

Logger version conductivity and temperature sensor

INFINITY-CT

A7CT2-USB
A7CT-USB

Temperature

Salinity



Description

Infinity-CT is an autonomously deployable data logger for temperature and salinity measurements. The conductivity sensor has a design of 7-electrode. The small package instrument ($\phi 54\text{mm} \times 255\text{mm}$, 0.7 kg in air) can be deployed and integrated the instrument virtually anywhere. The instrument has two depth rating versions for shallow water (200m, *A7CT2-USB*) and deep water (2,000m, *A7CT-USB*).

Sensor Specifications

Model Name	A7CT2-USB (Shallow version)*		A7CT-USB (Deep version)	
Parameter	Temperature	Conductivity	Temperature	Conductivity
Principle	Thermistor	7-electrode	Thermistor	7-electrode
Range	-3 to 45°C	2 to 70mS/cm	-3 to 45°C	2 to 70mS/cm
Resolution	0.001°C	0.001mS/cm	0.001°C	0.001mS/cm
Accuracy	$\pm 0.05^\circ\text{C}$ (3 to 31°C)	$\pm 0.05\text{mS/cm}$ (2 to 65mS/cm)	$\pm 0.01^\circ\text{C}$ (0 to 35°C)	$\pm 0.01\text{mS/cm}$ (2 to 65mS/cm)

*Ask if you need to measure conductivities in fresh water.

Logger Specifications

Model name	A7CT2-USB	A7CT-USB
Memory medium	miniSD card *waterproof & high speed type	
Data capacity	1GB provided as standard (miniSD card)	
A/D converter	16-bit digital conversion	
Measuring mode	Continuous mode, Burst mode	
Measuring interval	0.1 to 600 seconds	
Burst sampling interval	1 to 1,440 minutes	
No. of samples	1 to 18,000	
Battery	CR-V3 lithium / 3.3Ah (two maximum)	
Communication	USB 2.0 (Ver. 1.1 compatible)	
Current consumption	90mA	
Housing material	Titanium (grade 2)	
Dimensions	$\phi 54\text{mm} \times 255\text{mm}$ (including sensor card)	
Weight	Approx. 0.7kg in air, 0.3kg in water	
Depth rating	200m depth equivalent	2,000m depth equivalent

Drawing

