

ACR NAUTICAST™ Portable AIS

Automatic Identification System

Portable Inland and SOLAS

The Science of Survival



The ACR NAUTICAST™ Portable AIS is the right solution for your fully autonomous AIS needs. This transponder is compliant for Inland and SOLAS applications. With a fully charged internal battery, the portable system can operate for 3 hours or indefinitely when connected to ship's power. Interfacing with the ship's sensors and ECDIS displays is made easy with the external case mounted ports and optional cables. Built in WiFi allows for communication with PC ECS software.

NAUTICAST™ Portable AIS improves shipboard safety by providing information about AIS traffic that radar alone can't. AIS target name, vessel type, MMSI, position, COG, SOG, to name a few are available to ship's helmsmen on an innovative 3-in-1 display. Choose from Alphanumeric, Radar, or Fairway view to display surrounding traffic and their ship's data. Selectable range zoom functions along with target sorting provide customizable views of surrounding traffic.

The ACR NAUTICAST™ Portable AIS transponder fully corresponds to the technical specifications for the Universal Automatic Identification System (UAIS) Transponder issued by the International Maritime Organization (IMO). The NAUTICAST™ Portable AIS makes a significant contribution to maritime situational awareness.

18.5" (47 cm)



Rugged Portability

The ACR NAUTICAST™ Portable AIS is designed for situations where a fixed installation is not required or practical. This is the perfect solution for mandatory short term carriage compliance for bridge and lock tenders. The hard case can withstand the rigors of the marine environment as well as multiple deployments. Corrosion resistant IP65 rated connectors enhance the system reliability and connectivity.

This unit is capable of being set up and running within minutes. Once the transponder is powered up and programmed with ship's static data easy to install VHF and WiFi antennas complete the installation.

14.06"
(35.7 cm)

Equipment built in to the floating waterproof housing

NAUTICAST™ AIS transponder

GPS antenna

24v NiMH rechargeable battery pack

24v DC power supply with external 24v cable

Battery charger with external 230VAC cable

8" VHF storable antenna

4" WiFi storable antenna

Option accessories for advanced installations

P/N 2639 Secondary remote GPS antenna with 16.4 ft. (5 m) cable

P/N 2647 GPS extension cable, 66.6 ft (20 m) (not shown)

P/N 2628 Secondary remote VHF antenna with 16.4 ft. (5 m) cable

P/N 2649 Secondary VHF adapter cable TNC male to SO 239) Required with P/N 2628 (not shown)

P/N 2653 RS232 Serial port male to USB adapter

P/N 2654 RS232 Serial cable extension 16.4 ft. (5 m)

P/N 2655 External AC to DC power supply, dry environment only

P/N 2639



P/N 2628



P/N 2653



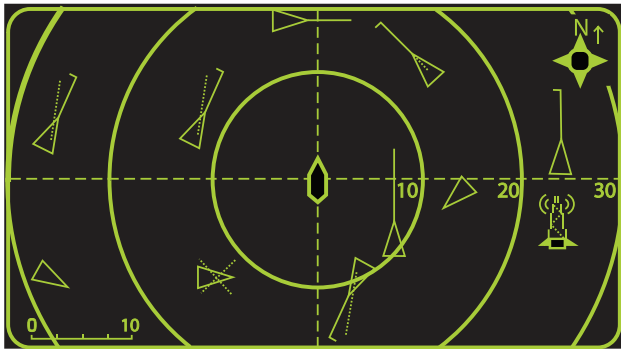
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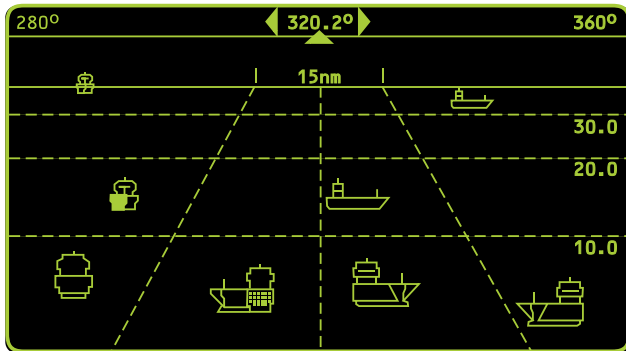
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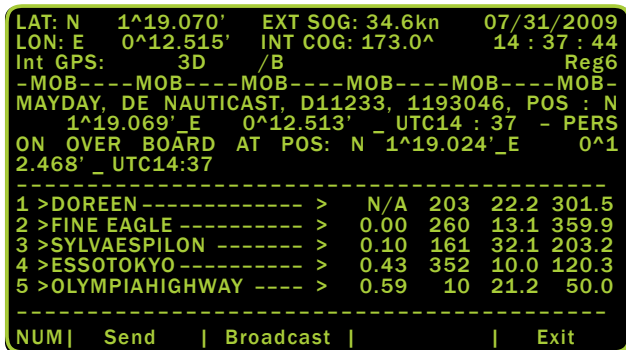
Radar View



Fairway View



Man Overboard View



NAUTICAST™ Portable Advanced Features

3-in-1 Graphical Display

The NAUTICAST™ Portable includes the innovative 3-in-1 graphical display with 3 different views at a fingertip: Alphanumeric, Radar, and Fairway view. With different zoom-levels, this representation of the surrounding traffic scenario can be selected directly using cursor keys.

Man Overboard Emergency Button

Man Overboard button automatically saves the precise coordinates of the incident and generates an immediate distress message to all AIS equipped vessels in the area.

Software Sensor Interfacing

The NAUTICAST™ Portable software enables you to automatically check, read out/trace and evaluate the data received from your sensor interfaces. All sensor inputs are configurable and have built in test programs for evaluating and troubleshooting your connections.

Fully Approved

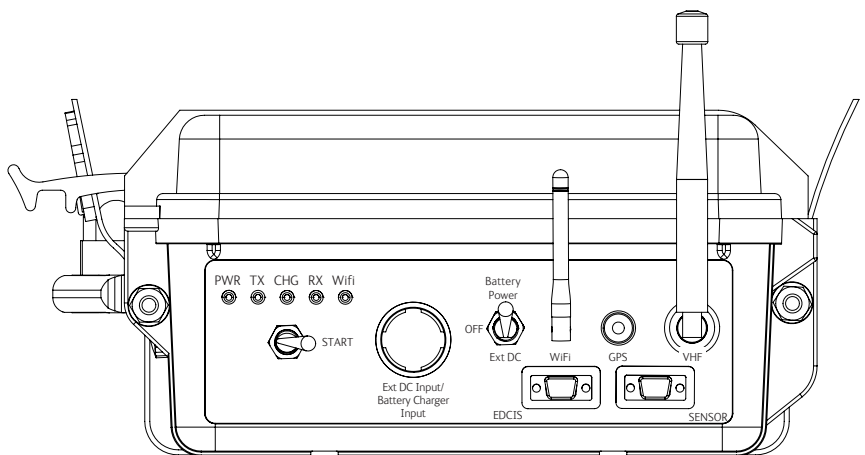
The NAUTICAST™ Portable has been re-certified to meet all SOLAS and IMO regulation including the new ITU –R M1371-3 requirements.

Enhanced GPS Sensitivity and Reporting

With our new internal upgraded 16 Channel GPS Module, the NAUTICAST™ Portable is more sensitive and accurate than ever before. The RAIM (Receiver Autonomous Integrity Monitor) receiver verifies the NAUTICAST™ unit's GPS data for increased accuracy reporting.

Engineered Smart, Built Strong

The cast aluminium transponder housing is rugged and protects your AIS for years of life on the water. The NAUTICAST™ Portable is rated to IP-65.



ACR NAUTICAST™ Portable AIS

Portable Automatic Identification System

THE SCIENCE



OF SURVIVAL

GENERAL

Product Number	2645
Size (L x W x D)	18.50" x 14.06" x 6.93" 47 cm x 35.7 cm x 17.6 cm
Weight	28.6 lbs, (12.9 kgs)
Operating Temperature	5°F to 131°F (-15 to 55°C)
Protection Class	IP67

POWER SUPPLY

Internal 24VDC, NiMH 5Ahr Battery
External 230VAC Input for Battery Smart Charger
External DC Input 18-36VDC @ 150 Watts Max

SWITCH

Battery or Ext DC Input.	Note: switch needs to be in the "Off"-Position for Battery Charging
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EXTERNAL INTERFACES

ECDIS (AIS targets, AIS messages)	RS-232
D-Sub 9 Connector	38400bps, 8N1
Sensor (Nav. Input Data)	RS-232
D-Sub 9 Connector	4800bps, 8N1

BUILT IN GPS

Receiver Architecture	16 channel diff.
Tracking Capability	16 satellites sim.
Accuracy	2.5 m CEP
DGPS Accuracy	2.0 m CEP
GPS Antenna Connector	TNC

GPS SOLUTIONS

Beacon Interoperability
EGNOS Interoperability
WAAS Interoperability
OMNISTAR
Interoperability
LongWave
Interoperability
VHF Interoperability
(DGPS over Msg. 17)
Optional internal beacon receiver
Combined GPS/DGPS antenna

Wifi – Antenna included SMA female

Range. With Antenna (Included) 100m
Configuration (CD included)
VHF Antenna Connection – TNC Female

EXT GPS antenna connection - TNC female

Internal GPS 16 Channel

LED INDICATORS

Red	Power (ON/OFF)
White	Wi-Fi
Yellow	Battery Charger
Green	TX Activity
Blue	RX Activity

SPECIFIED STANDARDS (TRANSPONDER)

IMO MSC. 74(69) Annex 3	
ITU-R M.1371-3 (Class A)	
IALA Techn. Clar. of ITU-R M. 1371-1 (Ed. 1.3)	
IEC 61993-2 (2002)	
IEC 61162-1 (2000)	NMEA 0183-3
IEC 61162-2 (1998)	NMEA 0183-3
ITU-R M. 823-2	
IEC 61108-1 (1996)	
IEC 60945 (1996)	
ITU-R M. 825-3	
ITU-R M. 1084-3	

VHF

Frequency Range	156 MHz - 162 MHz
Channel Spacing	12.5 or 25KHz
Number of RF Channels	3 Receiv. /1 Transm.
Number of AIS Receivers	2
Number of DSC Receivers	1
Frequency Error	+/- 2.5 ppm

VHF TRANSMITTER

Output Power	1 Watt to 12.5 Watt
(Adjustable)	
Rcv. to Transm. Switching Time	< 1 ms
Transmit Release Time	< 1 ms
Automatic Shutdown	1 sec
Channel Switching Time	< 25 ms
Attack Time	< 1 ms

VHF RECEIVER

Max. Usable Sensitivity	<-110 dBm
Co-channel Rejection	> -8dB (25 kHz); > -12 dBm (12.5 kHz)

Adjacent Channel Selectivity	>70 dB (25 kHz); > 60dB (12.5 kHz)
Inter-modulation Rejection	> 65 dB
Spurious Response Rejection	70 dB
Blocking	> 84 dB

VHF MODEM

Bitrate GMSK	9600 bps
RF Baud Rate (DSC)	1200 bps
Modulation	GMSK/FSK

SOFTWARE

NAUTICAST™ INLAND
Version 2.0.S116.XXX to
system and
AIS information

Keyboard

Internal Qwerty Keyboard
with separate navigation
keys and special function.

Display

Internal Monochrome
Display For AIS
monitoring

Graphical: 240 x 128,
adjustable brightness, and
contrast

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