

**STANDARD HORIZON**

*Nothing takes to water like Standard Horizon*

EUROPEAN  
VERSION

2017

# MARINE COMMUNICATIONS PRODUCT CATALOGUE



**Jacobs**  
[www.jbe.nl](http://www.jbe.nl)



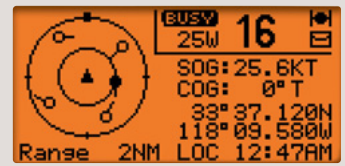



# Fixed Mount VHF Radios

POWER, PERFORMANCE, RELIABILITY



- AIS / AIS SART target display: MMSI, Call Sign, Ship Name, BRG, DST, SOG and COG

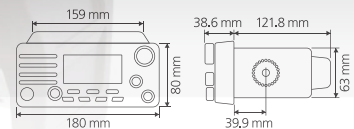


- Integrated 66 Channel GPS antenna 
- BUILT-IN AIS  
Integrated dual channel AIS (Automatic Identification System) receiver
- ClearVoice noise canceling speaker microphone with channel selection and 16/9 key
- Oversized rotary channel knob
- 80dB Commercial grade receiver

◀ Supplied Accessories:  
Power Cord and Mounting Bracket

## GX2200E MATRIX AIS/GPS ITU CLASS D BUILT-IN AIS

FIRST FIXED MOUNT VHF WITH BUILT-IN AIS/GPS RECEIVER  
30 W PA/FOG-RAM3+ COMPATIBLE



- Direct call to Class A and Class B vessels using the DSC individual call feature
- Programmable CPA or TCPA collision avoidance alarms
- Meets ITU-R M.493-13 Class D DSC (Digital Selective Calling)
- DSC position request and report functions
- GPS Compass, Waypoint and GPS status pages
- Navigation (LAT/LON, Time, SOG and COG) information shown on display
- 4800 or 38400 NMEA 0183 baud rate selection, for plotters with 1 NMEA port
- Enter, Save and Navigate to waypoints with Compass page
- User customisable soft keys for easy menu operation
- Programmable Scan, Priority Scan, and Dual Watch
- Supports optional RAM3+ second station remote microphone with AIS display
- ATIS Mode for European Inland Waterways

### Icon Function List





# GX1700E

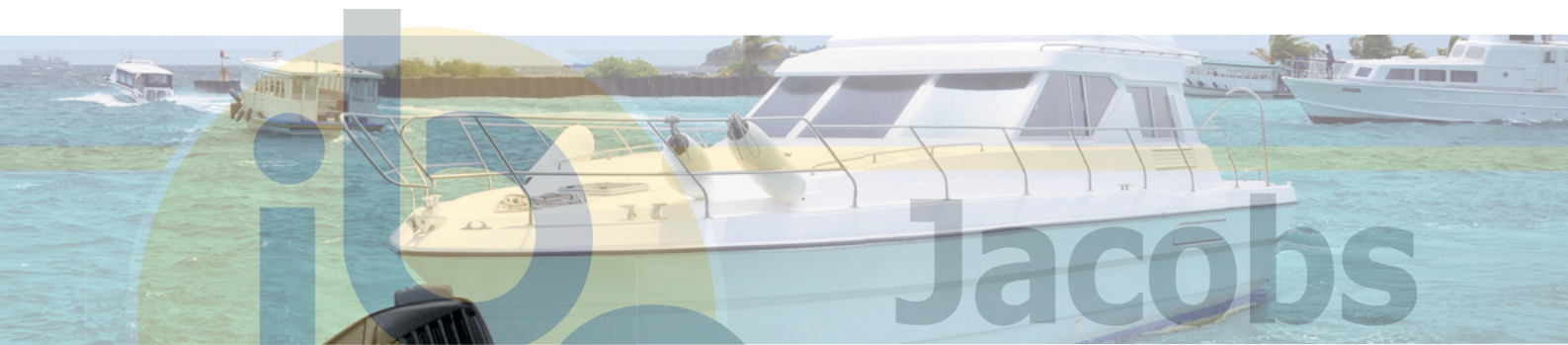
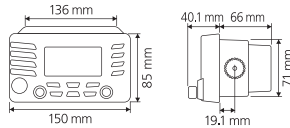
## EXPLORER GPS *ITU CLASS D*

ULTRA SLIM & COMPACT REAR CASE FIRST  
FIXED MOUNT VHF WITH BUILT-IN GPS!

◀ Supplied Accessories:  
Power Cord and Mounting Bracket



- Fixed Mount VHF with BUILT-IN 66 channel GPS
- Ultra thin and compact rear case design (3.5" depth)
- Meets ITU-R M.493-13 Class D (Digital Selective Call)
- Automatically poll the GPS position of up to 4 ships using DSC
- Dedicated CH 70 Receiver for DSC
- Enter, Save, and Navigation to Waypoint with Compass page
- Navigation (LAT/LON, SOG, and COG) information shown on display
- Noise cancelling microphone with channel UP/DOWN, 16/9 and H/L keys
- Programmable Scan, Priority Scan, and Dual Watch
- ATIS Mode for European Inland Waterways



Jacobs  
www.jbe.nl



# GX1300E

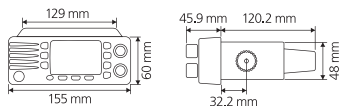
## ECLIPSE *ITU CLASS D*

FIXED MOUNT CLASS D DSC VHF

◀ Supplied Accessories:  
Power Cord and Mounting Bracket



- Affordable Ultra Compact Fixed Mount VHF radio
- Meets ITU-R M.493-13 Class D DSC (Digital Selective Calling)
- Built in separate receiver for CH70 (Receiving DSC Calls)
- Oversized full dot matrix display (31 x 55 mm)
- DSC Distress, Individual, Group, All Ships, Position Request, Position Report, and DSC Test Call\*2
- GPS position and Time shown on a full dot matrix display when connected to a GPS Receiver
- Automatically poll the GPS position of up to 6 ships using DSC\*2
- Programmable Scan, Priority Scan, and Multi Watch (Dual Watch or Triple Watch)
- ATIS Mode for European Inland Waterways



## Fixed Mount VHF Radio Accessories

	Microphone / Cable		External GPS Antenna	Encryption	Cover	External Speaker		Hail / PA Speaker		Bracket
Model	<b>CMP31B/CMP31W</b> Remote station microphone (Black/White) RAM3+	<b>CT-100</b> 7 m extension cable for CMP31	<b>SCU-31</b> External GPS antenna with 15 m of cable	<b>CVS2500A</b> Voice scrambler	Dust Cover	<b>MLS-300</b> External Speaker	<b>MLS-310</b> External Speaker with 10 W amplifier	<b>220SW</b> 114 mm Round PA/hailing horn 30 W 4 Ohm	<b>240SW</b> 127 x 203 mm Rectangular PA/hailing horn 40 W 4 Ohm	Flush mount bracket
GX2200E	•	•	•	•	HC2000	•	•	•	•	MMB-84
GX1700E	•	•	•	•	HC1600	•	•	•	•	MMB-97
GX1300E	•	•	•	•	HC1100	•	•	•	•	MMB-84

\*1 when connected to an optional AIS receiver or transponder \*2 when connected to an optional GPS





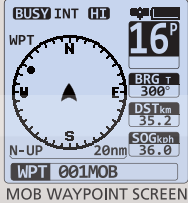
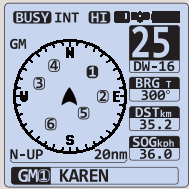
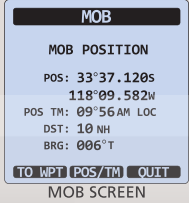


# Floating Handheld VHF Radios

LEADING THE INDUSTRY WITH  
THE FIRST FLOATING VHF WITH GPS



## ADVANCED FEATURES

- Integrated 66 Channel WAAS GPS antenna with memory log 
- Oversized full dot matrix display (43.2 mm (W) x 43.2 mm (H) or 58.4 mm diagonal)
  -  MENU SCREEN
  -  MOB WAYPOINT SCREEN
  -  GROUP MONITOR SCREEN
  -  MOB SCREEN
- Noise canceling function for transmit and receive audio
- USB Data Port - NMEA 0183 sentence Output DSC, DSE, GLL, RMC, GSA, GSV and GGA (9600 baud), and download GPS logged Data
- Water Activated Emergency Strobe Light
- Supplied with a 7.4 V 1800 mAh Li-Ion battery

Supplied Accessories:  
CAT460 Antenna, SBR-13LI 7.4V 1800mAh Li-Ion Battery Pack, SBH-12 Charger Cradle, SAD-11 Wall Charger, E-DC-19A DC Cable with Cigarette Lighter Plug, SBT-13 Alkaline Battery Case, Clip-22 Belt Clip, YS-05-01 Hand Strap and T9101606 USB Cable

Overall Dimensions: 62W x 138H x 43D mm  
Weight: 322 g (w/SBR-13LI, Hand Strap, Belt Clip & Antenna)

## HX870E ITU CLASS D

FLOATING 6 WATT CLASS D HANDHELD VHF WITH GPS



- Meets ITU-R M.493-13 Class D DSC (Digital Selective Calling)
- Built in dedicated channel 70 receiver for Class D DSC
- E20 (Easy to Operate) icon driven menu system
- Selectable 6, 2 and 1 Watt transmit power output
- Navigate to a DSC Distress Call with Compass Page
- GM (Group Monitor) using DSC Group Position Call
- DSC Test Call and Auto DSC Channel Change Selection

- Automatically poll the GPS position of ships using DSC
- Enter, Save, and Navigate to a waypoint with Compass Page
- MOB (Man Overboard) Function
- Navigation (LAT/LON, SOG, and COG) information shown on display
- Programmable Scan, Priority Scan, and Dual and Triple Watch
- Preset key used to recall up to 10 favourite channels
- ATIS Mode for European Inland Waterways



## HX300E

### COMPACT FLOATING HANDHELD VHF

◀ **Supplied Accessories:**  
CAT460 Antenna, FNB-122LI 3.7 V 1560 mAh Li-Ion Battery Pack, SAD-17 USB Wall Charger, T9101606 USB Cable, CLIP-22 Belt Clip and Hand Strap

Overall Dimensions: 59W x 128H x 33D mm Weight: 240 g (w/FNB-122LI, Belt Clip & Antenna)



- Submersible IPX8 (1.5 m for 30 minutes)
- Selectable 5 and 1 Watt transmit power output
- Unique USB charging system
- Water activated light, when dropped into the water
- Preset key used to recall up to 10 favorite channels
- 600 mW loud internal speaker audio
- Programmable Scan, Priority Scan, Dual Watch and Triple Watch
- ATIS Mode for European Inland Waterways



## NEW for 2017 HX210E

### COMPACT FLOATING HANDHELD VHF

◀ **Supplied Accessories:**  
CAT460 Antenna, SBH-25 Charger Cradle, SAD-11 Wall Charger, E-DC-19A DC Adapter, CLIP-22 Belt Clip and Hand Strap

Overall Dimensions: 57 W x 130 H x 40 D mm Weight: 280 g (w/ SBR-23LI, Belt Clip & Antenna)



- Floating
- Submersible IPX7 / (1 m for 30 minutes)
- Compact case design 57 (W) x 130 (H) x 40 (D) mm
- 6 W transmit power output
- E20 (Easy to Operate) Menu System
- 600 mW Loud Audio
- Built-in Lithium Polymer Battery Pack (7.4 V, 1800 mAh)
- ATIS Function (European version)
- Water activated emergency strobe light
- Preset key used to recall up to 10 favorite channels
- CH16/S Quick Access (S: Sub-channel)
- FM Broadcast Radio Receiver

## Handheld VHF Radio Accessories

Model	Antenna		Battery		Battery Charger		
	CAT460 VHF Marine Antenna	CN-3 BNC-SMA Adapter	Rechargeable	Alkaline Battery tray	Cradle	AC Adapter	DC Adapter
HX870E	• *1	•	SBR-13LI 1800 mAh Li-Ion*1	SBT-13 (5 x AAA)*1	SBH-12*1	SAD-11C/U*1,2	E-DC-19A*1 /E-DC-6
HX300E	• *1	•	FNB-122LI 1560 mAh Li-Ion*1	FBA-44 (3 x AAA)		SAD-17C/U*1,2	
HX210E	• *1	•	SBR-23LI 1800 mAh (Dealer replaceable)		SBH-25*1	SAD-11C/U*1,2	E-DC-19A*1 /E-DC-6
Model	Belt clip	Speaker Microphone / Vox Headset / Earpiece Microphone					
	CLIP-22 Belt Clip	SSM-14A Submersible speaker microphone with earphone jack	MH-57A4B Speaker microphone	MH-73A4B Submersible speaker microphone	CMP460 Submersible speaker microphone	SEP-10A Earphone for SSM-14A	SSM-64A Vox Headset
HX870E	• *1	•	•	•	•	•	•
HX300E	• *1	•	•	•	•	•	•
HX210E	• *1	•	•	•	•	•	•

\*1 The same as the supplied accessory \*2 "C" suffix is for use with 230 VAC (Type-C plug), and "U" suffix is for use with 230 VAC (Type-BF plug)






# Commercial Grade Marine VHF

BUILT BY PROFESSIONALS  
FOR PROFESSIONALS



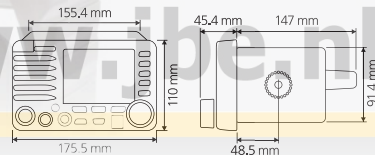
- Integrated AIS (Automatic Identification System) Class B Transponder (GX6500 only)
- Capable of connecting two optional wired RAM4 or one wired RAM4 and four wireless RAM4W microphones
- Integrated NMEA 2000 interface supporting all PGNs for Navigation, GPS, AIS and DSC functions
- Integrated Dual Channel AIS Receiver
- 66 Channel External GPS antenna included (GX6500 only) 
- GPS Compass, Waypoint and GPS status pages
- Dual Zone 25W PA / Loud Hailer with preprogrammed fog signals and listen back
- Submersible IPX8 (1.5 meters for 30 minutes)
- Integrated 32 Code Voice Scrambler and 4 Code Voice Scrambler

◀ Supplied Accessories:  
Hand Microphone, Power Cord, Mounting Bracket and Hardware, External GPS Antenna SCU-31\*\* USB Cable

Fixed Mount VHF Radio

**NEW for 2017** **GX6500E** *QUANTUM Class B AIS/GPS* **ITUCLASS D**  
**NEW for 2017** **GX6000E** *QUANTUM AIS* **ITUCLASS D**

FIXED MOUNT VHF WITH NMEA 2000 AND INTEGRATED CLASS B AIS TRANSPONDER BUILT-IN \*1



- Integrated dual channel AIS (Automatic Identification System) receiver
- Integrated Class B AIS transponder\*1
- AIS / AIS SART target display: MMSI, Call Sign, Ship Name, BRG, DST, SOG and COG
- Meets ITU-R M493-13 Class D DSC (Digital Selective Calling)
- NMEA 2000 and NMEA 0183 compatible
- 66 Channel External GPS antenna included\*1
- Selectable 4800 or 38400 baud rate for plotters
- GPS Compass, Waypoint and GPS status pages
- Programmable CPA or TCPA collision avoidance alarms
- Dual Zone 25W PA / Loud Hailer with preprogrammed fog signals and listen back
- Submersible IPX8 (5 feet or 1.5 meters for 30 minutes)
- 80dB Commercial grade receiver
- Noise-canceling for both transmit and receive audio
- Front panel microphone can be connected to rear panel and extended 6 m using MEK-4 mic extension kit
- Integrated Voice Recorder to playback up to two minutes of RX receive audio
- Integrated 32 Code Voice Scrambler compatible with FVP-42 and 4 Code Voice Scrambler compatible with CVS2500A
- E2O (Easy-To-Operate) menu system
- User customizable soft keys for easy menu operation
- Capable of connecting two optional wired RAM4 or one wired RAM4 and four wireless RAM4W microphones
- Contact Class A and Class B AIS vessels using the DSC individual call
- GM (Group Monitor) using DSC Group Position Call
- MOB (Man Overboard) Function

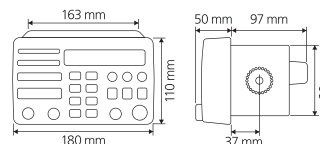
\*1 GX6500E only

## Loud Hailer VLH-3000A

30W DUAL ZONE LOUD HAILER

◀ Supplied Accessories: Mounting Bracket, Power Cord and Dust Cover

- 30W PA/Hailer output with Listen Back
- Dual Zone - Forward, Aft or Both
- 6 Preprogrammed Fog Signals: Underway, Stop, Sail, Tow, Anchor and Aground
- Horn and Siren
- Noise cancelling microphone
- Easy push button control
- 2 W Loud internal speaker audio Output
- Compatible with optional MLS-300i intercom speaker with Push-to Alert button for IC1 and IC2
- Compatible with MLS-300 and MLS-310 (10 W amplified) external speakers
- Adjustable Backlight





# HX400E

## COMMERCIAL GRADE VHF WITH LMR CHANNELS

- ◀ **Supplied Accessories:**  
CAT460 Antenna, FNB-115LI 7.4 V 2300 mAh Li-Ion Battery Pack, CD-50 Charger Cradle, PA-45 Wall Charger, CLIP-22 Belt Clip and Hand Strap

Overall Dimensions: 57W x 133H x 40D mm  
Weight: 350 g (w/FNB-115LI, Belt Clip & Antenna)



- 40 Programmable Land Mobile Channels 134 MHz to 174 MHz with CTCSS and DCS signaling
- 700 mW Loud Audio Output • Selectable 5 and 1 Watt transmit power output
- Supplied with 7.4 V 2300 mAh Li-Ion battery
- Built-in Noise Cancelling Microphone and Voice Scrambler
- Preset key used to recall up to 10 favorite channels
- Programmable channel names
- Programmable Scan, Priority Scan, and Multi Watch (Dual Watch or Triple Watch)



**NEW for 2017**

# HX407E On-board

## COMMERCIAL GRADE UHF ON-BOARD RADIO

- ◀ **Supplied Accessories:**  
SRA-14 Antenna, FNB-115LI 7.4 V 2300 mAh Li-Ion Battery Pack, CD-50 Charger Cradle, PA-45 Wall Charger, CLIP-22 Belt Clip and Hand Strap

Overall Dimensions: 57W x 133H x 40D mm  
Weight: 350 g (w/FNB-115LI, Belt Clip & Antenna)



- Selectable 1.5 and 0.5 Watt transmit power output
- Programmable channel names
- 40 Programmable Marine UHF Channels 400 MHz to 470 MHz
- Noise cancelling function for transmit and receive audio
- Voice Scrambler and Audio Tone Control
- 700 mW Loud Audio Output
- Supplied with 7.4 V 2300 mAh Li-Ion battery



**NEW for 2017**

# HX407E ATEX

## INTRINSICALLY SAFE

- ◀ **Supplied Accessories:**  
SRA-14 Antenna, FNB-115LI ATEX 7.4 V 2300 mAh Li-Ion Battery Pack, CD-50 Charger Cradle, PA-45 Wall Charger, CLIP-22 Belt Clip and Hand Strap

Overall Dimensions: 57W x 133H x 40D mm  
Weight: 350 g (w/FNB-115LI ATEX, Belt Clip & Antenna)



- Certified ATEX Intrinsically Safe
- Selectable 1 and 0.5 Watt transmit power output • Programmable channel names
- 40 Programmable Marine UHF Channels 400 MHz to 470 MHz
- Noise canceling function for transmit and receive audio
- Voice Scrambler and Audio Tone Control

ATEX Intrinsically Safe Approval classes: II2G Ex ib IIA T3

## Fixed Mount VHF Radio and Loud Hailer Accessories

	Microphone / Cable				Access Point / GPS Antenna		Bracket
<b>Model</b>	<b>SSM-70H</b> Remote Access Microphone RAM4	<b>SSM-71H</b> Wireless Remote Access Microphone RAM4W	<b>CT-100</b> 7 m extension cable for SSM-70H	<b>MEK-4</b> Microphone Extension Kit (6 m)	<b>SCU-30</b> Wireless Access Point for SSM-71H (RAM4W)	<b>SCU-31</b> External GPS Antenna with 49 ft (15 m) of Cable	<b>MMB-84</b> Flush Mount Bracket
GX6500E/GX6000E VLH-3000A							
<b>Model</b>	<b>External Speaker</b>			<b>Hail / PA Speaker</b>		<b>Encryption</b>	
<b>Model</b>	<b>MLS-300</b> External Speaker	<b>MLS-310</b> External Speaker with 10 W amplifier	<b>MLS-300i</b> Loud Hailer Intercom Speaker (with CALL button)	<b>220SW</b> 114 mm Round PA/hailing horn 30 W 4 Ohm	<b>240SW</b> 127 x 203 mm Rectangular PA/hailing horn 40 W 4 Ohm	<b>CVS2500A</b> Voice scrambler	
GX6500E/GX6000E VLH-3000A							

## Handheld VHF/UHF Radio Accessories

	Antenna			Battery		Battery Charger			
<b>Model</b>	<b>CAT460</b> VHF Marine Antenna	<b>SRA-14G/H/J</b> *5 UHF Marine Antenna	<b>CN-3</b> BNC-SMA Adapter	<b>Rechargeable</b>	<b>FBA-42</b> (6 x AA) Alkaline Battery tray	<b>CD-50</b> Charger Cradle	<b>PA-45C/U</b> *6 AC Adapter	<b>SAD-1460</b> 6 Unit Multi Charger	
HX400E									
HX407E ATEX*3	•*4	•*4	•	FNB-115LI 2300 mAh Li-Ion*4 FNB-115LI ATEX *3 Intrinsically Safe 2300 mAh Li-Ion*4	•	•*4	•*4	•	
HX407E On-board	•*4	•*4	•	FNB-115LI 2300 mAh Li-Ion*4	•	•*4	•*4	•	
<b>Model</b>	<b>Speaker Microphone / Vox Headset / Earpiece Microphone</b>						<b>Belt clip</b>	<b>Case</b>	
<b>Model</b>	<b>SSM-14A</b> Submersible speaker microphone with earphone jack*3	<b>MH-57A4B</b> Speaker microphone	<b>MH-73A4B</b> Submersible speaker microphone	<b>CMP460</b> Submersible speaker microphone	<b>SEP-10A</b> Earphone for SSM-14A	<b>SSM-55A</b> Earpiece/microphone	<b>SSM-64A</b> Vox Headset	<b>CLIP-22</b> Belt Clip	<b>SHC-18</b> Leather Case w/ belt loop and shoulder strap
HX400E									
HX407E ATEX*3	•	•	•	•	•	•	•	•*4	•
HX407E On-board	•	•	•	•	•	•	•	•*4	•

\*2 The same as the supplied accessory for GX6500 \*3 Intrinsically Safe Version \*4 The same as the supplied accessory \*5 G for 400-430 MHz/H for 420-450 MHz/J for 440-470 MHz \*6 "C" suffix is for use with 230 VAC (Type-C plug), and "U" suffix is for use with 230 VAC (Type-BF plug)



# FIXED MOUNT VHF AND LOUD HAILER SPECIFICATIONS

## Fixed Mount VHF Radios

MODEL	GX6500E/GX6000E	GX2200E	GX1700E	GX1300E
<b>GENERAL</b>				
Frequency Range	Marine Band: 156,025 - 163,275 MHz	Marine Band: 156,025 - 163,275 MHz	Marine Band: 156,025 - 163,275 MHz	Marine Band: 156,025 - 163,275 MHz
Input Voltage	13,8 VDC ±20 %	13,8 VDC ±20%	13,8 VDC ±20 %	13,8 VDC ±20 %
Current Drain	Standby: 0.55 A Receiver: 0.9A Transmit: 5.0 A (Hi), 1.0 A (Lo)	Standby: 0.55 A Receiver: 0.9 Transmit: 5.0 A (Hi), 1.0 A (Lo)	Standby: 0.45 A Receiver: 0.8 A Transmit: 5.0 A (Hi), 1.0 A (Lo)	Standby: 0.3 A Receiver: 1.0 A Transmit: 5.5 A (Hi), 1.5 A (Lo)
Overall Dimensions	175.5W x 110H x 173.3D mm	180W x 80H x 160D mm	150W x 85H x 90D mm	155W x 60H x 150D mm
Flush-Mount Dimensions	158W x 94H x 158D mm	161W x 65H x 150D mm	137W x 72H x 90D mm	131W x 51H x 140D mm
Weight	1.66 kg	1.45	0.9 kg	870 g
PA/FOG Power Output	25 W with listen back	30 W with listen back	-	-
<b>TRANSMITTER</b>				
RF Output	25 W (Hi), 1 W (Lo)	25 W (Hi), 1 W (Lo)	25 W (Hi), 1 W (Lo)	25 W (Hi), 1 W (Lo)
Conducted Spurious Emissions	Less than -80 dBc (Hi), -66 dBc (Lo) ±3 ppm (-20° C to +60° C)	Less than -80 dBc (Hi), -66 dBc (Lo)	Less than -80 dBc (Hi), -66 dBc (Lo)	80 dB (Hi), 66 dB (Lo)
Frequency Stability	50 dB	±3 ppm (-20° C to +60° C)	±3 ppm (-20° C to +60° C)	±3 ppm (-20° C to +50° C)
FM Hum and Noise	50 dB	50 dB	50 dB	50 dB
<b>RECEIVER (for Voice and DSC)</b>				
Sensitivity (12 dB SINAD)	0.30 µV	0.30 µV	0.25 µV	0.25 µV
Spurious and Image Rejection	80 dB for Voice (75 dB for DSC / 70 dB for AIS)	80 dB for Voice (75 dB for DSC)	80 dB for Voice (75 dB for DSC)	75 dB
Intermodulation and Rejection	80 dB for Voice (75 dB for DSC / 70 dB for AIS)	80 dB for Voice (75 dB for DSC)	70 dB for Voice (70 dB for DSC)	70 dB for Voice (70 dB for DSC)
Audio Output	10 W	4.5 W	4.5W	4.5W
DSC Format	Class D ITU-R M.493-13	Class D ITU-R M.493-13	Class D ITU-R M.493-13	Class D ITU-R M.493-13
TRANSMITTER (for AIS)	161.975 MHz (AIS CH A)*1 162.025 MHz (AIS CH B)*1			
<b>RECEIVER (for AIS)</b>				
Sensitivity	0.5 µV	0.5 µV	-	-
Selectivity	Spurious and Image Rejection 70 dB Intermodulation and Rejection 70 dB	Spurious and Image Rejection 70 dB Intermodulation and Rejection 70 dB	-	-
<b>NMEA Input/Output</b>				
NMEA 2000	Compatible	-	-	-
NMEA 0183	Input: GLL, GGA, GNS, RMC, GSA*1 and GSV*1 (4800 or 38400*1 bps) Output: DSC, DSE, GGA, GLL, GNS, RMC, GSA and GSV (4800 or 38400 bps), VDM and VDO (38400 bps)	Input: GLL, GGA, GNS, RMC, GSA and GSV (4800 or 38400 bps) Output: DSC, DSE (4800 or 38400 bps)	Input: GSA, GSV, GGA, GLL, GNS and RMC Output: DSC and DSE	Input: GSA, GSV, GGA, GLL, GNS and RMC Output: DSC and DSE
NMEA 0183-HS	Output: VDM and VDO (38400 bps)	Output: VDM (38400 bps)	-	-

\*1 GX6500E only

## Loud Hailer

MODEL	VLH-3000A
<b>GENERAL</b>	
Input Voltage	13.8 VDC ± 20 %
PA Horn Output	30W : 2ch (at 4 ohm 10 % distortion)
Intercom Output	4W : 2ch (at 4 ohm 10 % distortion)
Listen-Back Input Level	2 mV
AF Output	
EXT SPK Output	4 W (at 4 ohm 10 % distortion)
INT SPK Output	2 W (at 8 ohm 10 % distortion)
Mic sensitivity	10 mV
Drain current	7 A (MAX) when Forward and Aft Horns are used.
Idle current	300mA
Operating temperature	-20° C to +55° C
Storage temperature	-30° C to +70° C
Water integrity performance	IPX7 (1 m for 30 min) for the front panel
Overall Dimensions	180W x 110H x 140D mm
Flush mount dimensions	165W x 92H x 115D mm
Weight	1.35 kg

MODEL	GX6500E/GX2200E/GX1700E GPS Specifications
Channels	66 channels
Sensitivity	Less than -147 dBm
Time to First Fix	1 min typical (@Cold Start) 5 sec typical (@Warm Start)
Geodetic Datum	WGS84
SBAS Correction	WAAS, MSAS and EGNOS

## HANDHELD VHF SPECIFICATIONS

MODEL	HX870E	HX400E	HX407E ATEX/HX407E On-board	HX300E	HX210E
<b>GENERAL</b>					
Frequency Range	Marine Band: 156,025 - 162,000 MHz	Marine Band: 156,025 - 162,000 MHz LMR Band: 134 - 174 MHz	UHF Band: 450 - 470 MHz LMR Band: 400 - 470 MHz	Marine Band: 156,025 - 162,000 MHz	Marine Band: 156,025 - 163,275 MHz
Battery type / Capacity	Li-Ion 1800 mAh	Li-Ion 2300 mAh	Li-Ion 2300 mAh	Li-Ion 1560 mAh	Lithium Polymer 1800 mAh (Built-in)
Input Voltage	7.4 VDC	7.4 VDC	7.4 VDC	3.7 VDC	7.4 V DC
Current Drain	Standby: 100 mA (GPS On), 60 mA (GPS Off) Receive: 330 mA (MAX AF Output) Transmit: 1.6 A / 1.0 A / 0.7 A (6 W / 2 W / 1W)	Standby: 50 mA Receive: 320 mA (MAX AF Output) Transmit: 1.6 A / 0.8A (5 W / 1 W)	Standby: 70 mA Receive: 320 mA (MAX AF Output) Transmit: 0.8 A / 0.5 A (1 W / 0.5 W)	Standby: 20 mA Receive: 330 mA (Typical at MAX AF Output) Transmit: 2.3 A / 0.9 A (5 W / 1 W)	Standby: 60 mA Receive: 300 mA (MAX AF Output) Transmit: 1.8 A / 1.0 A / 0.7 A (6 W / 2.5 W / 1W)
Overall Dimensions	62 W x 138H x 43D mm	57W x 133H x 40D mm	57W x 133H x 40D mm	59W x 128H x 33D mm	57 W x 130H x 40D mm
Weight	322 g (w/SBR-13LI, Hand Strap, Belt Clip & Antenna)	350 g (w/FNB-115LI, Belt Clip & Antenna)	350 g (w/FNB-115LI ATEX, Belt Clip & Antenna)	240 g (w/FNB-122LI, Belt Clip & Antenna)	280 g (w/SBR-23LI (Built-in), Belt Clip & Antenna)
<b>TRANSMITTER</b>					
RF Output	6 W / 2 W / 1 W (@7.4 V)	5 W / 1 W (@7.4 V)	1 W (ATEX), 1.5 W (On-board) / 0.5 W (@7.4 V)	5 W / 1 W (@3.7 V)	6 W / 2.5 W / 1 W (@7.4 V)
Conducted Spurious Emissions	-75 dBc Typical	-75 dBc Typical	-75 dBc Typical	-75 dBc Typical	-75 dBc Typical
Frequency Stability	±3 ppm (-20° C to +60° C)	±2.5 ppm (-30° C to +60° C)	±2 ppm (-30° C to +60° C)	±5 ppm (-20° C to +60° C)	±5 ppm (-20° C to +60° C)
FM Hum and Noise	40 dB	40 dB	40 dB	40 dB	40 dB
<b>RECEIVER</b>					
Sensitivity (12 dB SINAD)	0.25 µV	0.25 µV	0.25 µV	0.25 µV	0.25 µV
Selectivity	70 dB Typical	80 dB (25 kHz) / 70 dB (12.5 kHz)	80 dB (25 kHz) / 70 dB (12.5 kHz)	70 dB Typical	More than 70dB
Audio Output	700 mW	700 mW	700 mW	600 mW	600 mW
DSC Format	Class D ITU-R M.493-13	-	-	-	-
NMEA 0183 In/Out	Input/Output: DSC, DSE, GGA, GLL, RMC, GSA and GSV	-	-	-	-
<b>GPS</b>					
Channels	66 channels	-	-	-	-
Sensitivity	Less than -147 dBm	-	-	-	-
Time to First Fix	1 min Typical (@Cold Start) 5 sec Typical (@Warm Start)	-	-	-	-
Geodetic Datum	WGS84	-	-	-	-
SBAS Correction	WAAS, MSAS and EGNOS	-	-	-	-

**STANDARD HORIZON**

Standard Horizon reserves the right to make changes and enhancements to products at our discretion. Current specifications are therefore subject to change without notice.

Jacobs Breda Electronics | Liesbosstraat 14 | 4813 BD Breda | Tel: 0031(0)76 - 5212881 | Fax: 0031(0)76 - 5141697



**Jacobs Breda Electronics** | the clever way to technology