

Hyperspectral UV-VIS Radiance Sensor (RAMSES)



Attention:

The operation of the radiance sensor has to be announced the people in charge prior to the cruise.

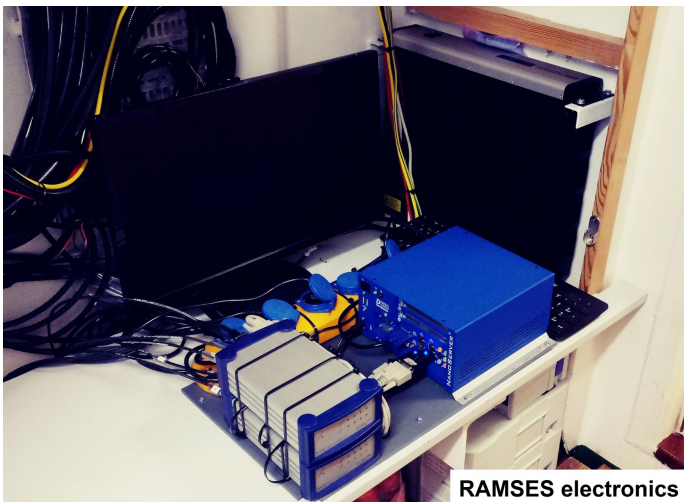
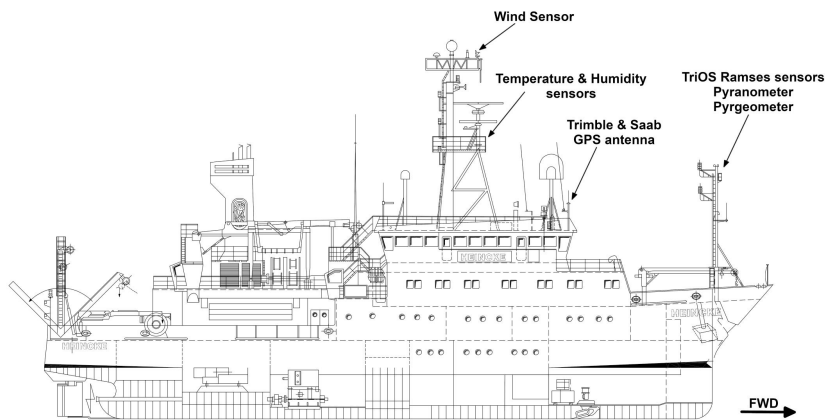
Summary

RAMSES radiometer are stand-alone and highly integrated hyperspectral radiometer for the UV, VIS and/or UV/VIS spectral range. On RV Heincke 1 Ramses-ACC-VIS irradiance sensor is installed on the foremast to measure downwelling solar irradiance. On the portside as well as on the starboard side of the foremast two Ramses-ARC Radiance sensors are installed, respectively. One of the Ramses-ARC sensors on each side is looking downwards the water surface while the other one looks upwards towards the sky.

Manufacturer	TriOS
Model	RAMSES ACC
Serial No.	n/a
Type	radiometer
REGISTRY-Link	REGISTRY (2368)



Locations on RV Heinckes compass platform and masts



RAMSES electronics

Contacts

Name	Institution	Role
Daniela Voss	Carl von Ossietzky University Oldenburg	Engineer In Charge, Data Scientist
Jochen Wollschlaeger	Universität Oldenburg	Data Scientist
Julia Oelker	Institute for Chemistry and Biology of the Marine Environment	Data Scientist

Components

Name	Model	Serial Number	REGISTRY-Link
RAMSES-ACC hyperspectral cosine irradiance meter	RAMSES-ACC	847e	REGISTRY (8656)
RAMSES-ARC hyperspectral radiance meters	RAMSES-ARC	847b	REGISTRY (8657)
RAMSES-ARC hyperspectral radiance meters	RAMSES-ARC	8474	REGISTRY (8658)
RAMSES-ARC hyperspectral radiance meters	RAMSES-ARC	8475	REGISTRY (8659)
RAMSES-ARC hyperspectral radiance meters	RAMSES-ARC	8478	REGISTRY (8660)

Position

Info	Electronics of the Ramses Sensor are located in the Lotgeraeteraum R202 on the tween deck. The sensors are installed on the foremast.
X	0.0 (no unit given) (no description given)
Y	0.0 (no unit given) (no description given)
Z	0.0 (no unit given) (no description given)

Parameter

Logged Parameters

Parameter	O2ARegistry Output Type	Unit
downwelling solar irradiance	diffuse radiation	W/m2
upwelling radiance	direct radiation	W/m2

Central geographical ship's position and time standard

Rawdata storage on board

DShip

Data archiving on land

Documentation

- [RAMSES brochure \(Factsheet, 2 MB\)](#)