

# L-3 Nautronix

## MIMR

### MULTI-INFLUENCE MEASUREMENT RANGE



Relocatable Multi-Influence Measurement Range

#### 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.

The L-3 Nautronix relocatable Multi-Influence Measurement Range (MIMR) is based on an application provided to one of our customers.

MIMR accurately and simultaneously measures and analyses the:

- acoustic (2 Hz to 96 kHz),
- magnetic (AC and DC),
- pressure,
- electric (Extremely Low Frequency Electromagnetic (ELFE)), and
- seismic

influence signatures of ships (including commercial shipping), submarines, and mine warfare equipment in littoral waters and ports.

The systems are provided in a relocatable configuration, enabling rapid deployment of the system equipment.

#### KEY FEATURES

- Measurement of multi-influence signatures for vessels
- Relocatable
- Rapid deployment
- Signatures automatically adjusted at magnetic field reference station to magnetic north
- Automated GPS tracking (using bow and stern reference points)



### MULTI-INFLUENCE MEASUREMENT RANGE

#### SYSTEM DESCRIPTION

- Comprises three sensor modules
- Sensor modules feed signature information to a shore based facility via a range-to-shore cable system.
- The signature data is gathered at an interface module and conditioned and digitised before transmission.
- Tracking of cooperative vessels is achieved by a DGPS receiver on the vessels, with a radio link providing the tracking information to the Data Acquisition System (DAS).
- The Multi Influence Range Controller (MIRC), housed in the Range Operations and Transportation Container (ROTC), provides the capability for the control of all range functions, and the acquisition, monitoring, storage and processing (analysis, display and replay) of the gathered multi-influence signature data.



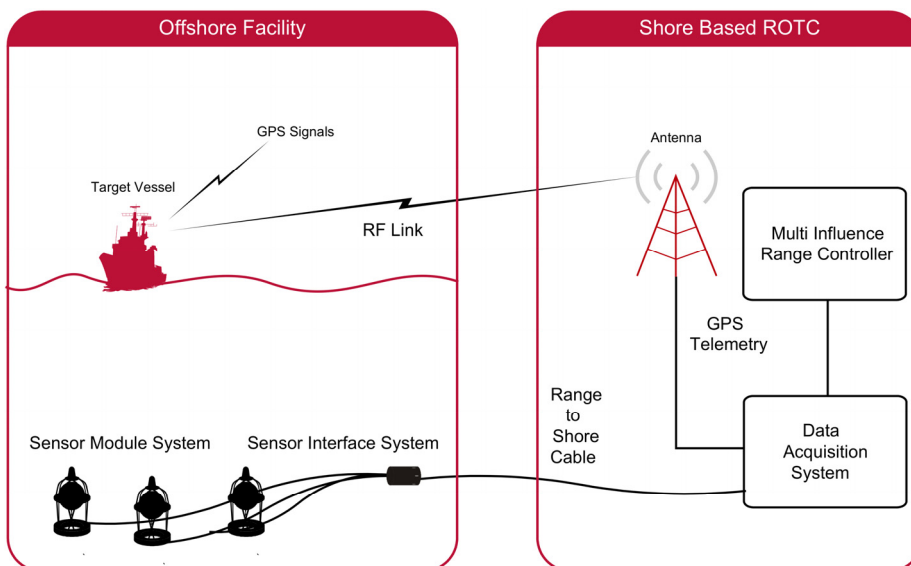
Example Sensor Module Assembly



Example Range Operations and Transport Container

#### APPLICATION

Experience has taught us that meeting the various operational needs of the customer requires research and development and an in-depth understanding of the environment and influences to be measured. The resulting system is always unique to each customer.



Conceptual View of a Multi-Influence Measurement Range

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