### **UAM-16320X-II2S**

3KM Mid-range Underwater Acoustic Modems (UAMs) Deck Unit with Built-in Battery



#### **Overview**

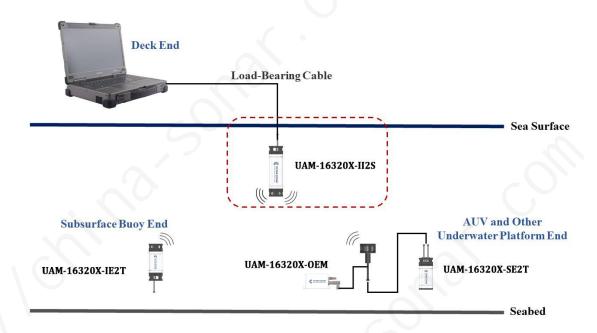
The UAM-16320X-II2S underwater acoustic communication device, serving as the deck unit of the UAM-16320X series, offers flexible deployment and simple control and use. Users can configure and operate the device using the provided upper-level software, along with a USB-to-RS485 serial cable and bearing cable. It comes with a 50m bearing cable, allowing deployment at depths of up to 30m (the device is designed to withstand pressures up to 4.5MPa, and for deeper deployment, custom extended bearing cables are available). The device features a built-in 7Ah@16.8V battery, providing approximately 8 hours of operation on a single charge (based on 8 hours of receiving 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 3 km and a maximum user data rate of 4 kbps (with a bit error rate of 10<sup>-4</sup>).

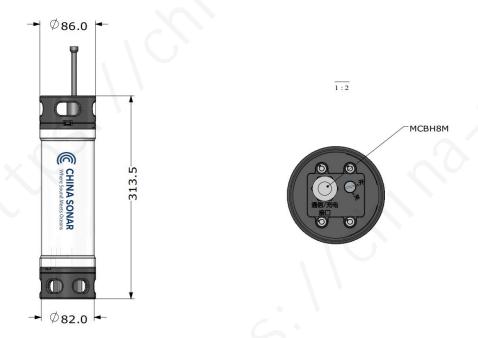
#### **Technical Specifications**

| SPECIFICATIONS                       |                                   |
|--------------------------------------|-----------------------------------|
| <b>Communication Frequency Range</b> | 16kHz-32kHz                       |
| Communication Distance               | Up to 3km                         |
| Communication Rate                   | 100bps-4kbps                      |
| Bit Error Rate                       | 10 <sup>-4</sup>                  |
| Operating Modes                      | Transmit Mode/Receive Mode        |
| Communication Type                   | Half-Duplex                       |
| <b>Communication Standard</b>        | Dual-Mode(MASS/SC-MPSK)           |
| Maximum Working Depth                | 300m(over 2x design margin)       |
| <b>Built-In Battery Capacity</b>     | 7Ah@16.8V                         |
| Control Interface                    | RS485/RS232/RS422                 |
| Dimensions                           | Diameter 82mm × Height 314mm      |
| Weight                               | 6.1kg (in air) / 4.8kg (in water) |



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# **UAM-16320X-IE2T**

3KM Mid-range Underwater Acoustic Modems (UAMs) Externally Powered, More Compact Unit



#### **Overview**

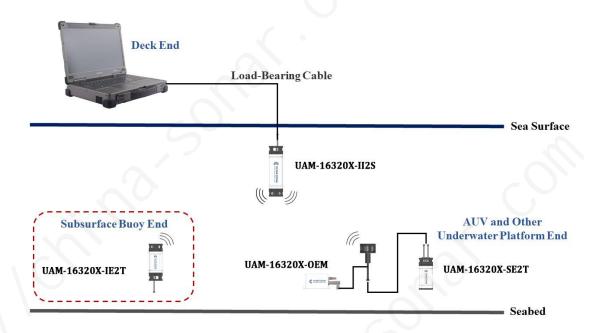
The UAM-16320X-IE2T underwater acoustic communication device is designed for shallow water applications, offering compact size and low weight. Featuring an integrated structure and TC4 titanium alloy, it comes with an RS232 serial port and operates at depths of up to 300m, meeting the requirements of all waters in the Bohai Sea, Yellow Sea, and East China Sea. The device supports standard control protocols and offers technical support for protocol development. This device offers reliable underwater communication with a range of up to 3 km and a maximum user data rate of 4 kbps (with a bit error rate of  $10^{-4}$ ).

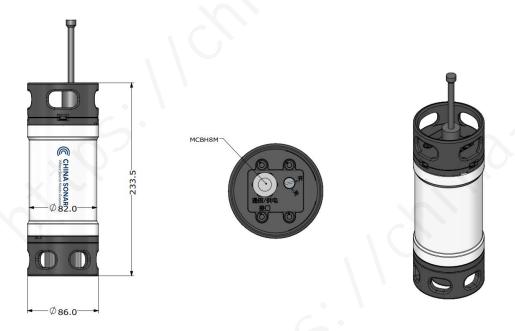
#### **Technical Specifications**

| SPECIFICATIONS                  |  |
|---------------------------------|--|
| Communication Frequency Range   | 16kHz-32kHz                              |
| <b>Communication Distance</b>   | Up to 3km                                |
| Communication Rate              | 100bps-4kbps                             |
| Bit Error Rate                  | 10 <sup>-4</sup>                         |
| 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)              |
| Receive Mode Power Consumption  | 1.5W                                     |
| Transmit Mode Power Consumption | up to 40W (with adjustable power levels) |
| Power Supply Voltage            | DC 16.8V                                 |
| Control Interface               | RS485/RS232/RS422                        |
| Dimensions                      | Diameter 86mm × Height 234mm             |
| Weight                          | 2.8kg (in air) / 2kg (in water)          |



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### **UAM-16320X-SE2T**

3KM Mid-range Underwater Acoustic Modems (UAMs) Externally Powered, Allowing Users to Design Custom Battery Compartments for Mission Requirements



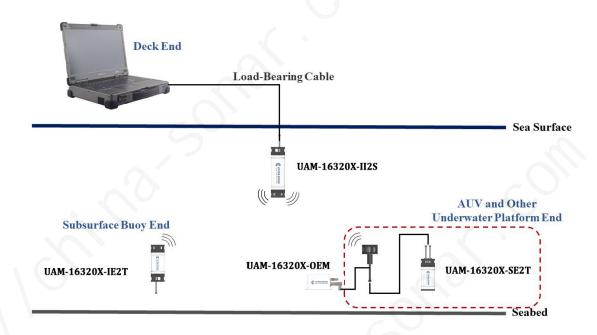
#### **Overview**

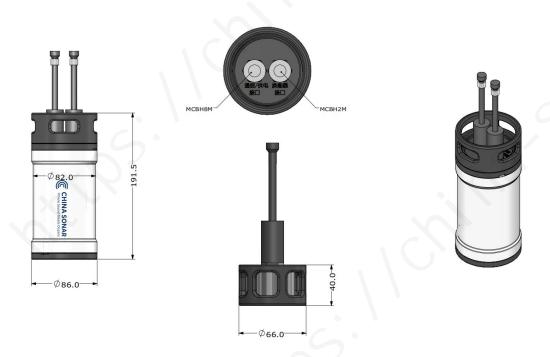
The UAM-16320X-SE2T underwater acoustic communication device is externally powered, allowing users to design custom battery compartments based on mission requirements to meet diverse needs. Featuring a modular structure, it operates at depths of up to 300m, offering flexible installation options. Constructed from TC4 titanium alloy for lightweight design, it meets the needs of weight-sensitive users. The device supports standard control protocols and offers technical support for protocol development. This device offers reliable underwater communication with a range of up to 3 km and a maximum user data rate of 4 kbps (with a bit error rate of 10<sup>-4</sup>).

#### **Technical Specifications**

| SPECIFICATIONS                       |  |
|--------------------------------------|--|
| <b>Communication Frequency Range</b> | 16kHz-32kHz                              |
| <b>Communication Distance</b>        | Up to 3km                                |
| <b>Communication Rate</b>            | 100bps-4kbps                             |
| Bit Error Rate                       | 10 <sup>-4</sup>                         |
| 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)              |
| Receive Mode Power Consumption       | 1.5W                                     |
| Transmit Mode Power Consumption      | up to 40W (with adjustable power levels) |
| Power Supply Voltage                 | DC 16.8V                                 |
| Control Interface                    | RS485/RS232/RS422                        |
| Dimensions                           | Diameter 86mm × Height 192mm             |
| Weight                               | 2.5kg (in air) / 1.67kg (in water)       |









## **UAM-16320X-OEM**

3KM Mid-range Underwater Acoustic Modems (UAMs) Customized OEM Model for Deep Collaboration



#### **Overview**

The UAM-16320X-OEM underwater acoustic communication device is a customized model for deep collaboration, available in an OEM form. It supports large platforms such as moorings, seabed stations, UUVs, gliders, wave gliders, and buoys. With OEM integration and extensive platform adaptation experience, it offers maximum flexibility for customers. The accompanying OEM sensor is capable of operating at depths of up to 300m. The device supports standard control protocols and provides technical support for protocol development. This device offers reliable underwater communication with a range of up to 3 km and a maximum user data rate of 4 kbps (with a bit error rate of 10<sup>-4</sup>).

#### **Technical Specifications**

| SPECIFICATIONS                         | $\sim$                                   |
|--|--|
| <b>Communication Frequency Range</b>   | 16kHz-32kHz                              |
| <b>Communication Distance</b>          | Up to 3km                                |
| <b>Communication Rate</b>              | 100bps-4kbps                             |
| Bit Error Rate                         | 10 <sup>-4</sup>                         |
| 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)              |
| Receive Mode Power Consumption         | 1.5W                                     |
| <b>Transmit Mode Power Consumption</b> | up to 40W (with adjustable power levels) |
| Power Supply Voltage                   | DC 16.8V                                 |
| Control Interface                      | RS485/RS232/RS422                        |
| Dimensions                             | Length 128mm × Width 98mm × Height 70mm  |
| Weight                                 | 1kg (in air)                             |



