



# 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 and measurement of fast events and flicker in lighting. 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 configuration;

0.8 nm (FWHM) w/600-line/mm grating and

5  $\mu$ m slit

**SNR (single scan):** 290:1

**Dynamic range (single scan):** 5000:1

**Integration time:** 10  $\mu$ s-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/ $^{\circ}$ C

**Entrance slit:** 5, 10, 25, 50, 100 or 200  $\mu$ m

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	<ul style="list-style-type: none"> <li>Biomedical applications (e.g., DNA absorbance)</li> <li>UV gas analysis</li> </ul>

### FAST ACQUISITION SPEED & ONBOARD AVERAGING

Benefits	Sample Applications
<p>Acquire and process more spectral data in less time for faster, more reliable answers</p> <p>Onboard averaging increases SNR and reduces cumulative data transfer times</p>	<ul style="list-style-type: none"> <li>Food sorting and processing</li> <li>Flicker measurements</li> <li>Laser characterization</li> <li>High-intensity plasma measurement</li> <li>Measurements from transient events</li> <li>Testing and QC in production environments</li> </ul>

### 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	<ul style="list-style-type: none"> <li>Chemical kinetics such as enzyme reactions in cells</li> <li>Reaction kinetics for drug development</li> </ul>

### VERSATILE COMMUNICATIONS MODULE

Benefits	Sample Applications
Operates via Gigabit Ethernet, Wi-Fi, RS-232 and USB	<ul style="list-style-type: none"> <li>Remote monitoring</li> <li>Portable instrumentation</li> <li>Process applications</li> <li>OEM product development</li> </ul>

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