COMPACT SPECTROMETER

COMPACTLINE

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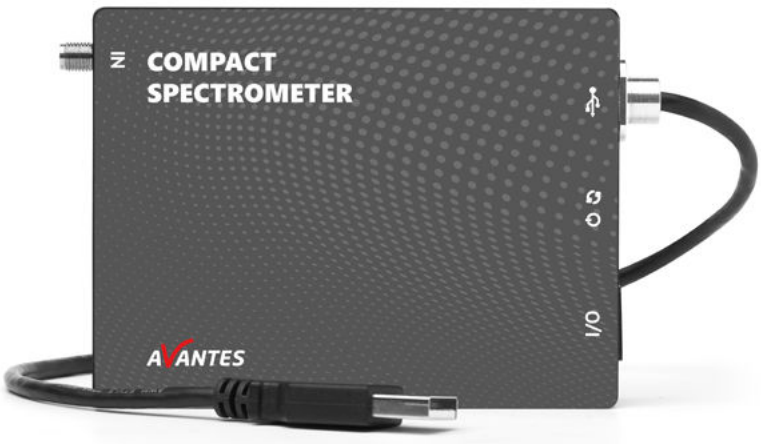


Meet the Compact spectrometer, a lightweight device optimized for the best performance in system integration. This device is compatible with Avantes light sources, accessories, and AvaSoft software.

POWERFUL.
VERSATILE.
COMPACT.

COMPACT SPECTROMETERS

To be suitable for everyone, we offer three variations to match your application's needs.

1. Compact Spectrometer
Available with 2048 or 4096 pixel detector, and USB-powered with strengthened pigtail

2. Compact Spectrometer Link
Allows you to use a different communication protocol (RS232 or SPI) for smooth integration

3. Compact Spectrometer Bench Only
The Bench Only let's you combine our optical engine with your own electronics

WHY CHOOSE COMPACT?

- Small size
- Improved optical bench design
- Smooth product or system integration
- Produced with AvaMation for unsurpassed inter-instrument reproducibility & scalability
- Superior stray light performance
- High signal-to-noise ratio
- USB-powered with pigtail
- Multiple variations available

APPLICATIONS & INDUSTRIES

The Compact spectrometers are suitable for a wide range of applications and industries, including;

Agriculture & Food
Food Sorting
Precision Agriculture

Semiconductor
Thin Film Coating
End-Point Detection

Environmental
Contamination &
Pollution Monitoring

(Bio)Medical
Blood Analysis
Cancer Detection

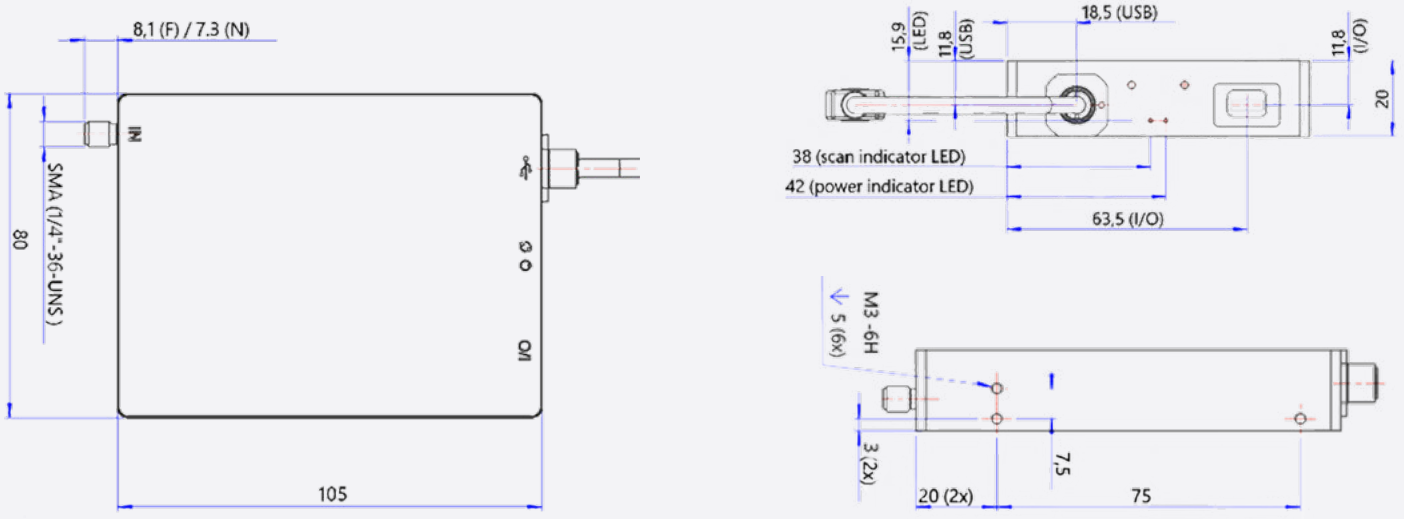
System Integration
Integrate into your
product or system

SPECIFICATIONS COMPACT SPECTROMETER

The information on this page relates to the USB-powered Compact spectrometer.

	Compact Spectrometer 2K	Compact Spectrometer 4K
Optical Bench	Symmetrical Czerny-Turner design, 75 mm focal length; spectrometer bench	
Wavelength range	190 - 1100 nm	
Stray light	0.1 - 1% (typical value 300l/mm, blaze 300 nm < 0.3%)	
Detector	HAM S11639, CMOS linear array, 2048 pixels (14x200 µm)	HAM S13496, CMOS linear array, 4096 pixels (7x200µm)
Signal/Noise	375:1	365:1
Dynamic Range	4500	
Dark noise	15 cnts	
AD converter	16-bit, 6 MHz	
Integration time	9 µs – 30 s	
Interface	USB 2.0 (480Mbps) / pigtailed (38cm) USB-A	
Sample speed on-board averaging	0.36 ms/scan	0.70 ms/scan
Data transfer speed	0.79 ms/scan	1.12 ms/scan
Digital I/O	5 bidirectional programmable I/O; 1 Analog out, 1 Analog in, 1x5V	
Dimensions, weight	105 x 80 x 20 mm, 277,5 grams	
Power supply	Default USB power, 500 mA	
Temperature range	5-55 °C	

DIMENSIONS



Dimensions in mm

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AVANTES
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