

**Universal Automatic Identification System Product No. 2600** 



Class A - SOLAS Transponder: XS in size and XL in functions Most compact AIS-System All-In-One Unit Best Value

The GlobalWatch™ Transponder fully complies with the IMO technical specifications for the Universal Automatic Identification System (AIS) Transponder.

The GlobalWatch<sup>™</sup> Transponder is specifically designed for all commercial vessels which are subject to the SOLAS regulations. The GlobalWatch<sup>™</sup> Transponder makes a significant contribution to increasing safety at sea.



ACR Electronics, Inc. 5757 Ravenswood Road Fort Lauderdale, FL 33312 U.S.A. Tel Worldwide: +1(954) 981-3333 Fax: +1(954) 983-5087 www.acrelectronics.com

\_ A *Chelton Group* Company

ACR Electronics, Inc. is registered by UL ISO 9001:2000

PHYSICAL	SPECIFIED STANDARDS	
Size (w) 7.9 in. / 20 cm	IMO MSC.74(69) Annex 3	
Size (h) 11 in. / 28 cm	ITU-R M.1371 (Class A)	
Size (d) 2.4 in. / 6 cm	IALA Techn.Clar. of ITU-R M.1371-1 (Ed.1.3)	
Weight 5.5 Ibs./2.49 kg	IEC 61993-2 (2002)	
Operating Temperature (Celsius) -15° to +55°	IEC 61162-1 (2000)	NMEA 0183-3
(Fahrenheit) +5° to +131°	IEC 61162-2 (1998)	NMEA 0183-3
POWER SUPPLY	IEC 61162-3	NMEA 2000
Supply Voltage 24 V DC (-10% +30%)	ITU-R M.823-2	
(minus is chassis ground)	IEC 61108-1 (1996)	
Input Current max. 5 A (24V)	IEC 60 945 (1996)	
	ITU-R M.825-3	
INTERFACES	ITU-R M.1084-3	
Number of Data Ports 3 Input / 4 I-O / 1 Output		
IEC 61162-1/2 ( RS422 / NMEA 0183)	VHF	
ITU-R M.823-2 ( RS422 / RTCM SC104)	Frequency Range	156 MHz - 162MHz
Bitrate 4800 bps / 38400 bps	Channel Spacing	12.5 or 25kHz
Sensor (Input; e.g.: GPS)	Number of RF Channels	3 Receiv. / 1 Transm.
Sensor (Input; e.g.: GYRO)	Number of AIS Receivers	2
Sensor (Input; e.g.: HDG)	Number of DSC Receivers	1
Pilot Port (In- / Output) AIS targets, AIS messages	Frequency Error	+/- 2.5ppm
ECDIS Port (In- / Output) AIS targets, AIS messages		
Long Range Port (In- / Output)	VHF TRANSMITTER	
	Output Power	2 Watt to 12.5 Watt (adjustable)
BUILT IN GPS	Receive to Transmit Switching Time	< 1ms
Receiver Architecture 12 channel differential	Transmit release time	< 1ms
Tracking Capability 12 satellites sim.	Automatic shutdown	1 sec.
Accuracy Horizontal 10m (2drms) *	Channel switching time	< 25ms
Accuracy Vertical 15m (2drms) *	Attack Time	< 1ms
GPS Antenna Connector TNC		
	VHF RECEIVER	
	Max. Useable Sensitivity	< -110dBm
GPS Solutions	Co-channel Rejection	> -8dB (25kHz); > -12dBm (12.5kHz)
Beacon interoperability	Adjacent Channel Selectivity	> 70dB (25kHz); > 60dB (12.5kHz)
EGNOS interoperability	Inter-modulation Rejection	> 65dB
WAAS interoperability	Spurious Response Rejection	> 70dB
OMNISTAR interoperability	Blocking	> 84dB
LongWave interoperability		
VHF interop.	VHF MODEM	
	Bit rate GMSK	9600 bps
	RF Baud Rate (DSC)	1200bps
	Modulation	GMSK / FSK
OPTIONAL INTERFACES		
Number of Data Ports RS232 up to 5 Bitrate Up to 115000 bps	SOFTWARE	
Simplex / Duplex Duplex	GlobalWatch <sup>™</sup> version 2.0.x	
Number of Data Ports IEC 1 61162-3 CAN (RS485)	<ul> <li>installed and ready for use</li> <li>implemented configuration Softwar</li> </ul>	Φ.
Bitrate up to 1 Mbps	<ul> <li>User friendly Interface to System</li> </ul>	
	and AIS Information	
KEYBOARD	- additional Interface to System Conf guration (Windows 2000 <sup>®</sup> )	
Integrated alphanumerical	- GlobalWatch <sup>™</sup> Demonstrator for training purposes	
DISDLAY	(Windows 2000 <sup>®</sup> )	
DISPLAY		



HARDWARE

GlobalWatch<sup>™</sup> version 1.0.x

graphical 240 x 128 adjustable brightness

and contrast

For more information on this or our other products, please contact us:

# ACR Electronics, Inc. 5757 Ravenswood Road Fort Lauderdale, FL 33312 U.S.A.

Tel: +1 (954) 981-3333 Fax: +1 (954) 983-5087 www.acrelectronics.com

Integrated



# GlobalWatch™ Features

#### ▶ The MOB Button

The MOB Button automatically saves the precise coordinates of the incident and immediately generates a distress message to surrounding vessels. Another clever feature, which could save you the precious seconds that could mean a life.

#### ▶ Size it up!

The GlobalWatch™ alluring measurements are (H) 7.9" (20 cm) x (W) 11" (28 cm) and it's only 2.4" (6 cm) deep. It's lightweight at 5.5 lbs. (2.49 kg), and will not take up precious space on your bridge, even though keyboard and display are integrated.

# ▶ Plug & Play

Inventive technology at its best! Two sockets suffice to connect power, sensors and antennas. Initial Transponder operation is up and running within minutes.

# Complimentary training software

GlobalWatch™ Training Software simulates all Transponder functions. It is especially valuable for simulating emergencies at sea and practising the handling of alarms, long range interface requests and messaging.

The free software is available upon request.

#### Warnings:

Although ACR strives for accuracy in all its publications, this material may contain errors or omissions, and is subject to change without prior notice. ACR shall not be made liable for any specific, indirect, incidental or consequential damages as a result of its use. ACR components may only be used in safety of life devices or systems, with the express written approval of ACR, as the failure of such components could cause the failure of the ACR device or system. If these fail, it is reasonable to assume that the safety of the user or other persons may be endangered.

# GDEWEID UNS

# **Universal Automatic Identification System Components**



### GlobalWatch™ UAIS includes:

Transponder, CD ROM with demo and documentation, users manual, quick start guide, installation manual, and 1 Flush Mount kit.



#### **Interface Cables**

AIS Interface Cable; Connects Transponder and Connection Box & Pilot

Plug. (Choose specific length) 3 meters (9.8ft): P/N 2610 10 meters (32.8ft): P/N 2611



GPS/VHF Interface Cable - <u>1meter (3.3ft)</u>; Includes 1 each Female N and TNC connectors installed and 1 each Male N and TNC connectors for RG214 cable (specify length) Not Required with P/N 2624 VHF/GPS Combi Antenna.

P/N 2612

GPS/VHF Interface Cable -  $\underline{10\ meters(\ 32.8ft)}$ ; Includes 1 each Male PL & TNC connector installed. (Not Required with P/N 2624 VHF/GPS Combi Antenna.) P/N 2613





Glomex R109 STS VHF
Stainless Steel Whip
Antenna - 91.4cm (36in);
Includes Mounting Kit &
Plug PL Male for RG214.
P/N 2620

Comrod AV 7 VHF Fiberglass
Antenna -1.22m(4ft); Includes

Aluminum mount (Vert or
Horiz. stanchion, or bulkhead)
When used with P/N 2612, 1
P/N 2632 PL Male Connector



& P/N 2630 Cable (specify length) are required. P/N 2621



## **GPS Antenna Solutions**

ProCom GPS4 Quadrifilar Helix Antenna 5 Volt. When used with P/N 2612 interface, one P/N 2633 TNC Connector & P/N 2630 cable (Specify length) are required. Mount P/N 2623 is required.

P/N 2622

ProCom FLG Deck Mounting Kit Metal Horiz. surface (for P/N 2622). P/N 2623



#### **VHF/GPS Combination Antenna Solutions**

Comrod AC17 Combi Antenna (combined GPS/VHF) includes Aluminum mount (Vert or Horiz.. Stanchion or bulkhead) & interface cable. 2 P/N 2631 Male N connectors & P/N 2630 cable (specify length) are required. P/N 2612 or 2613 are not required with this option. P/N 2624



## **Optional AIS Cable connection box**

(Required for Advanced Installation with ECDIS, etc.)

Connection Box P/N 2640

# **Optional VHF/GPS Antenna Cable and Plugs**

(for extension to standard cable lengths, select or supply your own)



GPS/VHF RF Antenna Cable extension cable RG214 (No Plugs) Sold per meter P/N 2630



N Male RG214 Crimp P/N 2631



PL Male RG214 Crimp P/N 2632



TNC Male RG214 Crimp P/N 2633

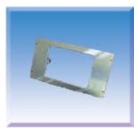
### **Optional Mounting Bracket Assemlies**



Drop In Frame for Larger Openings. 48.3cm (19in) Includes 3 Bolts and Nuts to hold display to bracket. P/N 2652



Retro Fit Frame Drop In Mount (Includes 3 screws, nuts, clips to hold display to bracket). P/N 2651



Mounting Bracket Gimbal Style (Includes 4 screws and 2 Mounting Knobs). P/N 2650