

# WaveRunIR<sup>™</sup>EXT-BOSS

The WaveRunIR-EXT™-BOSS, our state-of-the-art Extractive FTIR is now available: highly customizable, wall-mounted, and in a Class 1 Division 2 electrical classification enclosure.

### **Highly Customizable**

The WaveRunIR-EXT-BOSS is available with 3 different cell configurations, several different detector choices, and several filter choices which allows us to specify the device on behalf of the client to exceed a broad array of monitoring requirements. Thus, allowing a more robust choice of compounds to monitor, lower detection limits, and fast monitoring frequencies.



### Wall-Mounted Style

Extractive FTIR with external HMI. Computer, power, all integrated into a single cabinet.

#### Class 1 Division 2 Electrical Classification

With z-purge meeting Class 1 Division 2, our monitor can be permanently installed in your process area.

A 16-point sampling manifold (shown on the right) also wall-mounted separately near or adjacent to the analyzer enclosure. The combination allows for rapid measurements at each of the 16 sample points.

WaveRunIR-EXT-BOSS runs on our NuWave $^{\text{TM}}$  software package and data can be managed, organized and evaluated on our easy to use software packages, or we offer turnkey operation and maintenance. We simply deliver real-time data to your computer.

#### Tsunami™ Software

Tsunami™ is the Spectrum developed, state-of-the-art, data visualizaton and presentation package. This software is cloud based and is highly configruable to the client's requirements. The software was developed, in part, to conform to the SCAQMD Rule 1180 requiring public access capability to data genereated by industrial fence line monitoring systems. However, the client may choose to use the system solely for interna;, proprietary purposes. Notification and alarm functions can be configured for real-time text, email or voice messaging. Finally, the system can deliver real-time datat that organizes and disseminates information resulting from complicated algorithm beyond the concentrations from the UV-DOAS by combining concentrations with meteorological data to accomplish evaluations such as radial plume mapping.

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#### **About WaveRunIR-EXT-BOSS**

- Designed to couple to analysis cells of differing fixed pathlengths (1m and 10m pathlengths currently available)
- Analysis cells can be operated at room temperature up to 185°C or higher for special applications
- Rack-mountable design provides for easy transport and integration into standard 19" instrument racks
- Thermo Scientific iG50 Interferometer
  - Quietest-In-Class
  - Rugged, Proven Reliability
  - Real-Time Dynamic Alignment
  - 1/8 or Greater Wavenumer Resolution
  - State-of-the-Art Polaris IR Source
- 5-Year Warranty on Interferometer, Laser, and IR Source
- 1-Year Limited Warranty on parts
- Custom Light Sources, Optical Coatings/Materials, Detector Configurations

#### NuWave™ Software

NuWave™ is the Spectrum developed state-of-the-art software package that powers WaveRunIR-EXT-BOSS.

Nu-Wave's powerful, real-time, dynamic features include:

- Background generation algorithms
- Spectral shifting
- Convolution optimization
- Configurable alarms/notifications
- Meteorological integration
- Simultaneous Multi-Temporal spectral averaging
- SmartPath™ Machine Learning

Additionally, post-collection spectral utilities include:

- Straight-forward visual data validation
- · Visual method optimization and data reprocessing

### **Specifications**

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  - Data Frequency: 10 seconds or greater
  - Operating Temperature: 40° to 100°F
- Physical Specifications:
  - Base unit: 48" L x 15" W x 30" H | Weight: 270-290 lbs
  - Power: 7A, 11A, 15A (100-240 VAC)

# Ongoing Operation and Maintenance

As a company who not only builds analytical monitors but also uses them for short and long-term projects, we can provide exceptional operation and routine maintenance for your systems. Whether it be custom software applications, performing specialty projects, or the general upkeep of the equipment, the team at Spectrum Environmental Solutions will provide a full-service product. Additionally, we carry an extensive invenory of spare parts should there be instrument issues and can return the instruments to servuce with very little down time.



## How Can We Help You?

From FTIR, RAMAN, UV-DOAS, and optical remote sensing instrumentation, to real-time measurements, software integration and complete environmental consulting, Spectrum Environmental Solutions is a leading full service environmental solutions provider.