

UAC-400F

Forward-Looking Sonar 400kHz



Technical Specifications

SPECIFICATIONS	
Operating Frequency	400kHz
Detection Distance	Up to 200 m
Blind Zone	0.2 m @ 100m
Maximum Number of Beams	512
Distance Resolution	7.5mm @ 1m; 20 mm @ 10m; 75 mm @ 100m
Horizontal Beamwidth	1°
Horizontal Field of View	135°
Horizontal Beam Resolution	0.26°
Vertical Field of View	10° / 20°
Dimensions	234mm (L) × 200mm (W) × 90mm (H)
Weight	5.1 kg (in air) / 2.8 kg (in water)
Maximum Operating Depth	1000m
Continuous Working Time	≥24h
Operating Temperature	-5℃ ~ +35℃
Storage Temperature	-20℃ ~ +50℃
Refresh Rate	Up to 20 Hz
Power Supply Range	DC20V-30V
Maximum Power	35W
Idle Power Consumption	8.5W
Power Requirement	24V, rated current ≥3A
Built-in Sensor	Temperature and Humidity Sensor
Special Features	Vertical Installation Angle Compensation: ±10° (-10° to +10° range) Pulse-per-Second (PPS) Input and Synchronous Output

waterproof cable

A 2-meter platform-mounted watertight short cable (model: SW132) is provided as standard. An optional 10-meter watertight long cable (model: JW101), applicable for depths shallower than 300 meters, is available for convenient debugging.

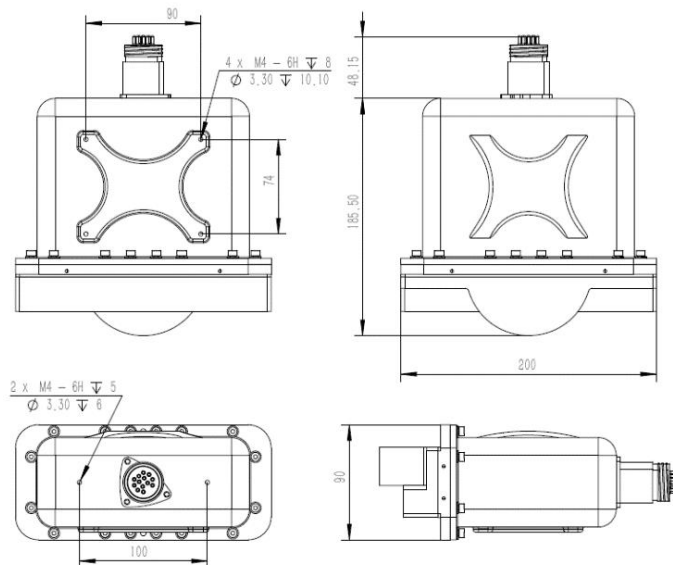


SW132

JW101

Dimensions and Mounting Holes

The bottom of the sonar is equipped with 4 M4 threaded holes for installation and fixation, with a hole depth of 10mm and a thread length of 8mm. The tail is provided with 2 auxiliary fixing holes, featuring a hole depth of 6mm and a thread length of 5mm.



Interface Description

The sonar uses a single waterproof composite cable for power supply and communication
The pin assignments are as follows:

Number	Insulation Layer Color	Function	Description
1	Black (Phase)	GND	DC Power Supply
2	Orange (Phase)	Chassis Ground	
3	White (Phase)	GND	DC Power Supply
4	Brown	485A	
5	Brown-White	485B	
6	Blue	PPS	
7	Blue-White	PPS_GND	
8	Orange	TX+	100Mbps Ethernet Communication
9	Orange-White	TX-	
10	Green	RX+	
11	Green-White	RX-	
12	Red (Phase)	24V	DC Power Supply
13	Green (Phase)	24V	DC Power Supply