

# Absorption and Attenuation Meter

## ac-9 Plus

The ac-9 Plus combines the power of the standard ac-9 dual path absorption and attenuation meter with the added capability of accepting and integrating data from the WET Labs' ECO-VSF sensors as well as a CTD. The data from these ancillary sensors is incorporated into the serial (RS-232) data stream. WETView, our host data collection and real-time display program, records and displays in real-time the data from the ac-9 Plus, as well as conductivity, water temperature, depth and optical backscattering. This powerful new tool will allow researchers to simultaneously collect the data needed to describe inherent optical property measurements of natural waters for effects such as salinity and temperature with one integrated package. It will also provide important information about the Volume Scattering Function (VSF).



The ac-9 Plus is available in several standard configurations: the ac-9 Plus + CTD, ac-9 Plus + ECO-VSF + CTD, and ac-9 Plus + CTD + ECO-VSF 3. It supports many popular CTDs including the SBE 19, 25, and 37, as well as CTDs from other manufacturers. Upgrades are available for existing ac-9 sensors.

- Memory 128 Mb standard (up to 192 Mb available)
- Host Interface Windows 95 and up graphical

### Specifications

Mechanical		Optical	
<i>Diameter</i>	4.1 in (10.4 cm)	<i>Spectral range</i>	410–715 nm
<i>Length</i>	30.1 (76.5 cm)	<i>Band pass</i>	10 nm/channel
<i>Weight in air</i>	14.5 lbs (6.6 kg)	<i>Pathlength</i>	10 or 25 cm
<i>Weight in water</i>	4.5 lbs (2.0 kg)	<i>Beam cross-section</i>	8 mm dia. (nominal)
<i>Pressure housing</i>	Acetal copolymer	<i>Linearity</i>	≥ 99% R <sup>2</sup>
		<i>Output wavelengths</i>	9
		<i>Accuracy</i>	+/-0.01 m <sup>-1</sup>
		<i>Precision</i>	+/-0.003 m <sup>-1</sup> @ 6 Hz; +/-0.001 m <sup>-1</sup> @ 1 Hz +/-0.005 m <sup>-1</sup> typ., 0.0012 m <sup>-1</sup> max @ 4 Hz
		<i>Dynamic range</i>	0.001–10 m <sup>-1</sup>
		<b>Environmental</b>	
		<i>Temperature range</i>	0–30 deg C
		<i>Depth rating</i>	500 m
		<i>Pressure sensor</i>	optional
<b>Electrical</b>			
<i>Input</i>	10–16 VDC		
	0.85 A @12V nominal;		
<i>Current draw</i>	50 mA logger standby		
<i>Serial output</i>	RS-232 or 485		
<i>Connector</i>	MCBH6M		
<i>Sample rate</i>	6 scans/sec., nominal		

Specifications are subject to change without notice.