

UAM-16320H

High-Rate Underwater Acoustic Modems

High-Rate Short-to-Medium Range Underwater Communication

Max. 2 km range | Up to 8 kbps data rate | Depth rated to 6000 m



Overview

The UAM-16320H underwater acoustic modem is designed for short-to-medium range underwater communication requirements. It focuses on improving underwater data transmission efficiency and communication rate, and is suitable for various application scenarios including underwater data exchange, device coordination, status feedback and mission control.

Core Functions & Advantages

- **Efficient Underwater Communication**
Max data rate up to 8 kbps, for efficient underwater data transmission over short-to-medium ranges.
- **Excellent Anti-Interference Performance**
Maintains stable connections in complex marine environments.
- **Flexible Network Topology**
Supports point-to-point communication, network deployment and adaptation to multiple scenarios.
- **Digital Information Transmission**
Supports device control, status feedback and data communication.

Application

- **Wireless Control & Data Feedback for Underwater Robots**
Wireless control and data return of underwater robots.
- **Seabed Observation Network & Fixed Infrastructure Networking**
Network communication for seabed observation networks and other fixed subsea facilities.
- **Ocean Geological Survey & Resource Exploration**
Real-time data transmission for ocean engineering projects.

Technical Specifications

Parameter	UAM- 16320H
Operating Frequency	16–32 kHz
Max. Communication Range	2 km
Max. Communication Rate	8 kbps
Transmit Power	60 W (Customizable)
Receive Power Consumption	1.7 W
Communication Interface	RS422 / RS485 / RS232 (Customizable)
Operation Mode	Half-duplex
Communication Scheme	OFDM
Supply Voltage	24V–48V DC
Dimensions	Standard Version: $\leq \Phi 100 \text{ mm} \times 225 \text{ mm}$; Built-in Battery Version: $\leq \Phi 100 \text{ mm} \times 375 \text{ mm}$ (Optional)
Operating Temperature	0°C ~ +50°C
Storage Temperature	-20°C ~ +65°C
Housing Material (Optional)	Light 316L SS (1000 m) / Heavy 316L SS (2000 m) / Titanium Alloy (6000 m)
Power Supply (Optional Configurations)	Built-in 48V/7Ah battery for autonomous missions or external power for fixed long-term deployment
Host Software	For parameter setup, data communication and status monitoring.