KanAtoN AIS Transponder Types 1 & 3

orolia Group

KanAtoN AIS Transponders Type 1 and Type 3 are Automatic Identification Systems (AIS) for aids to navigation including data buoys, renewable wind and wave energy sites, and oil and gas platforms.

Broadcasting information regarding an AtoNs identity, position, battery condition and navigation status, AIS allow mariners to obtain vital information to avoid collisions, such as warning them in real-time of weather conditions and if a buoy moves off position. They also provide shore station authorities with complete, accurate information about the AtoN and its environment.

The transponders can support one real and up to four synthetic or virtual transmissions. Type 1 and Type 3 can transmit 3 VDL message types: identification including MMSI, type, name, position, longitude, latitude, dimension, 'off' position indicator, status, and signalling light on/off indicators; meteorological and hydrological messages; and remote tele-monitoring including status of battery charge, lights, solar panels etc. Type 3 can also relay safety messages from a Search and Rescue Transponder (SART).

KanAtoN transponders include VHF and GPS antennas, connection cables and connectors. All electronic components are integrated in a watertight casing, except for the VHF antenna, which is external.

features:

- Low power consumption – compatible with solar-powered installations
- Compact, lightweight unit with watertight casing
- Easy to configure from a PC, serial or USB port
- Robust VHF power amplifier
- Input protection against overvoltage
- Fully autonomous – can be placed in any location (Type 3 only)
- Supports VDL configuration and monitoring
- Modem for satellite transmission (optional)
- Integrated satellite link enables transmission of data over long distances
- Fully compliant with IALA A-126

AIS & monitoring

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KanAtoN AIS Transponder

specifications

physical

Dimensions mm	165 Ø x 135 h
Weight Kg	1.1
Construction	ASA plastic, white
Case sealing	IP67

operation

Temperature °C	-20 to -60
Protection against reversal of polarity	Yes
Voltage	10 to 36
Current	<1mA sleep mode <50mA in operation <2.5A in transmission

consumption

[Message 21 every 3 min] Type 1	<0.20AH / day
[Message 21 every 3 min] Type 3	<1AH / day
GPS receiver	GPS L1 C/A-code SPS 12 channels
VHF antenna connector	N female

communication ports

TX and RX in RS232	For configuration and reception of technical data
RX in RS422	For reception of meteorological data

characteristics

Transmission mode	FATDMA (Type 1) / RATDMA (Type 3)
Inputs/outputs	4 inputs insulated by optocouplers (to read light fault, lights on and Racon fault data)
	Insulation voltage 5300Vrms
	Protection voltage 16V 60W for 1ms
	Operating voltage 16 to 3.3V
1 output per static relay (for remote control of a Racon)	Insulation voltage 5300Vrms
	Max current 200mA at max 16V
	Ron resistance < 150 Ohms

operating indicator

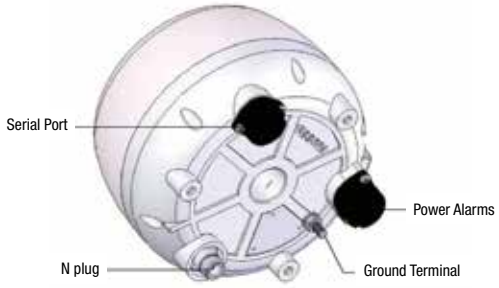
Three-colour LED	(Green/yellow/red)

accessories

VHF antenna

2x7 strand shielded cables fitted with a 5m Amphenol C16-1 connector

1 RG213 coaxial cable fitted with a 5m N male connector



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about Hydrosphere

Hydrosphere is the UK's leading supplier of aids to navigation and has been providing cost-effective solutions to the marine industry for more than 20 years. We offer a wide range of navigation and mooring buoys, LED navigation lights, sector lights, rotating beacons, leading lights, jetty masts, beach and zone marking products and associated moorings. Rental, installation and maintenance services are also available for all our products and systems.

For more information please contact us.

data buoy platforms | moorings | navigation buoys | navigation lights | mooring buoys | installation

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Compliant with all IALA recommendations.

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