

RAMSES-ACC-VIS

Hyperspectral UV-VIS Irradiance Sensor

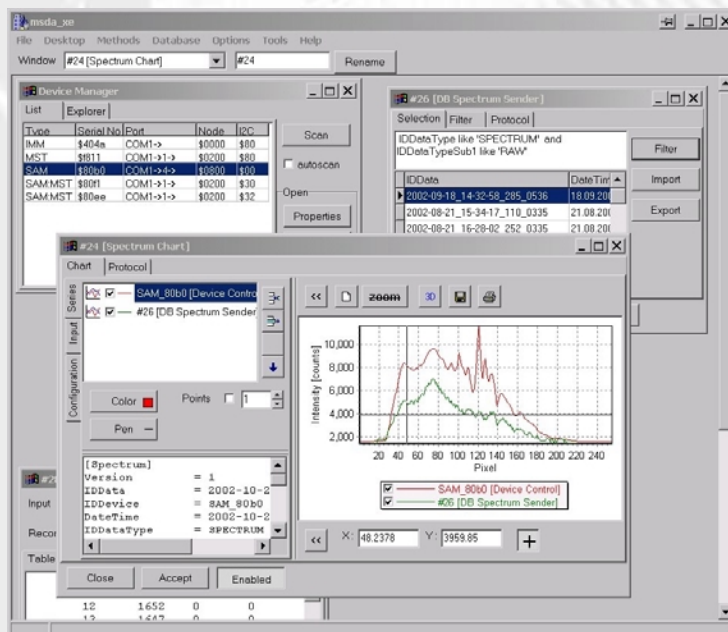
320..950 nm

Features:

RAMSES-ACC is a stand-alone highly integrated hyperspectral radiometer for the UV and/or VIS spectral range. Small size and very low power consumption make it suitable for hand-held and autonomous applications. The sensor is part of the **RAMSES radiometer family**, which is especially designed for combining precision hyperspectral light measurements with a maximum of flexibility.

Applications:

- monitoring
- water quality
- field measurements
- satellite data validation
- biology
- photosynthesis
- climatology



Sensors are delivered with our free graphical easy-to-use software for measurement, data display and storage.

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RAMSES-ACC

Features:

- stand-alone hyperspectral radiometer
- low power consumption
- small size
- autorange function
- free Windows-based acquisition and control software

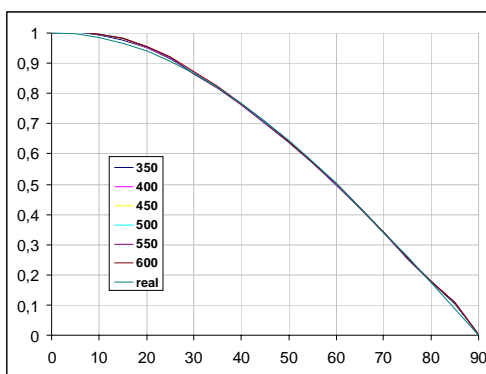
Accessories:

- power supply
- interface for simultaneous operation of up to 4 radiometers
- data logger units
- sensor frames

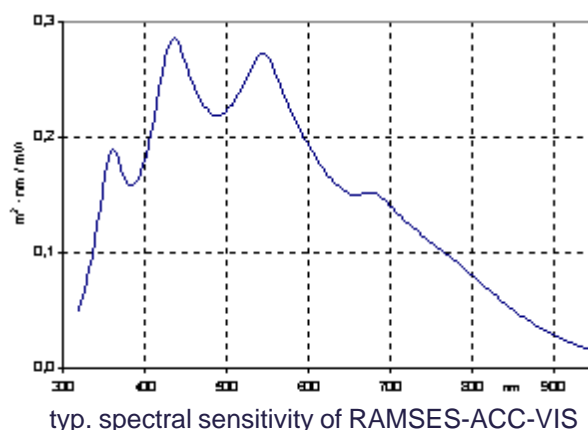
Technical specifications	
VIS	
optical	
wavelength range*	320 – 950 nm
detector type*	channel silicon photodiode array
spectral sampling*	3.3 nm/pixel
spectral accuracy*	0.3 nm
usable channels	190
typical saturation (4ms integration time)	10 W m ⁻² nm ⁻¹ (at 400nm) 8 W m ⁻² nm ⁻¹ (at 500nm) 14 W m ⁻² nm ⁻¹ (at 700nm)
typical NEI (8s integration time)	0.4 μW m ⁻² nm ⁻¹ (at 400nm) 0.4 μW m ⁻² nm ⁻¹ (at 500nm) 0.6 μW m ⁻² nm ⁻¹ (at 700nm)
detection	
collector type	cosine response
accuracy	better then 6 – 10% (depending on spectral range)
electrical	
integration time	4 ms – 8 sec.
telemetry data interface	RS-232
data rate (RS-232)	1,200 – 19,200 baud
power requirements	1.5 – 11 VDC 0.85 W (data acquisition active) 100 mW (interface active) 0.5 mW (stand-by modus)
connector	SUBCONN-Micro 5 pins, male connector
physical	
size	∅ 4.7 cm x 26 cm (without connector)
weight in air	< 1.0 kg (stainless steel/POM housing)
depth rating	300 m
operating temperature	-10 to +50°C

* specifications from Carl ZEISS, Germany

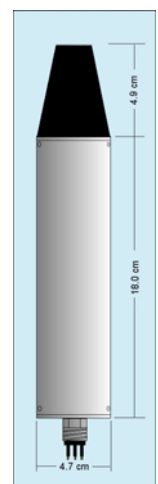
Specifications may change due to technical improvements without notification.



typ. cosine response at different wavelengths



typ. spectral sensitivity of RAMSES-ACC-VIS



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