

# MULTI Spectra

## Compact Ultra-High Resolution Multi-Channel Spectrometer

The MULTI Spectra gives you access to ultra-high resolution on 8 parallel channels having a simultaneous bandwidth of few nanometers. The MULTI Spectra can be used as a multi-channel multimode wavelength meter or to monitor the presence of several laser modes of one or several sources. Due to the robustness of the **SWIFTS™** TECHNOLOGY, this spectrometer is factory calibrated and will not require any user calibration, even after transportation.



### Key features

- > Ultra-high spectral resolution (Resolving power > 50,000)
- > Wavelength range : 630 - 1070 nm
- > 8 parallel channels
- > Simultaneous bandwidth of a few nanometers
- > Excellent absolute accuracy : 0.001 nm
- > Trigger
- > Long-life factory calibration
- > Robust (easy transport)
- > User-friendly interface or DLL interface
- > Compact size

### Applications

- > Laser control
- > Multimode laser monitoring
- > Science



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Jan. 2013 V1.0

### PRELIMINARY CHARACTERISTICS

Wavelength range	630 to 1070 nm
Optical Spectral Resolution	10 - 20 pm / 0.2 cm <sup>-1</sup> / 6 GHz
Number of channels	8
Wavelength bandwidth one measurement for each channel	9.6 cm <sup>-1</sup> 3.8 nm (@ λ <sub>min</sub> = 630 nm) 11 nm (@ λ <sub>min</sub> = 1060 nm)
Absolute Accuracy	0.001 nm (thermal regulation)
Aperture	Singlemode fiber N.A. 0.12
Analog Gain	Variable x3, x6
Sensitivity	Low dark noise
Wavelength Calibration	Factory calibration - T° calibrated
Integration time	200 ms to 40 s (200 ms step)
Maximum Measurement rate	5 Hz
A/D resolution	14-bits
Dimensions	8 cm x 12 cm x 20 cm
Power consumption	15 W - 625 mA @ 24 VDC
Communication	Gigabit Ethernet compliant GigE Vision® standard with GenICam SFNC standard
Fiber connection	FC/APC

### FUNCTIONALITIES

Wavelength meter functions	Multi-Peak detection and wavelength record
Start and stop continuous, acquisition	✓
Rafale mode	✓
Dark measurement	✓
Unit change (nm, cm <sup>-1</sup> , THz)	✓
Output Data	ascii, bmp, svg
Standard graphical utilities	zoom, markers...
Peak detection	✓
Trigger modes	Internal and external presets or configurable trigger mode (3 inputs, 2 outputs)
Interface with VIs LabView	✓
<b>SWIFTS™</b> TECHNOLOGY	Patents UJF/INPG/UTT/CNRS

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