

OSCAR

60SX00000

Benefits

- stand alone hyperspectral integrating cavity absorption meter (PSICAM)
- user changeable cavities in Ø 50 mm or Ø 80 mm
- flow through design
- low power consumption

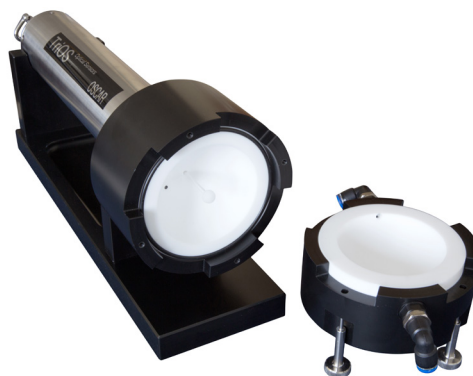
Applications

- water quality
- satellite validation
- algae blooms
- biology
- ocean optics



Online hyperspectral integrating cavity absorption meter

OSCAR is a new high-end absorption meter, following the principle of the well-known PSICAM (Point Source Integrating Absorption Meter). This principle allows to measure the real absorption spectra without the use of many assumptions, like other instruments on the market. OSCAR is suitable for laboratory use, but also for in situ profiling and moored applications. Internal datalogging function and low power consumption make the sensor suitable for autonomous measurements.



Technical Specifications

Measurement technology	light source	12 LED
	detector	High-end miniature spectrometer
		256 channels
		360 to 750 nm
		3.3 nm/pixel
Measurement principle		Absorption
Diameter		80 mm or 50 mm
Parameter		Absorption
Turbidity compensation		Yes
Data logger		2 GB
T100 response time		≤ 2 min.
Measurement interval		≥ 1 min.
Housing material		Stainless steel (1.4571/1.4404) or titanium (3.7035)
Dimensions (L x Ø)		450 mm x 135 mm (without hose connection)
Weight	stainless steel	~ 6.2 kg
	titanium	~ 5.5 kg
Interface	digital	Ethernet (TCP/IP)
		RS-232 or RS-485 (Modbus RTU)
Power consumption		≤ 4 W
Power supply		12...24 VDC (± 10 %)
Maintenance effort		Typically ≤ 0.5 h/month
Calibration/maintenance interval		24 months
System compatibility		Modbus RTU
Guarantee		1 year (EU: 2 years)
INSTALLATION		
Max. pressure	with SubConn	30 bar
	in cavity	1 bar more than ambient pressure, 2...4 L/min
Protection type		IP68
Sample temperature		+2...+40 °C
Ambient temperature		+2...+40 °C
Storage temperature		-20...+80 °C