



## OVERVIEW

AtonisPro-R is a unique, state-of-the-art, AIS simplex repeater station. The AtonisPro-R's primary function is to extend the AIS coverage for AIS base station networks, or to overcome limitations in radio propagation due to topographical obstacles inhibiting line-of-sight communication.

The AIS repeater receives AIS message data from ships within its coverage area and retransmits the received information using RATDMA protocol.

The AtonisPro-R is an economical, stand-alone installation that does not require integration with landline or non-AIS VHF communication networks.

Due to the low power consumption, the AtonisPro-R can be powered by an inexpensive battery/solar panel power system, making it suitable for installations on floating Aids-to-Navigation and at remote sites where electrical power is not available.

The AtonisPro-R can also be operated in a dual Repeater/AIS Aton mode with full AIS Aton functionality.

## CERTIFICATES

- BSH, CE 0168/NB No. THER1 16 05 95836 001,
- R&TTE Directive (EC/1999/5)

## KEY FEATURES

- Compliant with IALA A-124 and A-126; IEC 60945 and IEC 62320-2; ITU-R M.1371
- BSH approved AIS Aton Station
- Dual Repeater and AIS Aton mode operation
- Transmits Msg 21 for up to four virtual or synthetic Atons
- Low-power suitable for solar/battery operation

## PHYSICAL SPECIFICATIONS

Dimensions	Various, Depending on Enclosure
Weight	<4.5 kg (<10 lbs) (Typical)
Input Voltage	9 - 32 VDC; Over current and Revers Polarity Protection
Power Consumption	
Idel (No Vessels)	5 watts
Moderate (<100 Vessels)	8 watts
High (200 Vessels)	10 watts
Transmit Power (ERP)	Configurable for 1, 5 or 12.5 Watts
Repeater Capabilities	Repeats all received messages using RATDMA access scheme according to ITU-R M.1371-1, IALA A-124 and IALA -126
AtoN Monitoring	Msg 21, 6, 8, 12 and 14 Up to 4 virtual or synthetic Atons 2 digital and 2 analog inputs; additional 4 digital and 4 analog inputs with optional interface board
Frequency Range	155 - 163 MHZ, 25kHz Bandwidth, Configurable
Receiver Sensitivity	Better than -112 dBm PER 20%
VHF and GPS Antennas	Internal or External; VHF 50 ohm, GPS 5V
Operating Temperature	-15°C to +50°C
Ingress Rating	NEMA 4X/IP-56 (Typical)

*\*All values are subject to change without notice.*

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