Cable Type Sensor Series

This series consists of digital output sensors designed for integration into system products, such as telemeters. They offer the same performance as our logger-type sensors and provide highly accurate measurements through power supply and command control from the system side. The standard communication output is RS-485, but customization to RS-232C is available if needed. Additionally, the main unit features detachable cable connectors, making it easy to remove for maintenance.

Electro-Magnetic Current Meter

Sensor Specifications

Velocity	Direction	Temperature		
2-axis Electromagnetic Induction	Hall Element	Thermistor		
0 to ±500 cm s ⁻¹	0 to 360°	-3 to 45°C		
0.02 cm s ⁻¹	0.01°	0.001°C		
±1 cm s ⁻¹ or ±2%* ±2°		±0.02°C (3 to 31°C)		
ϕ 54 mm × 381 mm (excluding connector)				
	Velocity 2-axis Electromagnetic Induction 0 to ±500 cm s ⁻¹ 0.02 cm s ⁻¹ ±1 cm s ⁻¹ or ±2%* Ø54 mm × 381 mm (excluding conne	Velocity Direction 2-axis Electromagnetic Induction Hall Element 0 to ±500 cm s ⁻¹ 0 to 360° 0.02 cm s ⁻¹ 0.01° ±1 cm s ⁻¹ or ±2%* ±2° Ø54 mm × 381 mm (excluding connector)		

Communication Specifications		
Model	AEM-CAD	
Communication Interval	0.1 sec or more	
Preheat Time	3 sec	
Power Supply	DC 12 to 24 V	
Current Consumption	50 mA during measurement (using standard 20 m cable, with DC 12 V supply)	

Velocity calibration range is 0 to ±100 cm s⁻¹.

Fast Optical DO Sensors / RINKO II

Instruments Specifications

Parameter	DO	Temperature
Sensor Type	Optical	Thermistor
Range	0 to 200%	-3 to 45°C
Resolution	0.01%	0.001°C
Accuracy	Non-linearity $\pm 2\%$ of full scale (3 to 30°C)	±0.02°C (0 to 35°C)
Dimensions	Ø54 mm x 185 mm (excluding connector)	

Communication Specifications

Model	ARO-CAD
Communication Interval	0.5 sec or more
Preheat Time	5 sec
Power Supply	12 to 24 V DC
Current Consumption	35 mA (using standard 20 m cable, with DC 12 V supply)

Water Pressure Principle Wave Height Meter

Sensor Specifications

Parameter	Pressure	
Sensor Type	Semiconductor Pressure	
Range	0 to 0.25 MPa	
Resolution	0.00001 MPa	
Accuracy	Non-linearity ±0.14% FS Reproducibility 0.20% FS	
Dimensions	ϕ 70 mm × 162 mm (excluding connector)	

Communication Specifications		
Model	AWH-CAD	
Communication Interval	0.1 sec or more	
Preheat Time	1 sec	
Power Supply	upply DC 12 to 24 V	
Current Consumption	20 mA during measurement (using standard 20 m cable, with DC 12 V supply)	

Conductivity and Temperature Sensor with Wiper

Sensor Specifications

Parameter	Temperature	Electrical Conductivity	
Sensor Type	Thermistor	7-Electrode Type	
Range	-3 to 45°C	0.5 to 70 mS cm s ⁻¹ *	
Resolution	0.001°C	0.001 mS cm s ⁻¹	
Accuracy	±0.01°C (0 to 35°C) ±0.01 mS cm s ^{-1*}		
Dimensions	ϕ 70 mm × 285 mm (excluding connector)		

Calibration is performed using seawater (range of 28 to 65 mS/cm) Please contact us if you intend to use it in freshwater.

Communication Specifications

Model	ACTW-CAD
Communication Interval	0.5 sec or more
Preheat Time	15 sec
Power Supply	DC 12 to 24 V
Current Consumption	50 mA during measurement (using standard 20 m cable, with DC 12 V supply)



Harmful Plankton Detector with Wiper

Sensor Specifications

Parameter	FSI	Chlorophyll	Temperature
Sensor Type	Fluorescence Intensity Ratio	Fluorescence	Thermistor
Range	-	0 to 400 ppb (Uranine reference)	-3 to 45°C
Resolution	-	0.01 ppb	0.001°C
Accuracy	Repeatability ±0.05 (0 to 200 ppb)	Non-linearity ±1% FS (0 to 200 ppb)	±0.02°C (3 to 31°C)
Dimensions	ϕ 70 mm × 176 mm (excluding cable)		

FSI must be calculated using the individual outputs of F670nm and F690nm from this sensor. Please refer to the user manual for details.

Communication Specifications

Model	AHIW2A-CAD
	1 sec or more
Preheat Time	10 sec
Power Supply	DC 12 to 24 V
Current Consumption	120 mA (using standard 20 m cable, with DC 12 V supply)

Chlorophyll and Turbidity Sensor with Wiper

Sensor Specifications				
arameter	Chlorophyll	Turbidity	Temperature	
ensor Type	Fluorescence	Infrared Backscatter	Thermistor	
ange	0 to 400 ppb (Uranine reference)	0 to 1,000 FTU (Formazin reference)	-3 to 45°C	
esolution	0.01 ppb	0.03 FTU	0.001°C	
ccuracy	Non-linearity ±1% FS (0 to 200 ppb)	±0.3 FTU or ±2%	±0.02°C (3 to 31°C)	
imensions	ϕ 70 mm × 173 mm (excluding connector)			

A		0	
1 ommun	ICATION	Shorific	ations

Model	ACLW2-CADU
Communication Interval	0.1 sec or more
Preheat Time	10 sec
Power Supply	DC 12 to 24 V
Current Consumption	30 mA during measurement (using standard 20 m cable, with DC 12 V supply)

Wide Sensing Range Turbidity Sensor with Wiper

Sensor Specifications			Communication Specifications			
Parameter	Medium Concentration Turbidity	High Concentration Turbidity	Pressure	Temperature	Model	ATU75W2-CAD
Sensor Type	Infrared Backscatter (LED)	Infrared Backscatter (Optical Fiber)	Semiconductor Pressure	Thermistor	Communication Interval	0.1 sec or more
Range	0 to 1,000 FTU	0 to 100,000 ppm	0 to 0.25 MPa	-3 to 45°C	Preheat Time	10 sec
Resolution	0.03 FTU	2 ppm	0.00001 MPa	0.001°C	Power Supply	DC 12 to 24 V
Accuracy	±0.3 FTU or ±2%	±10 ppm or ±5%	Non-linearity ±0.14% FS, Repeatability 0.20% FS	±0.02°C (3 to 31°C)	Current Consumption	40 mA during measurement (using standard 20 m cable, with DC 12 V
Dimensions	Ø70 mm × 238 mm (excluding connector)					

Optical DO Sensor with Wiper

Sensor Specifications

Parameter	DO	Temperature				
Sensor Type	Optical	Thermistor				
Range	0 to 200%	-3 to 45°C				
Resolution	0.01%*	0.001°C				
Accuracy	Non-linearity ±2% FS	±0.02°C (3 to 31°C)				
Dimensions	ϕ 70 mm × 173 mm (excluding connector)					

Communication Specifications				
Model	AROW2-CADU			
Communication Interval	0.5 sec or more			
Preheat Time	10 sec			
Power Supply	DC 12~24 V			
Current Consumption	40 mA during measurement (using standard 20 m cable, with DC 12 V supply)			