

Super-Fast Ocean FX Spectrometer



High Sensitivity, Fast Acquisition Speed and Enhanced Communications

Ocean FX delivers acquisition speed up to 4,500 scans per second, onboard processing for improved SNR and reduced data transfer time, and robust communications via USB, Gigabit Ethernet and Wi-Fi. Ocean FX is ideal for high-speed process applications such as QC sorting, measurement of fast events and flicker in lighting, and reaction monitoring. The Ocean FX is a modular spectrometer, allowing you to source the device at the component, subsystem or system level. Ocean FX fills a niche where high speed acquisition, robust communication protocols, and onboard processing are needed.





At a Glance

Spectral range: 200-1100 nm

(configurable within this range)

Optical resolution: Depends on configura-

tion; 0.8 nm (FWHM) w/600-line/mm

grating and 5 µm slit

SNR (single scan): 290:1

Dynamic range (single scan): 5000:1

Integration time: 10 µs-10 seconds

Scan rate (maximum): 4,500 scans/second*

Onboard processing: Buffer depth

(up to 50,000 spectra);

averaging (up to 5,000 spectra)

Thermal stability: 0.11 pixels/° C

Entrance slit: 5, 10, 25, 50, 100 or 200 μm

width slits

Input fiber connector: SMA 905 or FC

* Varies by performance of operating computer and system.

Spectrometer Features and Benefits

CMOS DETECTOR

Benefits

Sample Applications

Responsive from 200-1100 nm, with great sensitivity in the UV and NIR

 Biomedical applications (e.g., DNA absorbance)

• UV gas analysis

FAST ACQUISITION SPEED & ONBOARD AVERAGING

Benefits

Sample Applications

Acquire and process more spectral data in less time for faster, more reliable answers

Onboard averaging increases SNR and reduces cumulative data transfer times

- Food sorting and processing
- Flicker measurements
- Laser characterization
- High-intensity plasma measurement
- Measurements from transient events
- Testing and QC in production environments

BUFFERING AND TIMESTAMPING

Benefits

Sample Applications

Onboard buffer holds up to 50,000 spectra so you don't miss a single data point during measurement

- Chemical kinetics such as enzyme reactions in cells
- Reaction kinetics for drug development

VERSATILE COMMUNICATIONS MODULE

Benefits

Sample Applications

Operates via Gigabit Ethernet, Wi-Fi, RS-232 and USB

- Remote monitoring
- Portable instrumentation
 - Process applications
- OEM product development

For more information, please contact an Application Sales Engineer today.

