## Super-Fast Ocean FX Spectrometer



# High Sensitivity, Fast Acquisition Speed and Enhanced Communications

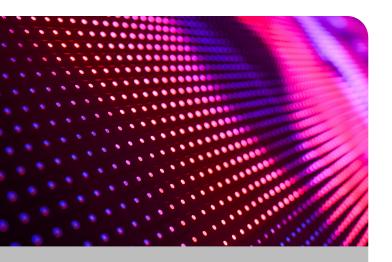
Ocean FX delivers acquisition speed up to 4,500 scans per second, onboard processing for improved SNR and reduced data transfer time, and robust communications via USB, Gigabit Ethernet and Wi-Fi. Ocean FX is ideal for high-speed process applications such as QC sorting and measurement

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.

US +1 727-733-2447 EUROPE +31 26-3190500 ASIA +86 400-623-2690

info@oceanoptics.com • www.oceanoptics.com





### 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 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	<ul><li>Biomedical applications (e.g., DNA absorbance)</li><li>UV gas analysis</li></ul>

#### **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	<ul> <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>

CMOS DETECTOR	
Benefits	Sample Applications
Onboard buffer holds up to 50,000 spectra so you don't miss a single data point	Chemical kinetics such as enzyme reactions in cells

 Reaction kinetics for drug development

CMOS DETECTOR		
Benefits	Sample Applications	
Operates via Gigabit Ethernet, Wi-Fi, RS-232 and USB	<ul> <li>Remote monitoring</li> <li>Portable instrumentation</li> <li>Process applications</li> <li>OEM product development</li> </ul>	



during measurement