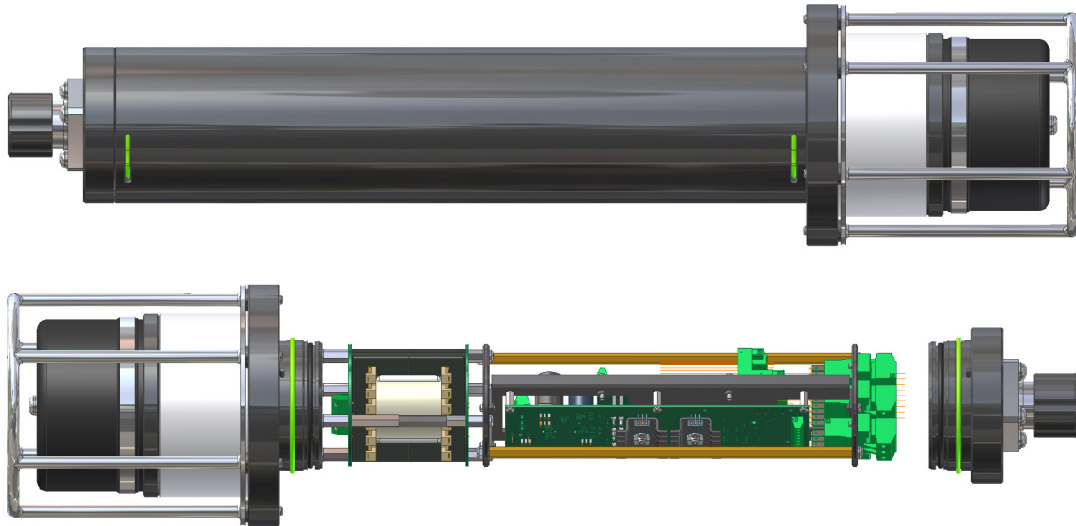


HAIL GPM

HAIL GENERAL PURPOSE MODEM



HAIL GPM Underwater Casing

PRODUCT DESCRIPTION

L-3 Nautronix develops sophisticated solutions to measure and communicate data through water. The company specialises in applications involving underwater test and evaluation and Through-Water Communications.

This specification describes the Hydro Acoustic Information Link (HAIL) General Purpose Modem (GPM). The HAIL GPM is based on an application recently provided to one of our customers.

The HAIL GPM meets the need for a reliable long range underwater communications link.

The HAIL GPM is ideal for use in underwater communications where power and size are major constraints.

The HAIL GPM employs Digital Signal Processing (DSP) architecture, and is aimed at embedded HAIL applications with well defined telemetry requirements such as Autonomous Underwater Vehicles.

KEY FEATURES

- General Purpose Modem built on a modular architecture
- Reliable long range underwater communications link
- Undersea networking and tactical data links
- Can be integrated into unmanned vehicles and seabed sensors
- Integrated digital signal processing (DSP) architecture



HAIL GPM

HAIL GENERAL PURPOSE MODEM

KEY CHARACTERISTICS

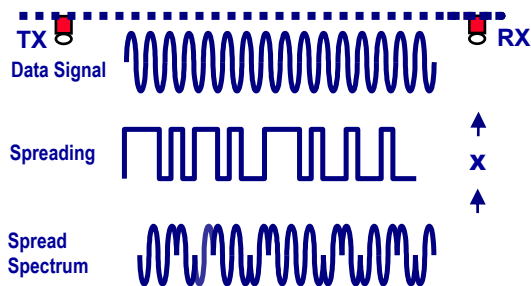
- Modular
- Reliable
- Long range
- Undersea networking
- Tactical data
- Integrated DSP architecture



HAIL GPM Casing

SPREAD SPECTRUM TECHNOLOGY

- The HAIL GPM uses coded Spread Spectrum technology, which is a broadband signalling technology
- 'Spreading' the signal allows more energy and a more complex signal to be generated. This results in enhanced detection and further benefits to integrity, reliability and accuracy from the associated processing

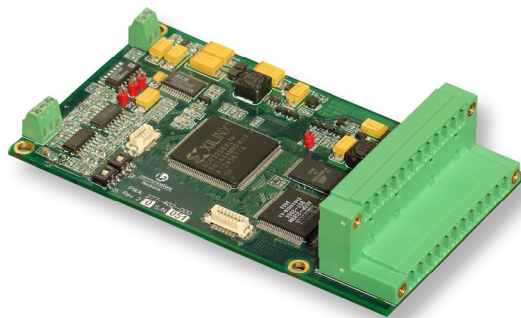


OPTIONS

Our experience (over 20 years) has taught us that systems such as these are unique to the customer's requirements, requiring research, development and evolution to meet its specific role.

For example, L-3 Nautronix has provided HAIL GPM interfaced to:

- Host sonar
- Underwater telephones
- Unmanned vehicles
- Seabed sensors



HAIL GPM Acoustic Communication Module

L-3 Nautronix

108 Marine Terrace
Fremantle
Western Australia, 6160
Australia
Tel: +61 8 9431 0000
Fax: +61 8 9430 5901
www.L-3Com.com/Nautronix
info.nautronix@L-3Com.com



Nautronix