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**Turbidity and temperature sensor for the deep ocean**

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# ATUD-USB

ISO9001



JQA0950

Measuring turbidity in deep water



- Long-term deployment in deep water
- Compact design
- 6000 m depth rating



**JFE Advantech Co., Ltd.**

# ATUD-USB

## ■ Description

ATUD-USB is an autonomously deployable data logger for long-term turbidity and temperature measurements in deep water. The temperature and turbidity sensors are highly stable, allowing for accurate data for long periods of time. Turbidity is detected through infrared backscattering and the sensor output has a good correlation with SS (Suspended Solid) over the range.

## ■ Sensor specifications

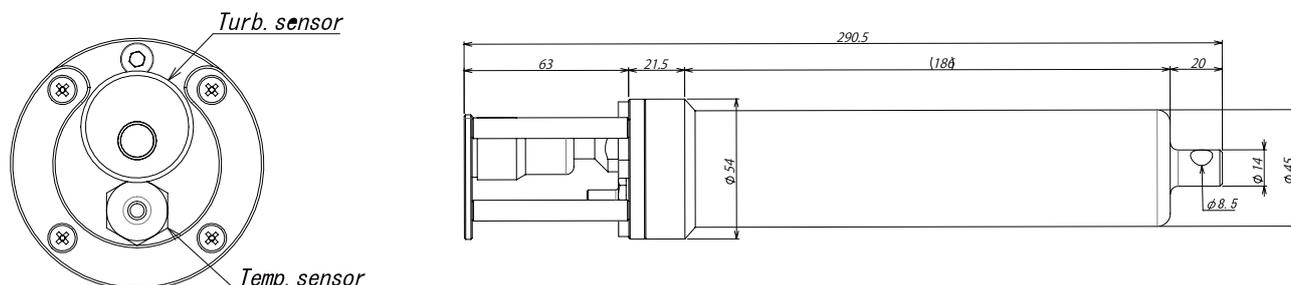
Model	ATUD-USB	
Parameter	Temperature	Turbidity
Principle	Thermistor	Infrared backscattering
Range	-3 to 45 °C	0 to 1000 FTU (Formazin reference)
Resolution	0.001 °C	0.03 FTU
Accuracy	±0.02 °C (0 to 35 °C)	±0.3 FTU or ±2%

\* The turbidity sensor is calibrated against formazin solution.

## ■ Instrument specifications

Model	ATUD-USB
Memory medium	1 GB miniSD card
Battery	CR-V3 3.3 Ah Lithium battery (maximum 2 batteries)
Communication	USB 2.0 (ver 1.1 compatible)
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 1440 min (1 min increment)
Number of samples per burst	1 to 18000 samples
Power consumption	110 mA
Dimensions	Φ54 × 290.5 mm (including sensor guard)
Weight	Approx. 1.2 kg in air, 0.8 kg in water
Depth rating	6000m depth equivalent
Materials	Titanium (Ti-6Al-4V)

## Drawing



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



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