

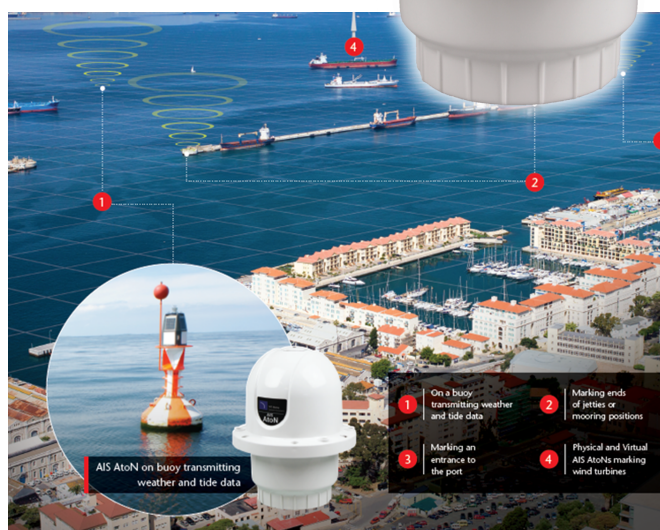
CARBON

AIS Aid to Navigation (AtoN) Transceiver

Product Type: OEM White Label

Carbon is an internationally certified AIS AtoN with the world's lowest power consumption. Available as either Type 1 or Type 3 configurations, it offers a full range of features, including transmission of virtual AtoN targets, simple integration with lanterns and external sensors, plus over the air configuration and chaining. The toughened enclosure is designed for continuous, long term use in even the most extreme environments from the equator to the poles.

- Configurable as Type 1 or Type 3
- Ultra low power consumption in all operating modes
- Designed and manufactured for the toughest of environments – IP66 and IP67
- Integrated GPS antenna with optional external input
- Multiple flexible sensor interfaces
- Proven operational reliability
- Full feature set, includes unlimited virtual AtoN
- Repeater functionality
- Encrypted 2way control configuration

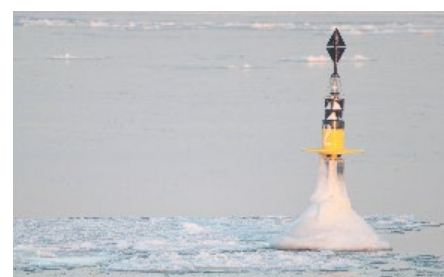


Power < 0.09 Ah/day

Ultra low power consumption minimises overall system installation costs



Multiple external interfaces facilitates easy integration with external sensors and devices



Ruggedised, weatherproof, enables permanent installation in any environment

Buoys and lanterns are vital for safe navigation

Buoys and lanterns perform a critical role in safe navigation of waterways. Vessel captains rely on them and an off-station buoy or faulty lantern can result in a major accident. Real time remote monitoring provides peace of mind that your AtoN's are in the right place and providing accurate indication of shipping hazards.

Customisation

SRT products offer unmatched capability to be customised for specific applications and markets. Additional features and functions can be specified and implemented and range from the simple to complex encryption and messaging features.

Certification

This product is fully tested and certified to the relevant international standards and product specifications. As part of the OEM customisation process into your brand, international certification can be transferred into your brand name within a matter of weeks.

Physical Specification

Dimensions	284 x 188mm (H x D)
Weight	1.2Kg

Electrical Specification

Power supply	12 to 24VDC
Power consumption Type 1 AtoN (FATDMA)	Less than 0.09Ah/day (with 3 minute position reporting rate)
Power consumption Type 3 AtoN (RATDMA)	Less than 0.8 Ah/day (with 3 minute position reporting rate)

Interfaces - basic AtoN

USB	for configuration
IEC61162-1 ports	Two (NMEA0183) at 38400 baud
Logic level IO lines	5 configurable

Interfaces - via optional sensor interface

Five isolated digital inputs	✓
Two isolated analogue inputs – 0 to 36VDC	✓
Three non-isolated analogue inputs	✓
Two relay drive outputs	✓
Analogue current sense (up to 5A)	✓
Five non-isolated logic level input / output channels	✓
NMEA0183 (IEC61162-1/2) port	✓
Two RS232 ports – configurable baud rates	✓
SDI-12 interface	✓

Standards Compliance

AIS Standard	IEC62320-2:2008
Environmental	IEC60945:2002-08
GPS Performance Standard	IEC61108-1:2002-07
Safety	EN60950-1:2006 +A11:2009 +A1:2010 +A12:2011

VHF Transceiver

Transmitter	x 1
Receiver	x 2
Frequency	156.025 to 162.025MHz in 25KHz steps
Output power	1W, 2W, 5W or 12.5W
Channel bandwidth	25KHz
Channel step	25KHz
Modulation modes	25KHz GMSK (AIS, transmit and receive)
Bit rate	9600 b/s (GMSK)
Receiver sensitivity	< -110dBm @ 20% PER
Adjacent channel selectivity	70dB

SRT enhances maritime domain awareness by developing and manufacturing tracking technology and system solutions for individual vessel owners, port authorities, maritime infrastructure owners, coast guards and national security agencies around the globe. Applications include the tracking of commercial and leisure vessels; sustainable fishery; anti-collision; search and rescue; waterway management, port and coast security; pollution management and environmental management.

GPS Receiver & Antenna

Channels	50
IEC 61108-1	Compliant
GPS antenna	Internal or external options
Glomass	Option available
Spurious response rejection	70dB

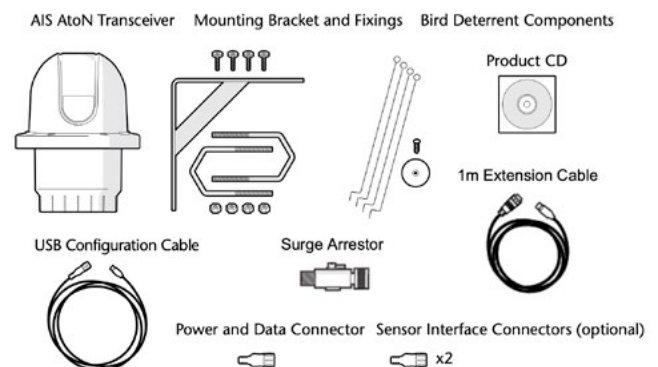
AtoN Functions

Type 1 and Type 3 options available	✓
Supports configuration by VDL command	✓
Chaining option available	✓
Customisable sensor interfacing	✓
Virtual AtoN support	✓

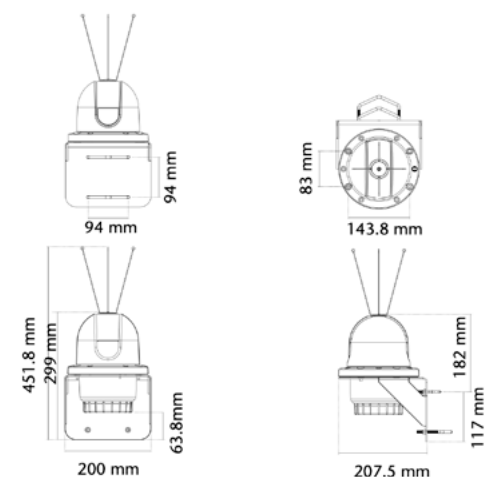
Environmental

Waterproof	IP66 and IP67 rated for water ingress
IEC 60945	'Exposed' category
Operating temperature	-25°C to +55°C

What's In The Box



Dimensions



Contact us now for your OEM requirements:

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