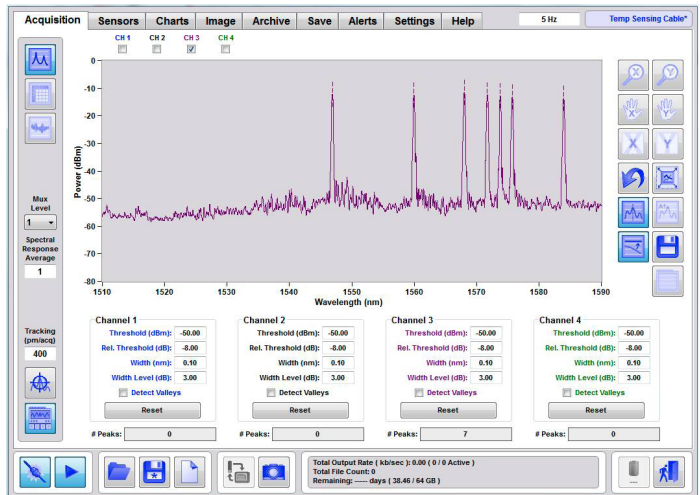
ENLIGHT's Data Archive provides a reliable baseline of measurement data by automatically storing active FBG and sensor elements in an archive from the moment they are defined. The Archive tab presents the user with a suite of indicators and controls used to plot FBG and sensor elements stored in the ENLIGHT data archive. The user can easily retrieve and view FBG and sensor elements on the archive chart in the Archive tab, via the ENLIGHT Remote Command Interface function (TCP commands), or through a user-developed web application based upon a RESTful HTTP interface for analysis.

ENLIGHT Sensing Analysis Software is included with all x25 and x30 core Optical Sensing Interrogators. It is also available pre-loaded on the Micron Optics sp125 or sp130 sensor processing units which interface directly with sm125 or sm130 Optical Sensing Interrogators.

Products displaying the "Micron Optics Tuned" logo include Micron Optics tunable technologies insuring high quality and performance.
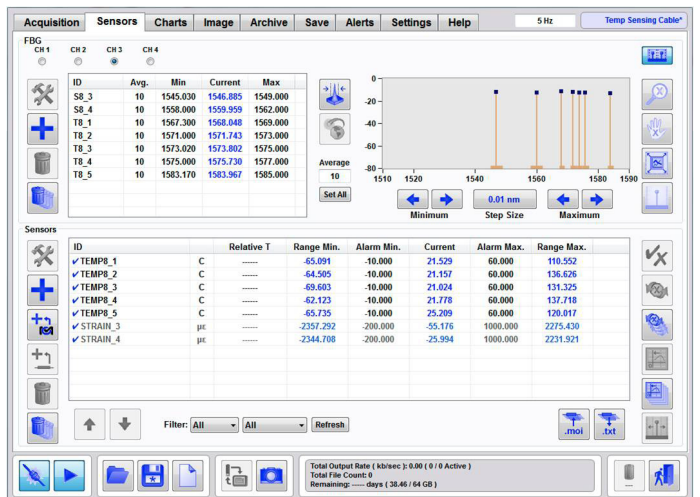
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Acquisition Tab

- Manage data connections
- Optimize and engage spectral peak detection
- View FBG spectral or peak data
- Configure module specific settings
- Enable channel multiplexing
- Display and save FFT information

Sensors Tab

- Define wavelength ranges for FBG peaks
- Perform averaging, referencing, and other data processing functions on FBGs
- Define sensors quantities (strain, temperature, displacement, pressure, or custom) based upon one or more FBG inputs
- Create calculated macro-sensor elements (e.g. combine two or more FBGs in one sensor value)
- Define sensor ranges, set warning and alarm limits
- Easily add Micron Optics sensors using pre-configured sensor templates with auto-insertion of standard constants

Charts Tab

- Combine like sensors together on the same chart
- Display up to four charts simultaneously, each with multiple sensor display capability
- Show/hide alarm limits where needed
- View historical data
- Synchronize multiple charts

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phone   404 325 0005
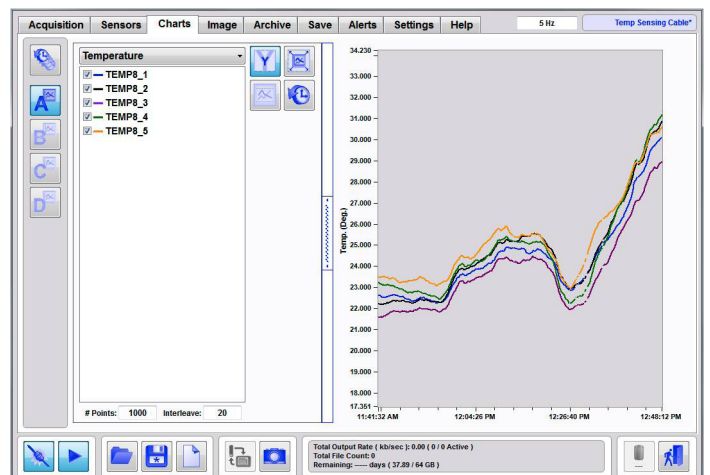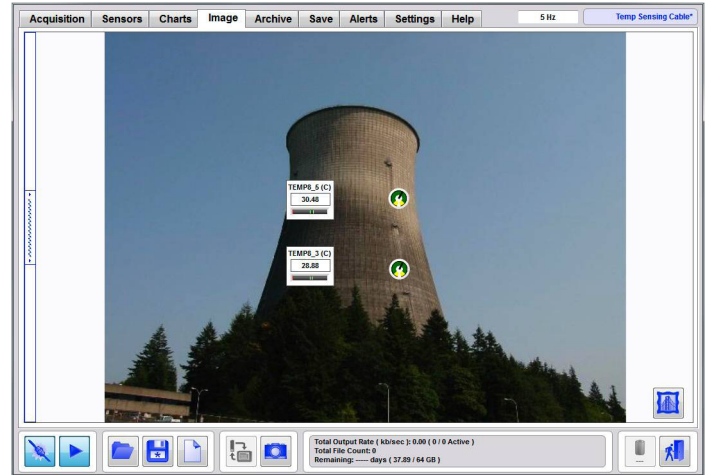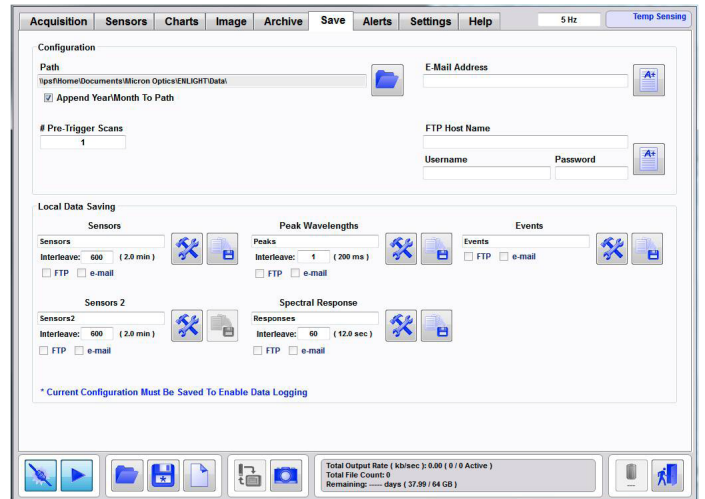fax   404 325 4082
www.micronoptics.com

Image Tab

- Import custom image for each application

- Choose from three types of sensor status indicators

- Position indicators directly on any image

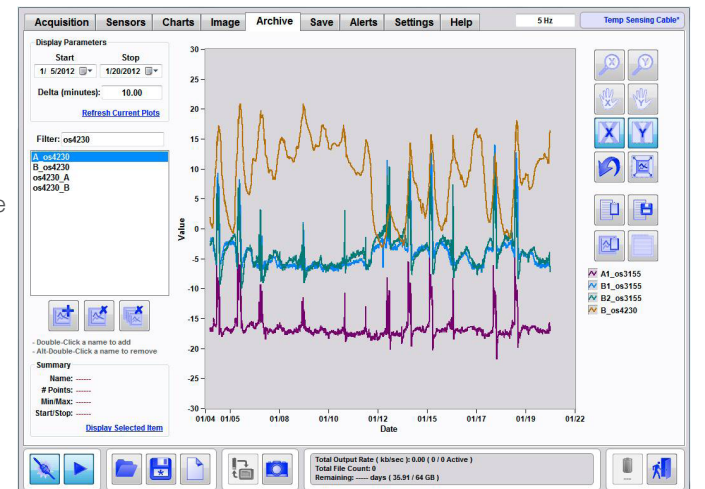- Receive fast visual updates on sensor status

Save Tab

- Save data for sensors, peak wavelengths, spectral responses and events

- Save data by stop/start time, scheduled, repeated or triggered events

- Select triggered acquisitions and include pre-trigger data

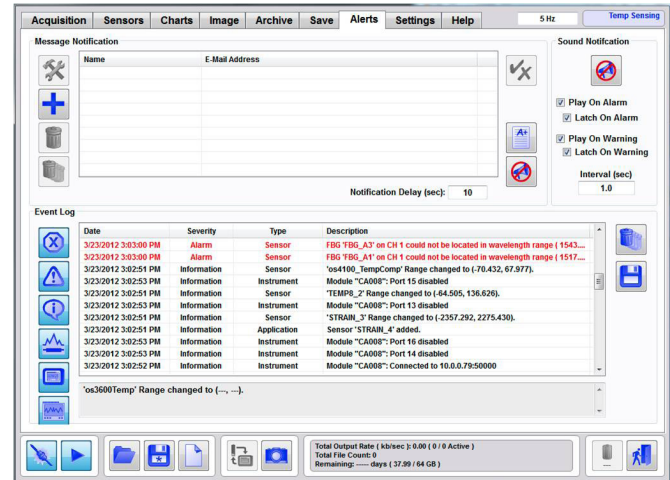- Manage files by time, date or file size

Archive Tab

- Automatically store active FBG wavelengths and defined sensor quantities

- View single/multiple Archive entries in user-adjustable chart

- Query Data Archive using ENLIGHT Remote Command Interface (TCP commands), RESTful interface (HTTP), or a Silverlight™ web interface

- Export the displayed chart or raw data to either a text file or the clipboard
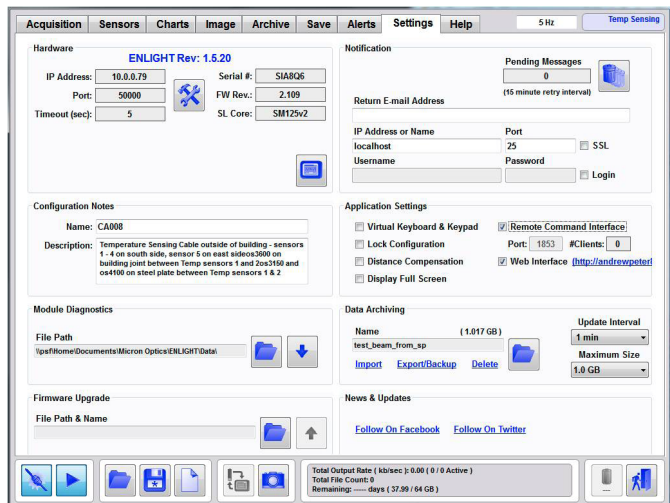
Alerts Tab

- Selectively view information, warnings and alarms associated with sensor, software and instrument events

- Set notification instructions by type and condition for multiple e-mail addresses

- Trigger relays to physical devices (using sp) for audible alarms, warning lights and lights

Settings Tab

- View and set instrument IP address and communication preferences

- Define e-mail notification settings

- Download on-board module diagnostic files

- Manage firmware upgrades

- Enable remote command interface to external applications, displays, analysis tools and control systems.

- Maximize display to full screen

Help Tab and Global Controls

- Access the complete ENLIGHT manual for full description of all software functions, hardware and instrument capabilities

- Global controls on any tab allow:
  - connect/disconnect from instrument
  - stop/start acquisitions
  - open/save configurations
  - download configurations from memory stick
  - capture screen shots and save

Remote Command Interface

- Create custom GUI's to display data, control processes and trip alarms

- Call or stream sensor data

- Run ENLIGHT in background

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