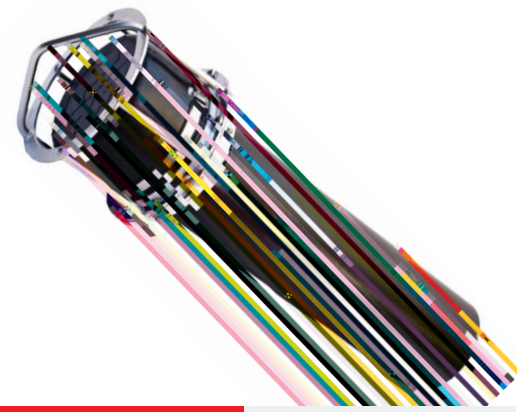
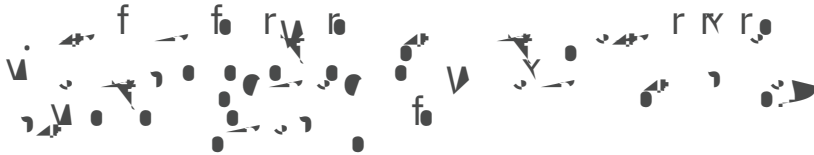


# GPM 300 ACOUSTIC MODEM



LE  
INTELLIGENCE



## RECORD-BREAKING TECHNOLOGY

The GPM 300 acoustic modem can be used for reliably sending and receiving data and/or voice through water for communications, monitoring and remote command & control in harsh, multi path, reverberating and noisy hydro acoustic environments where other modems fail.

The leading performance of the GPM 300 is well proven. They are fitted to Triton's Hadal Exploration System – the world's first manned submersible commercially certified for repeatable exploration to the deepest point in the ocean.

In 2019, the Hadal system was used for the 'Five Deeps Expedition', an around-the-world journey to dive to the deepest point in each of the world's five oceans, and broke the world record for the deepest ever dive at 10,927m in the Marianas Trench. The modems were also used in James Cameron's Deepsea Challenge Expedition in 2012, again, providing communications and enabling a record-breaking 'tweet' from the deepest point of the ocean.

## MINIMAL INTERFERENCE

The modem uses third-generation MASQ multichannel direct sequence spread spectrum (DSSS) technology for high reliability communications, robust against multipath inter symbol interference.

To compensate for channel fading and multipath interference, the GPM 300 offers continuous channel equalisation.

Communication between platforms moving at speed is supported with doppler tolerance +/-15 knots and continuous doppler correction.

The network-enabled GPM 300 is compatible with L3Harris ELAC UT 3000 underwater telephone and voice communication compliant with NATO STANAG 1074.

## KEY FEATURES

- > Third-generation MASQ multichannel direct sequence spread spectrum
- > Advanced forward error correction with error rates less than  $1 \times 10^{-4}$
- > Supports remote configuration settings
- > Ultra-reliable data rates up to 1000 baud
- > Voice communications\* up to 25 km
- > Digital communication up to 45 km†
- > Low probability of intercept



## COMMUNICATIONS AT THE DEPTHS OF THE OCEAN

The landers of Triton's Hadal Exploration System, as used in the Five Deeps Expedition, providing communications from the deepest points of the world's five oceans.

\* Voice requires optional GPM 300 voice interface units.

† Assumes best case sea conditions. Actual range obtained depends on deployment characteristics, environmental noise and sea conditions.

