

CHRONOS AIS Aid to Navigation (AtoN)

Product Type: OEM White Label



Chronos 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, over the air configuration and chaining. Chronos can be interfaced directly with lights and racons, and to an extensive range of sensors when connected to the Chronos Sensor Interface product accessory.

The small, tough enclosure is designed for continuous, long term use in even the most extreme environments from the equator to the poles and can be easily installed in even the tightest of spaces.



- Available as Type 1 or Type 3
- Proven operational reliability and performance
- Ultra low power consumption in all operating modes
- Small size for installation in the tightest of spaces
- Designed and manufactured for the toughest of environments – IP66 and IP67
- Multiple flexible sensor interfaces, when combined with the Chronos Sensor Interface accessory

Accessory



Chronos Sensor Interface accessory available for extended interfacing to external sensors (product code 418-0052)

Power < 0.09 Ah/day



Ultra low power consumption minimises overall system installation costs



Small size allows installation in locations with limited space

Branding

Our OEM products are supplied fully branded as per your specific requirements. This includes the product, all manuals and packaging such that upon arrival they are instantly ready for you to ship to your customers.

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*	172mm x 120mm x 55mm
Weight	350g

*For both the Chronos AIS AtoN and Chronos Sensor Interface

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 (RATDMA)	Less than 0.8Ah/day (with 3 minute position reporting rate)

Interfaces - Chronos AtoN

USB	For configuration
IEC61162-1 port*	NMEA0183 at 38,400baud
Light*	Status and health
Racon*	Status

*Not available when connected to the Chronos sensor interface unit

Interfaces - Via Chronos Sensor Interface

See separate data sheet: Chronos Sensor Interface - 418-0052

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
AIS Receiver sensitivity at 20% PER	< -110 dBm
AIS Transmitter Frequency Accuracy	< ±500 Hz
AIS Transmitter maximum transmit time for channel protection	1 Sec max on air

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.

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

GPS Receiver and Antenna

Channels	50
IEC 61108-1	Compliant
GPS antenna	External antenna provided
Glonass Option	available

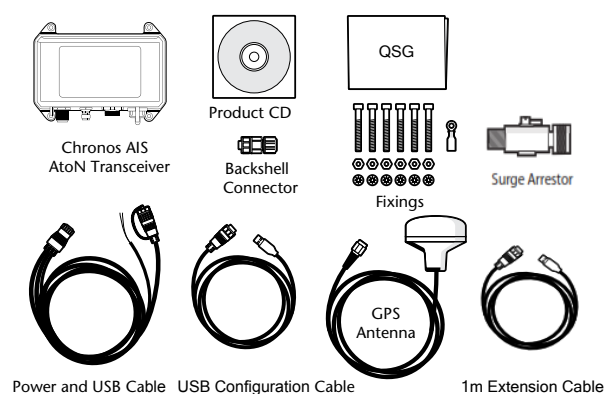
AtoN Functions

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

Environmental

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

What's In The Box



201-0803:1

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