

# RAMSES-ACC-UV

## Hyperspectral UVA/UVB Irradiance Sensor

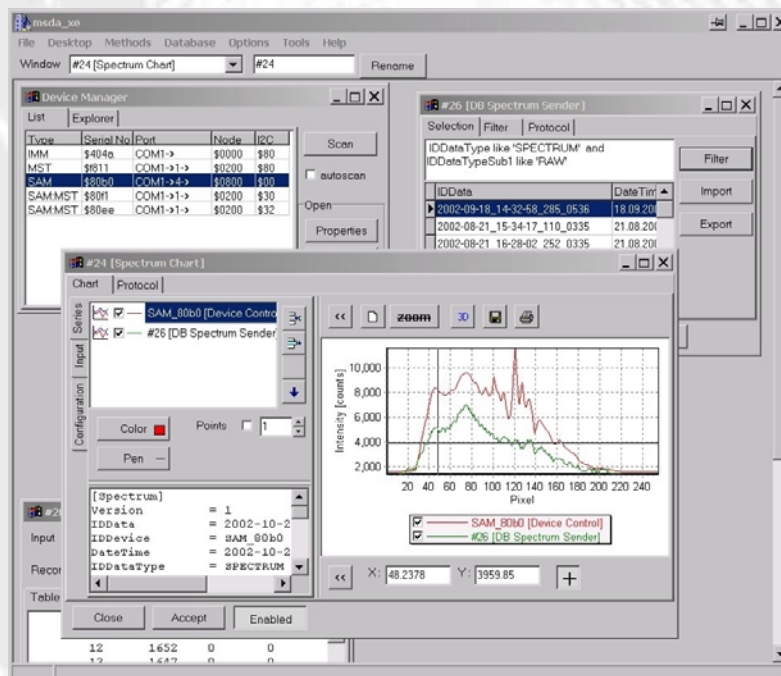
280..500 nm

### Features:

**RAMSES-ACC** is a stand-alone highly integrated hyperspectral radiometer for the UV 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
- UV measurement
- 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

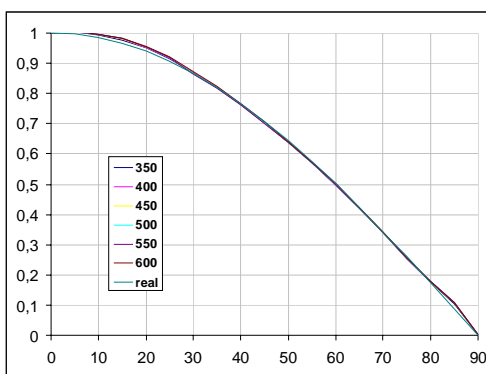
## Accessories:

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

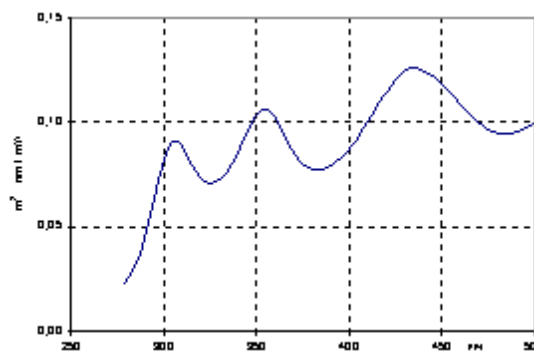
Technical specifications	
UV	
<b>optical</b>	
wavelength range*	280 – 500 nm
detector type*	channel silicon photodiode array
spectral sampling*	2.2 nm/pixel
spectral accuracy*	0.2 nm
usable channels	100
typical saturation (4ms integration time)	20 W m <sup>-2</sup> nm <sup>-1</sup> (at 300nm) 17 W m <sup>-2</sup> nm <sup>-1</sup> (at 360nm) 18 W m <sup>-2</sup> nm <sup>-1</sup> (at 500nm)
typical NEI (8s integration time)	0.85 μW m <sup>-2</sup> nm <sup>-1</sup> (at 300nm) 0.75 μW m <sup>-2</sup> nm <sup>-1</sup> (at 360nm) 0.80 μW m <sup>-2</sup> nm <sup>-1</sup> (at 500nm)
<b>detection</b>	
collector type	cosine response
accuracy	better then 6 – 10% (depending on spectral range)
<b>electrical</b>	
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
<b>physical</b>	
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

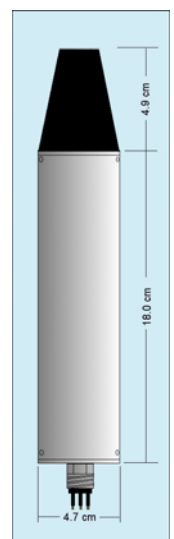
Specifications may change due to technical improvements without notification.



typ. cosine response at different wavelengths



typ. spectral sensitivity of RAMSES-ACC-UV



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