VARIUS™ SPECTROMETER

STARLINE

Meet the VARIUS™, a versatile spectrometer specifically designed to meet the needs of a wide variety of applications. The VARIUS™ is available with a 2k or 4k pixel detector, both of which are compatible with Avantes light sources, accessories, and AvaSoft software.

Additionally, the VARIUS™ spectrometer provides excellent price-to-performance ratio, making it a great choice for laboratories and research institutions seeking a powerful, reliable, and affordable spectroscopy solution.

PRODUCT VARIATIONS

To provide our customers with the best possible service, the VARIUS™ spectrometer is available in two product variations.

1. VARIUS™
Available with 2048 or 4096 pixel detector, USB3 high speed data transfer, and a replaceable slit to customize your throughput and resolution.

2. VARIUS™ OEM
Industrial OEM-version with a stainless steel electromagnetic compatible housing. Optimized for integration into your product or system.
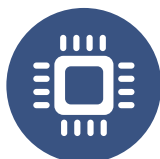
WHY THE VARIUS?

- Patented optical bench design

- Flexible performance through replaceable slit

- Versatile spectroscopy design

- Semi-automated production for unsurpassed inter-instrument reproducibility & scalability

- Superior stray light performance

- High signal-to-noise ratio

- Easy to operate with intuitive software

- Cost-effective instrument

APPLICATIONS & INDUSTRIES

The VARIUS™ is optimized for a wide variety of applications and industries. Including, but not limited to;

Agriculture & Food
Leaf measurements
Chlorophyll analysis

Semiconductor
Thin Film Coating
Coating Deposition

Lighting
Quality Control
Radiometry

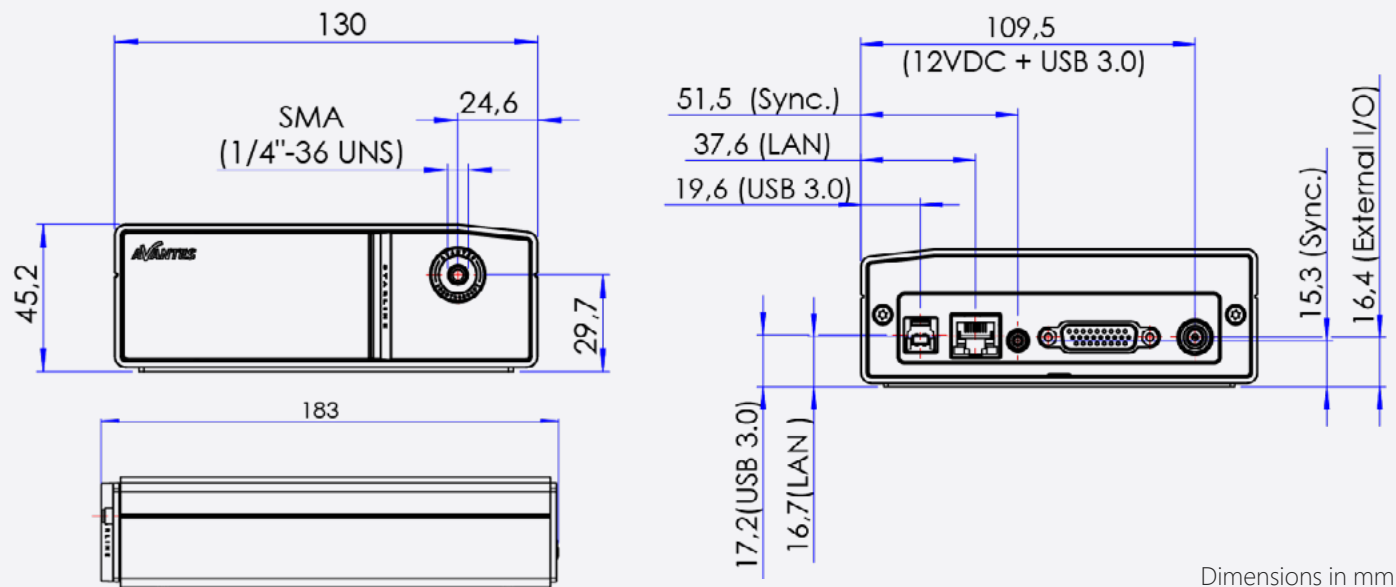**Laboratory**
Research and
Chemistry labs

System Integration
Integrate into your
product or system

SPECIFICATIONS VARIUS™

The dimensions of the VARIUS™ OEM differs from the data below. Scan the QR-code below for the full specifications of all variants.

	VARIUS™ 2K	VARIUS™ 4K
Optical Bench	Symmetrical Czerny-Turner design, 75 mm focal length; VRS bench	
Wavelength range	190 - 1100 nm	
Stray light	0.1 - 1% (typical value 300 l/mm, blaze 300 nm < 0.3%)	
Detector	HAM S11639, CMOS linear array, 2048 pixels (14x200 μm)	HAM S13496, CMOS linear array, 4096 pixels (7x200 μm)
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 3.0 high speed (5Gbps), Gigabit Ethernet (1 Gbps)	
Sample speed on-board averaging	0.38 ms/scan	0.70 ms/scan
Data transfer speed	0.38 ms/scan (USB3.0), 1.0 ms (ETH)	0.70 ms/scan (USB3.0), 1.31 ms (ETH)
Digital I/O	HD-26 connector, 2 Analog in, 2 Analog out, 13 Digital bidirectional, trigger, sync., strobe, laser	
Dimensions, weight	183 x 130 x 45,2 mm, 1068 grams	
Power supply	Default USB3 power, 500 mA or 12 VDC, 300 mA	
Temperature range	5-55 °C	

DIMENSIONS

Dimensions in mm

FULL PRODUCT OVERVIEW & SPECIFICATIONS

Scan the QR-code for the full product specifications, grating options, ordering options, and more. Discover the flexibility of the VARIUS™ and find your ideal variation.

AVANTES
MEMBER OF THE NYNOMIC GROUP