UAM-08160X-II2S

Underwater Acoustic Modem 300m

Overview

The UAM-08160X-II2S underwater acoustic modem device, as a deck unit in the UAM-08160X series, is flexible to deploy and easy to use. Users can configure and operate the device using the provided upper-level software, along with a USB-to-RS485 serial cable and bearing cable. It comes with a standard 50m bearing cable for deployment at depths of up to 30m (the device is designed for a maximum pressure of 4.5MPa, and custom longer cables can be provided for deeper deployment). The built-in 7Ah@24V battery supports around 8 hours of operation per charge (based on 8 hours of reception and 1 hour of continuous maximum power transmission), meeting most offshore operational needs. This device offers reliable underwater communication with a range of up to 10km and a maximum user data rate of 4kbps (with a bit error rate of 10^{-4}).

Technical Specifications

SPECIFICATIONS	
Communication Frequency Range	8kHz-16kHz
Communication Distance	Up to 10km
Communication Rate	100bps-4kbps
Bit Error Rate	10^{-4}
Operating Modes	Transmit Mode/Receive Mode
Communication Type	Half-Duplex
Communication Standard	Dual-Mode(MASS/SC-MPSK)
Maximum Working Depth	300m(over 2x design margin)
Built-In Battery Capacity	7Ah@24V
Control Interface	RS485/RS232/RS422
Dimensions	Diameter 126mm × Height 492mm
Weight	11.5kg(in air)/8.5kg(in water)

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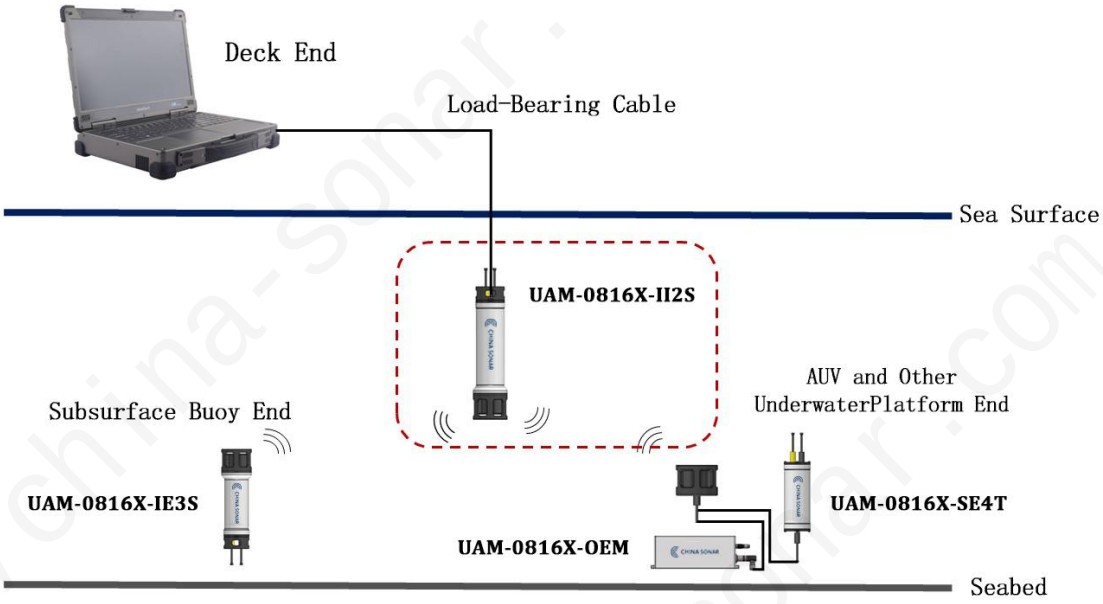
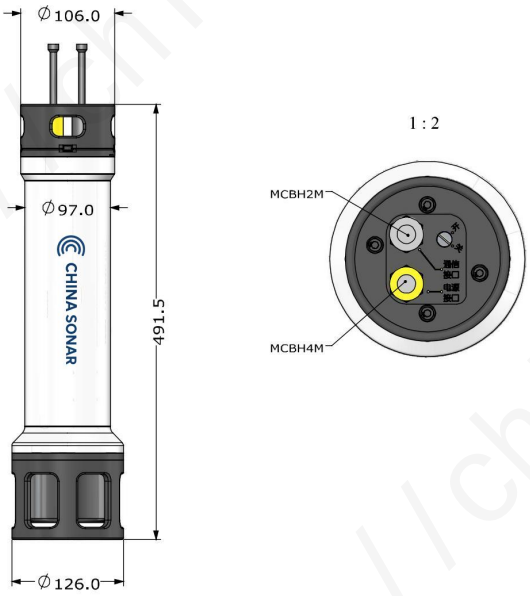
Application Diagram



Dimensional Diagram



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UAM-08160X-IE3S

Underwater Acoustic Modem 4000m

Overview

The UAM-08160X-IE3S underwater acoustic modem device, designed for long-term observation platforms like seabed bases and buoys, features an integrated low-power standby Mode. It is externally powered, with a user-customizable battery compartment to meet diverse mission needs. Built with a monolithic structure and 2205 stainless steel, it comes with an RS232 serial port and operates at depths of up to 4000 meters, fulfilling communication requirements across most of China's South Sea regions. It supports standard control protocols and processes, offering technical support for protocol development. This device provides reliable acoustic communication with a maximum range of 10km and a user data rate of up to 4kbps (BER10^{-4}).

Technical Specifications

SPECIFICATIONS	
Communication Frequency Range	8kHz-16kHz
Communication Distance	Up to 10km
Communication Rate	100bps-4kbps
Bit Error Rate	10^{-4}
Operating Modes	Transmit Mode/Receive Mode/Standby Mode
Communication Type	Half-Duplex
Communication Standard	Dual-Mode(MASS/SC-MPSK)
Maximum Working Depth	4000m(with a design margin of 600m)
Standby Power Consumption	20mW
Receive Mode Power Consumption	3.6W
Transmit Mode Power Consumption	up to 120W(with adjustable power levels)
Power Supply Voltage	DC 24V
Control Interface	RS485/RS232/RS422
Dimensions	Diameter 126mm × Height 420mm
Weight	12kg(in air)/8.6kg(in water)

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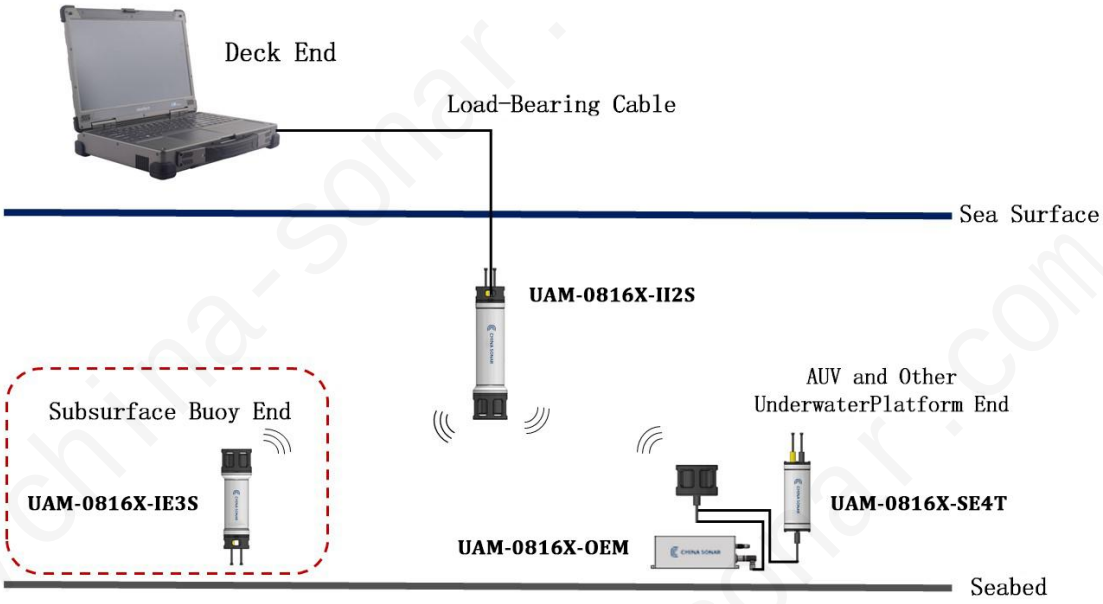
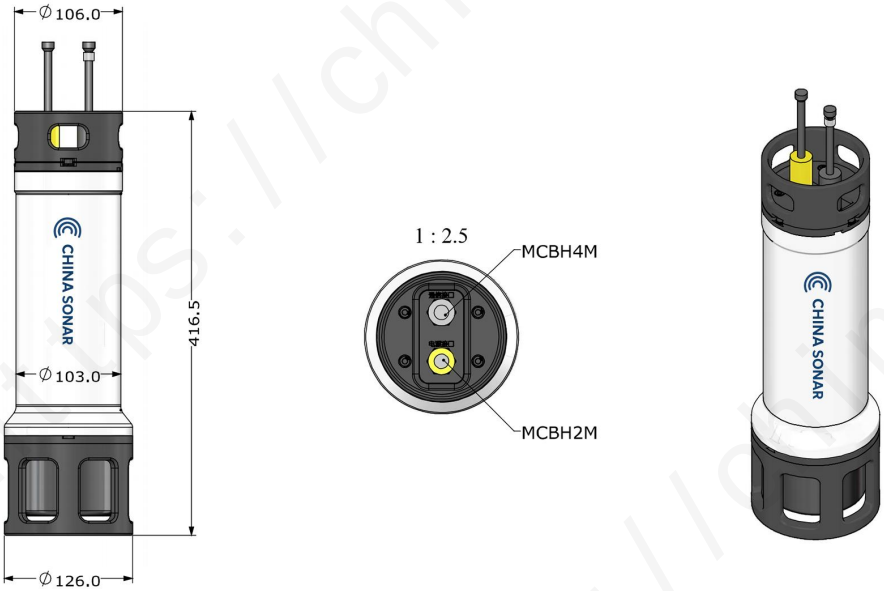
Application Diagram



Dimensional Diagram



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UAM-08160X-SE4T

Underwater Acoustic Modem 6000m

Overview

The UAM-08160X-SE4T underwater acoustic modem device features a built-in low-power duty module, designed for long-term observation platforms such as seabed bases and buoys. Powered externally, it allows users to design custom battery compartments based on mission requirements, meeting diverse user needs. With a modular structure, it can operate at depths of up to 6000m, offering flexible installation. The device is lightweight, constructed from TC4 titanium alloy, catering to weight-sensitive applications. It supports standard control protocols and provides technical assistance for protocol development. This device provides reliable acoustic communication with a maximum range of 10km and a user data rate of up to 4kbps (BER10^{-4}).

Technical Specifications

SPECIFICATIONS	
Communication Frequency Range	8kHz-16kHz
Communication Distance	Up to 10km
Communication Rate	100bps-4kbps
Bit Error Rate	10^{-4}
Operating Modes	Transmit Mode/Receive Mode/Standby Mode
Communication Type	Half-Duplex
Communication Standard	Dual-Mode(MASS/SC-MPSK)
Maximum Working Depth	6000m(with a design margin of 600m)
Standby Power Consumption	20mW
Receive Mode Power Consumption	3.6W
Transmit Mode Power Consumption	up to 120W(with adjustable power levels)
Power Supply Voltage	DC 24V
Control Interface	RS485/RS232/RS422
Dimensions	Diameter 106mm × Height 277mm
Weight	5kg(in air)/2.6kg(in water)

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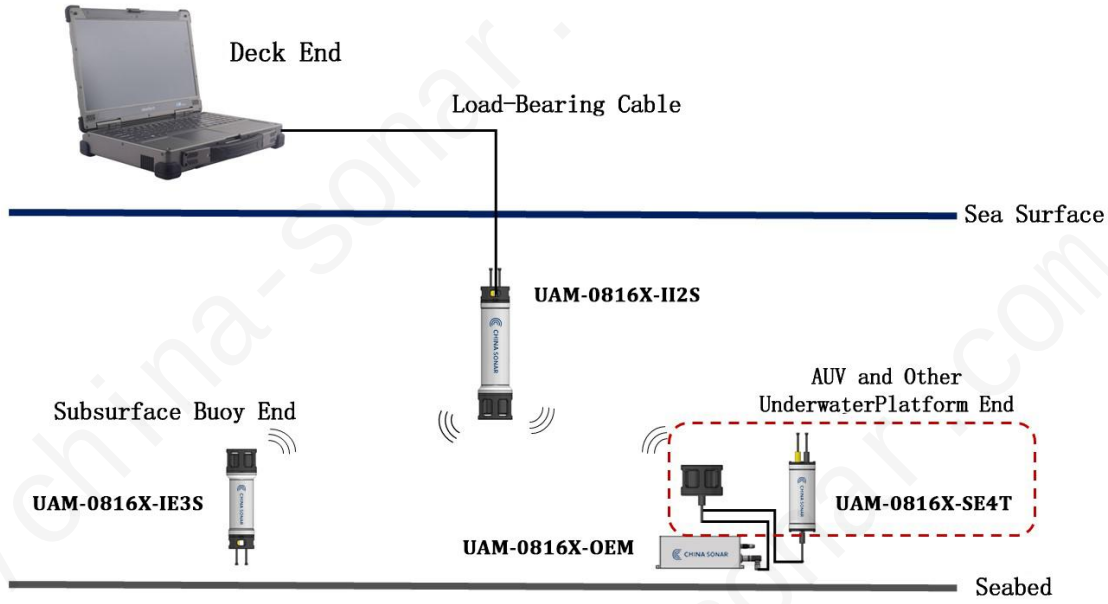
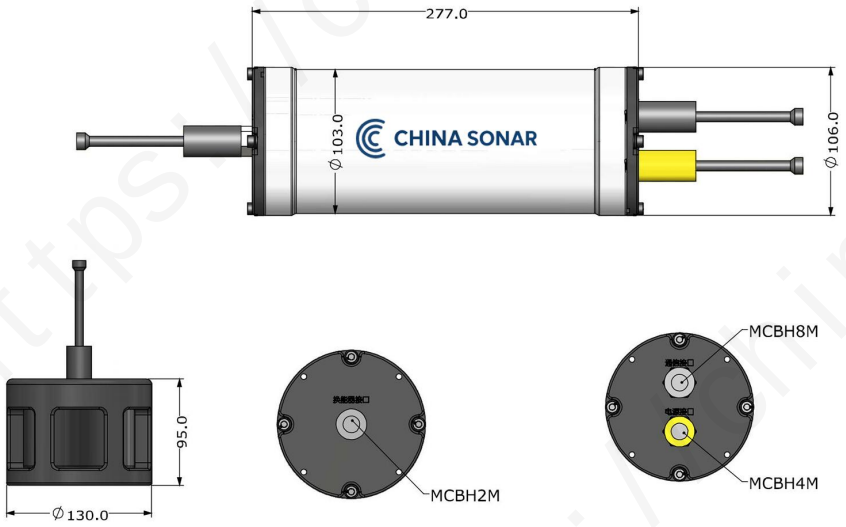
Application Diagram



Dimensional Diagram



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UAM-08160X-OEM

Underwater Acoustic Modem 6000m

Overview

The UAM-08160X-OEM underwater acoustic modem device is an OEM model designed for deep collaboration with users. It supports large platforms such as buoys, seabed bases, UUVs, gliders, wave gliders, and more. An option allow-power duty module is available for long-term observation platforms like seabed bases and buoys, while configurable software for mobile platforms like UUVs offers maximum flexibility. The included OEM sensor supports operation at depths of up to 6000m. The device adheres to standard control protocols and provides technical support for protocol development. This device provides reliable acoustic communication with a maximum range of 10 km and a user data rate of up to 4kbps (BER10^4).

Technical Specifications

SPECIFICATIONS	
Communication Frequency Range	8kHz-16kHz
Communication Distance	Up to 10km
Communication Rate	100bps-4kbps
Bit Error Rate	10^{-4}
Operating Modes	Transmit Mode/Receive Mode/Standby Mode
Communication Type	Half-Duplex
Communication Standard	Dual-Mode(MASS/SC-MPSK)
Maximum Working Depth	6000m(with a design margin of 600m)
Standby Power Consumption	20mW
Receive Mode Power Consumption	3.6W
Transmit Mode Power Consumption	up to 120W(with adjustable power levels)
Power Supply Voltage	DC 24V
Control Interface	RS485/RS232/RS422
Dimensions	Length 238mm×Width 75mm×Height 88mm
Weight	1.6kg

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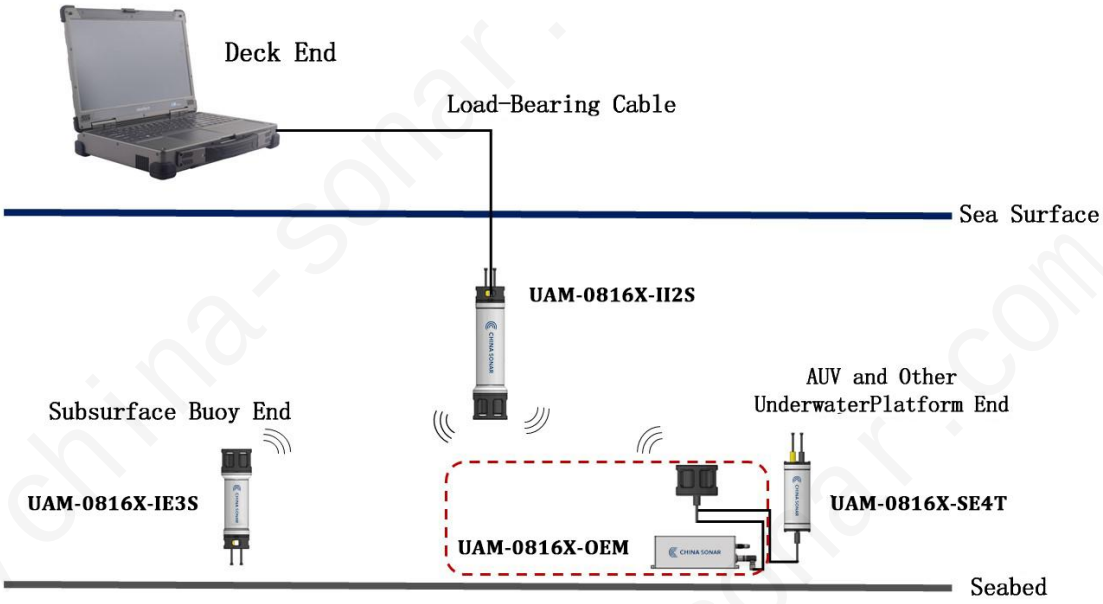
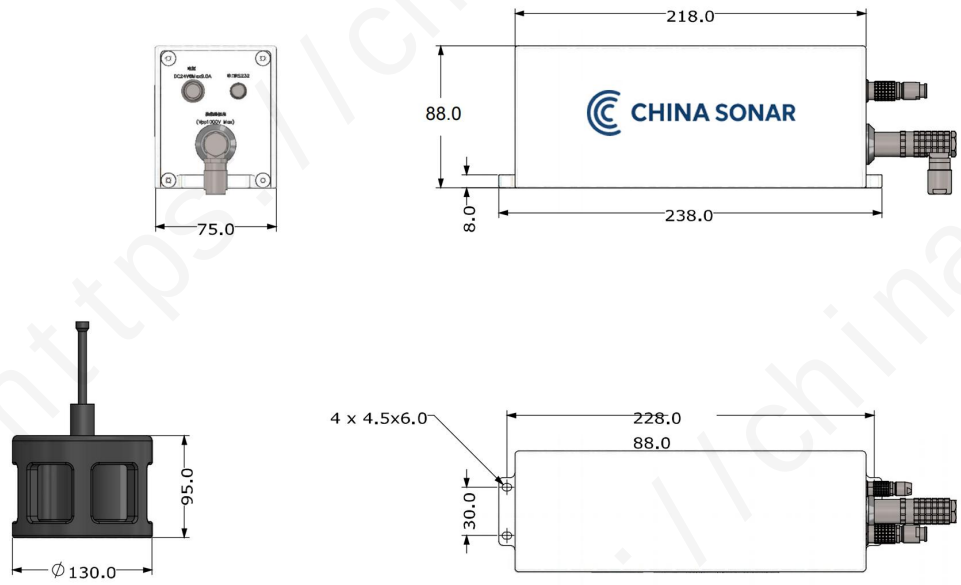
Application Diagram



Dimensional Diagram



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Specifications subject to change without notice.