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## Conductivity and temperature sensor

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# INFINITY-CT

A7CT2-USB  
A7CT-USB/CAR/CAD

For the most various observations



- 7-electrode conductivity sensor
- Compact design
- Data logging (A7CT2/A7CT-USB): > 4 months at 10 min int.



JFE Advantech Co., Ltd.

# INFINITY-CT

**A7CT2-USB**  
**A7CT-USB/CAR/CAD**

## ■ Description

INFINITY-CT is an accurate conductivity and temperature meter making use of 7-electrode sensor. This 7-electrode generates an electric current only inside of the conductivity cell, minimizing external influences and improving data quality. Thus, precise salinity measurements are possible under bio-foul forming conditions. The compact design is suitable to be deployed/integrated with various sites/platforms. The instrument has two depth rating versions, shallow water (200 m, A7CT2-USB) and deep water (2,000 m, A7CT-USB and 1,000 m, A7CT-CAR/CAD).

## ■ Sensor specifications

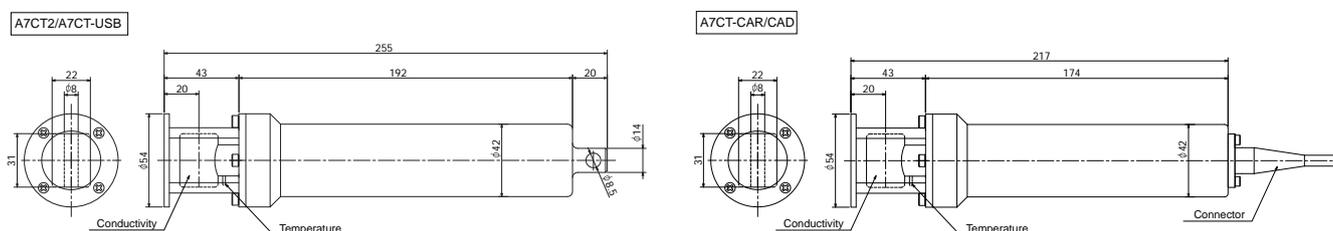
Model	A7CT2-USB (for shallow water)		A7CT-USB/CAR/CAD (for deep water)	
	Parameter	Conductivity	Parameter	Conductivity
Temperature	Thermistor	7-electrode	Thermistor	7-electrode
Principle	-3 to 45 °C	0.5 to 70 mS cm <sup>-1</sup> *	-3 to 45 °C	0.5 to 70 mS cm <sup>-1</sup> *
Range	0.001 °C	0.001 mS cm <sup>-1</sup>	0.001 °C	0.001 mS cm <sup>-1</sup>
Resolution	±0.05 °C (0 to 35 °C)	±0.05 mS cm <sup>-1</sup> *(28 to 65 mS cm <sup>-1</sup> )	±0.01 °C (0 to 35 °C)	±0.01 mS cm <sup>-1</sup> *(28 to 65 mS cm <sup>-1</sup> )
Accuracy				

\* Please contact us for applications in fresh water

## ■ Instrument specifications

	Data logger	Cable type
Model name	A7CT2/A7CT-USB	A7CT-CAR/CAD
Memory medium	1 GB miniSD card	-
Battery	CR-V3 3.3 Ah Lithium battery (maximum 2 batteries)	-
Operating voltage	-	DC 12 to 24 V
Communication	USB 2.0 (ver 1.1 compatible)	CAR: RS-232C, CAD: RS-485
Data transfer	-	38,400 bps
A/D converter	16 bit digital conversion	
Sampling interval	0.1 to 1.0 s (0.1 s increment), 1 to 600 s (1 s increment)	-
Burst sampling interval	1 to 1,440 min (1 min increment)	-
Number of samples per burst	1 to 18,000 samples	-
Power consumption	90 mA	60 mA
Dimensions	Φ 54 mm × 255 mm	Φ 54 mm × 217 mm (connector not included)
Weight	Approx. 0.7 kg in air, 0.3 kg in water	Approx. 0.6 kg in air, 0.3 kg in water
Depth rating	200 m (A7CT2-USB), 2,000 m (A7CT-USB)	1,000 m
Materials	Titanium (grade 2)	

## ■ Drawing



\*All specifications on this leaflet are subject to change without notice.

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