

## Conductivity and temperature sensor with wiper

# INFINITY-CTW

ACTW-USB/  
CAR/CAD

ISO9001



JQA0950

For long-term deployment



- 7-electrode conductivity sensor
- Compact design
- Wiper to prevent bio-fouling



JFE Advantech Co., Ltd.

# INFINITY-CTW ACTW-USB/CAR/CAD

## ■ Description

INFINITY-CTW is an accurate conductivity and temperature meter making use of 7-electrode sensor with a wiper to avoid bio-fouling. This 7-electrode generates an electric current only inside of the conductivity cell, minimizing external influences 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.

## ■ Sensor specifications

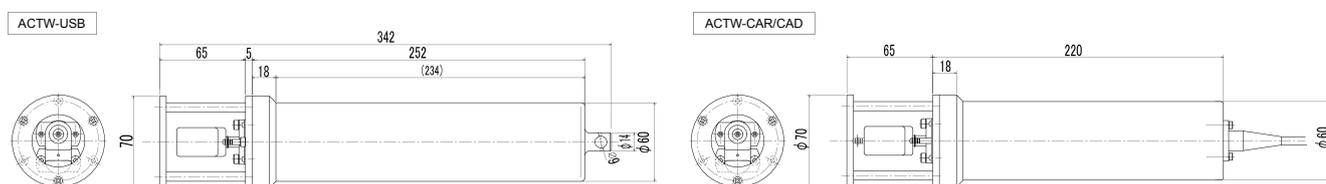
Model	ACTW-USB/CAR/CAD	
Parameter	Temperature	Conductivity
Principle	Thermistor	7-electrode
Range	-3 to 45 °C	0.5 to 70 mS cm <sup>-1</sup> *
Resolution	0.001 °C	0.001 mS cm <sup>-1</sup>
Accuracy	±0.01 °C (0 to 35 °C)	±0.01 mS cm <sup>-1</sup> * (28 to 65 mS cm <sup>-1</sup> )

\* Please contact us for fresh water conductivity measurements.

## ■ Instrument specifications

	Data logger	Cable type
Model	ACTW-USB	ACTW-CAR/CAD
Memory medium	1 GB miniSD card	—
Battery	CR-V3 3.3 Ah Lithium battery (maximum 4 batteries)	—
Operating voltage	—	DC 12 to 24 V
Communication	USB 2.0 (ver 1.1 compatible)	CAR: RS-232C, CAD: RS-485
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	110 mA	60 mA
Dimensions	Φ70 × 342 mm (including sensor guard)	Φ70 × 285 mm (connector not included)
Weight	Approx. 1.5 kg in air, 0.6 kg in water	Approx. 1.3 kg in air, 0.5 kg in water
Depth rating	500m depth equivalent	
Materials	Titanium (grade 2)	

## ■ Drawing



※ Dimensions are in mm. ※ All specifications on this leaflet are subject to change without notice.

 **JFE Advantech Co., Ltd.**

JFE Ocean & River Instruments Division

URL: <http://www.jfe-advantech.co.jp/>

Head Office 3-48 Takahata cho, Nishinomiya, Hyogo 663-8202  
 TEL. +81-798-66-1783 FAX. +81-798-66-1654  
 Tokyo Head Office JFE Kuramae Bldg. 2F, 2-17-4 Kuramae, Taito ku, Tokyo 111-0051  
 TEL. +81-3-5825-5589 FAX. +81-3-5825-5591  
 Tohoku Sales Office TM Bldg. 2F, 1-3-1, Ichiban cho, Aoba ku, Sendai, Miyagi 980-0811  
 TEL. +81-22-711-7535 FAX. +81-22-711-7534