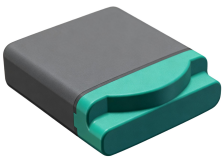


UAC-900F

Forward-Looking Sonar 900kHz

Small Low-power Portable Forward-Looking Sonar



Overview

The UAC-900F is a compact, low-power forward-looking sonar designed for high-resolution underwater imaging and multi-target detection. It delivers detailed visualization of underwater environments such as rivers, lakes, harbors, and coastal areas. With its portable form factor and strong adaptability, the UAC-900F enables real-time perception, obstacle avoidance, and situational awareness for a wide range of underwater platforms including ROVs, AUVs, and USVs.

Technical Specifications

SPECIFICATIONS	
Operating Frequency	900kHz
Detection Distance	Up to 80 m
Blind Zone	0.1m
Maximum Number of Beams	256
Distance Resolution	7.5mm
Horizontal Beamwidth	1°
Horizontal Field of View	60°
Vertical Field of View	20°
Dimensions	113 mm (W) × 44 mm (H) × 128 mm (D) (excluding watertight connector)
Weight	0.87 kg (in air) / 0.31 kg (in water)
Maximum Operating Depth	300m
Operating Temperature	-5℃ ~ +35℃
Storage Temperature	-20℃ ~ +50℃
Refresh Rate	Up to 40 Hz
Power Supply Range	DC 12 V – 48 V (≥ 48 W power supply)
Typical Power Consumption	14 W (@ 8 m range)
Built-in Sensors	Temperature and humidity sensor, electronic compass, attitude sensor

waterproof cable

Standard configuration includes a 2-meter platform-mounted short cable (model: HY132); Optional accessories include a 10-meter test cable (model: HY131) and a 1-to-2 adapter cable (model: BH932).



HY132 (Not drawn to scale)



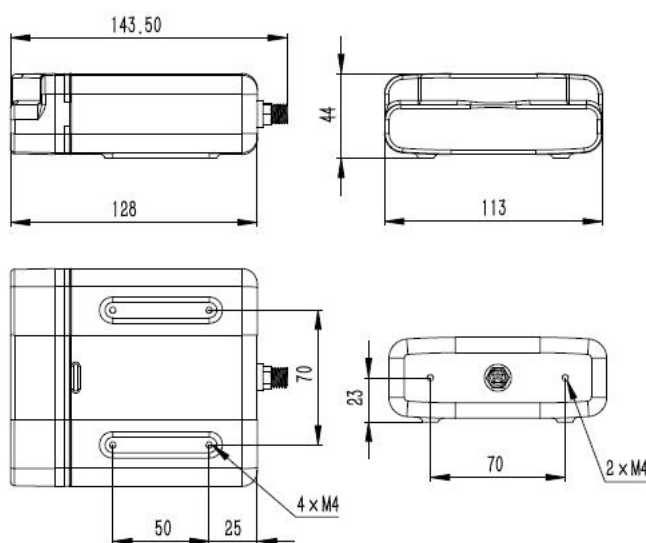
HY131 (Not drawn to scale)



BH932

Dimensions of the bottom fixing holes

The bottom features 4 fixing holes: M4 threaded holes with a thread depth of 3mm; The tail is equipped with 2 auxiliary fixing holes (positions for sacrificial anode installation): M4 threaded holes with a thread depth of 3mm.



Interface Description

The sonar has only one watertight socket interface externally, with the wire sequence of the corresponding watertight plug cable as follows.

No.	Signal	Description
1	DC24-	DC Power Negative
2	DC24+	DC Power Positive
3	TX+	Sonar Network Data Transmit +
4	TX-	Sonar Network Data Transmit -
5	RX+	Sonar Network Data Receive +
6	RX-	Sonar Network Data Receive -