

Teledyne Marine

ATM-900 Series

Acoustic Modems

Proven Acoustic Communications

The Teledyne Benthos **ATM-900 Series Acoustic Telemetry Modems** represent the next-generation in acoustic modem technology. The ATM-900 Series provides an extensive list of features and enhancements spanning well beyond basic underwater communication capabilities.

With over twenty five years of A-Comms experience, and thousands of acoustic modems delivered worldwide, Teledyne Benthos is your established, proven leader in acoustic communications technology.



PRODUCT FEATURES

- Reliable, robust, proven long distance communications
- Flexible housing designs to fit virtually any deployment configuration, including glass instrument housing
- Optional features such as high capacity data logging, in band acoustic recording, arbitrary waveform play, and dual serial port available
- Transducer options including omnidirectional and directional, both integral and remote versions
- Modems can be used in conjunction with the Benthos positioning product line
- All modems are compatible with the new JANUS interoperability standard

UTS-9400 Universal Top Side

- Splashproof, ruggedized and portable
- Internal batteries or AC/DC power
- Color Display / Speakers
- Serial port
- Transducer and cable included
- Communicates with all Benthos acoustic modems and releases
- 25m to 200m cables available
- GNSS / Nav upgrade available



ATM-910 Series

- 500 meter depth rated
- Alkaline batteries, 378W-HR optional
- Remote head optional



ATM-920 Series

- 2000 meter depth rated
- Alkaline batteries, 378W-HR optional
- Remote head optional



ATM-960 Series

- 6000 meter depth rated
- Alkaline batteries, 588W-HR optional
- Remote head optional



ATM-903 Series

- Ideal for AUV applications or mounted in customer supplied housing
- Transducer, power cable and serial cable included



Compact Modem

- Highly compact; value priced option
- OEM or self-contained configurations



ATM-900 Series

Acoustic Modems

TECHNICAL SPECIFICATIONS

ATM-900 Series

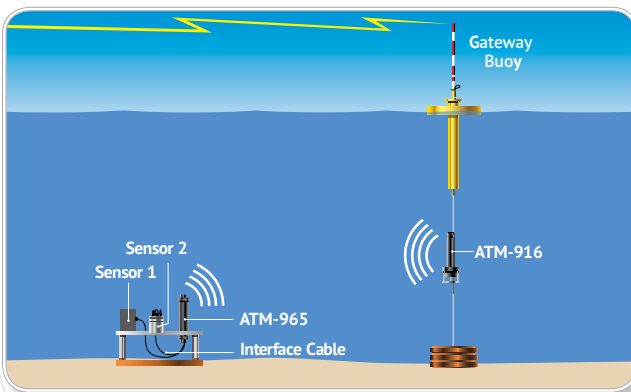
Baud Rate	80 bits per second (bps) Frequency Hopped (FH) 140-2400 bits per second (bps) Multiple Frequency Shift Keying (MFSK) 2560 -15,360 bits per second (bps) Phase Shift Keying (PSK)
Frequency Band	Customer Specified: - 9 - 14 kHz (LF) - 16 - 21 kHz (MF) - 22-27 kHz (Band C)
Distances-Range	2-6 km common, greater distances possible

Processing Features	Data redundancy, 1/2 rate convolutional coding Multipath guard period selection FH, MFSK, and PSK modulation schemes
----------------------------	--

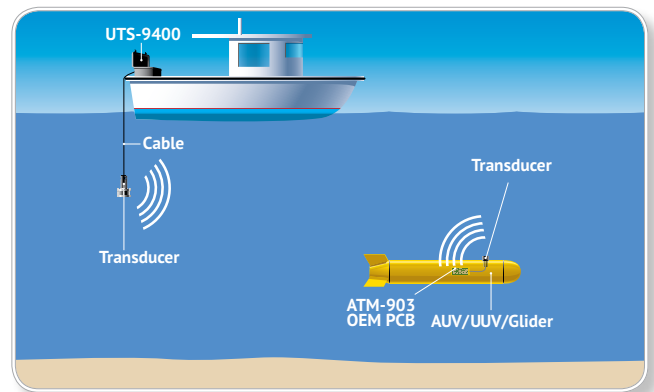
Deployment Length	Up to 2 years 3-6 months typical with hourly transmissions Unlimited with external power supplied
--------------------------	---

Data Storage	6144 KB datalogger standard Expanded memory option available
---------------------	---

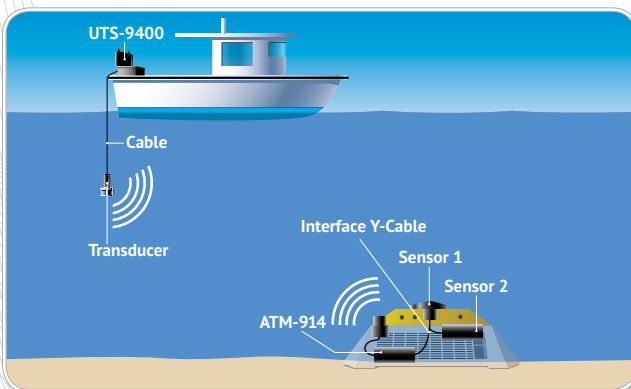
APPLICATIONS/DEPLOYMENT SCENARIOS



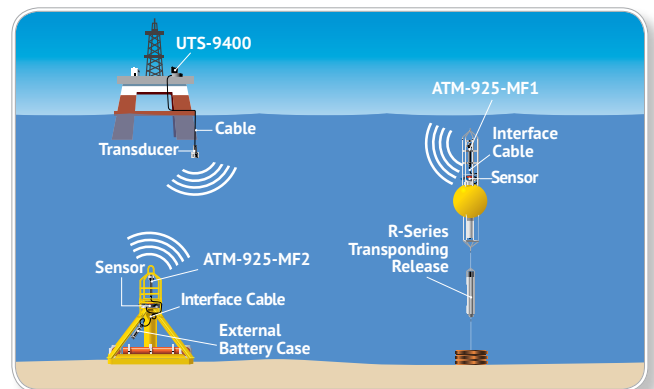
Real-time data capability from oceanographic moorings



Vehicle command and communications



Sensor command, communication and system vitals from a ship of opportunity



Oil and gas command and control