



# X100

VHF | DSC | AIS



**CONNECT-X**  
Effortlessly connect  
with all your smart devices.



Marine VHF/DSC Radio with Integrated AIS Class B  
**Connected Convenience**



# X100 – VHF/DSC/AIS Marine Radio Communication System

VHF/DSC communication seamlessly combines a powerful 5W receive and transmit AIS Class B transceiver and the convenience of wireless connectivity to provide you with a marine radio system that does it all. It also offers the benefit of **CONNECT-X** connected convenience.

Engineered for performance, the X100 is built to withstand a lifetime of extreme marine environments. Completely waterproof, ruggedised against shock and vibration, and with daylight-readable full-colour display and tactile knobs and buttons, it is a radio system you can rely on.



X100  
VHF | DSC | AIS



■ X100 Base



Connect-X mobile device command mic app



## Packed with features

X100 is a marine radio communications system engineered and built for marine life with functionalities for professional, commercial or leisure mariners. Tough, rugged and packed with functionalities designed to make your boating safer and more convenient.

- Use your cell phone or smartwatch to make and receive VHF/DSC radio calls, as well as monitor real-time AIS traffic, anywhere on board, above or below deck.
- Crystal clear digital audio quality.
- Ergonomic, full-colour user interface with ruggedised tactile control buttons and knobs.
- Plug and play connectivity and interoperability convenience with all your existing onboard navigation systems and chartplotters, mobile devices and nav-apps.
- Powerful commercial-grade AIS Class B transceiver with silent mode and CPA monitoring and alerts.
- Small, lightweight, low-power consumption. Built-in zero-loss splitter so only one VHF antenna is required to support both AIS and VHF simultaneously.
- Integrated GPS antenna means external GPS antenna is optional and not required in most installations.

■ **CONNECT-X**  
Mobile Device System



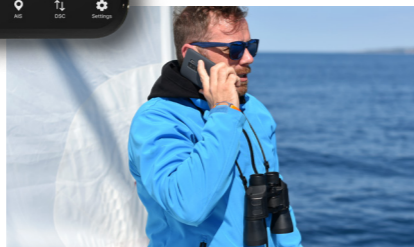
Functionality			Engineering	Connected			
VHF/DSC 25W 	AIS Class B 	MOB/PLB 	Clearwave Audio 	Hi-Vis Colour Display 	VHF/AIS Antenna Splitter 	Bluetooth & Wifi 	Connect-X Mobile App 
AIS CPA Alerts 	Private Intercom 	Loudhailer 	Power Efficient 	Waterproof 	Global Certification 	NMEA2000 & 0183 	Interoperable 

## Connected Convenience



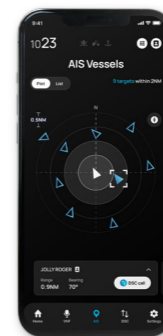
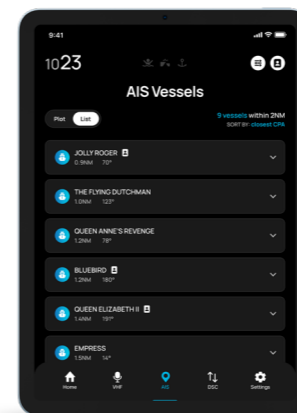
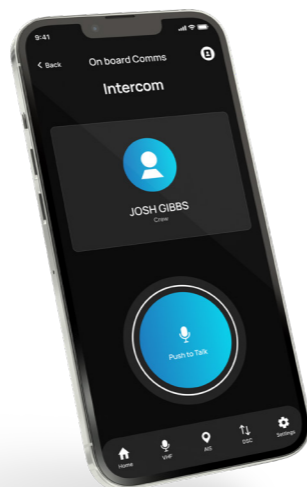
### VHF/DSC on your smart device

- Download **CONNECT-X** App to your smartphone or watch (any Apple or Android mobile device) and use it anywhere onboard as a fully wireless command mic (no cell network required). Monitor, make and receive VHF/DSC radio calls anywhere onboard, above and below deck, and experience the power and convenience of DSC/AIS radio-linked communications.



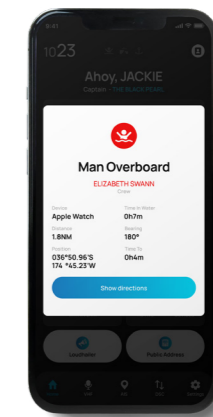
### Private group intercom

- Download **CONNECT-X** to multiple smartphones and watches to create a private on board intercom that you can use to easily communicate with fellow crew members, family, friends and guests to make onboard tasking safer and more effective. From docking instructions to ordering your next drink.



### MOB & PLB alert system

- Peace of mind by automatically monitoring the safety of everyone onboard using X100 and **CONNECT-X** MOB function. MOB or detected PLB events are instantly alerted on the X100 and all connected **CONNECT-X** devices, which provide clear last location, bearing and approximate distance information.



### AIS Class B

- Commercially-certified 5W receive-and-transmit AIS Class B, with an array of features that includes collision and CPA alerts on X100 base and your **CONNECT-X** wireless command-enabled smartphone or watch, vessel lists and details, direct push-to-talk (VHF/DSC) call linkage, and on/off transmit (silent mode).

# Engineered for marine life

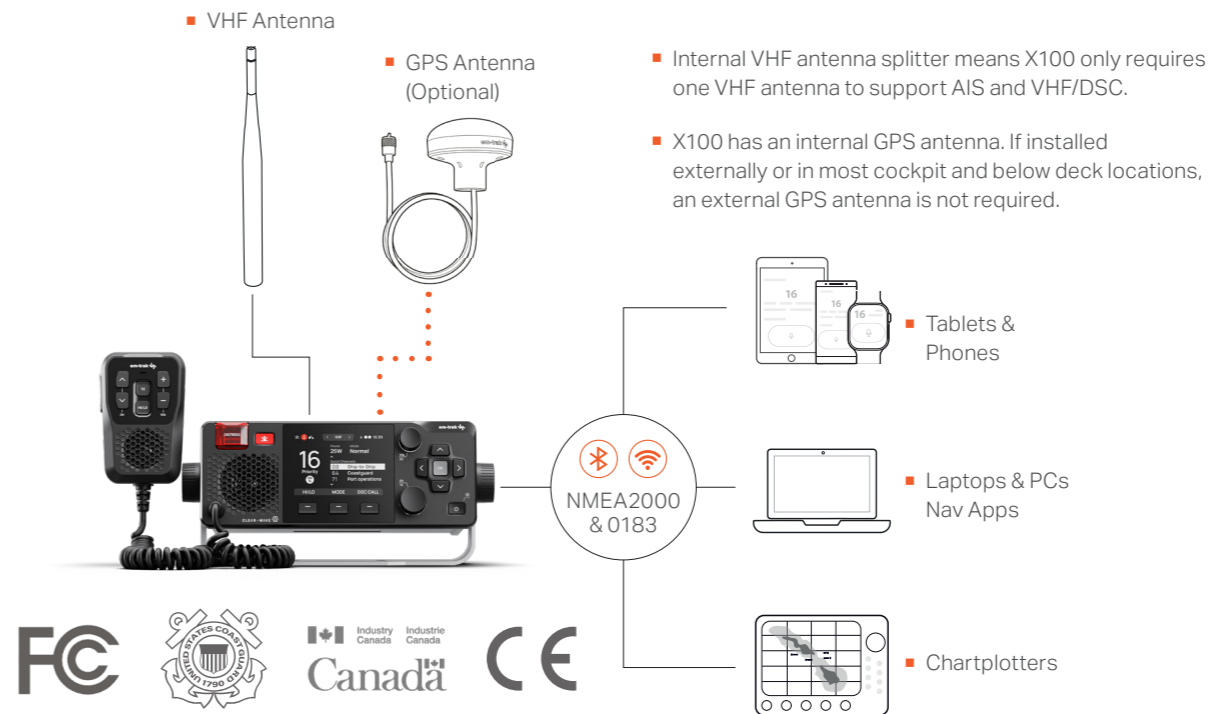
X100 is engineered to reliably endure continuous operation in the harshest of marine environments: from the arctic to the equator. **No-compromise build quality** and engineering fused with technical performance and convenient functionality.



**Complete confidence, wherever you sail.** The X100 is supported by the em-trak 3-year International warranty - our gold-standard worldwide coverage designed to give you total peace of mind on every journey.

See our website for full details. [www.em-trak.com](http://www.em-trak.com)

## X100 Technical Information



### Physical specification – base unit

Dimensions	W249mm, H84mm, D162mm
Weight	1.78kg (3.933lb)
<b>General</b>	
Voice frequency range:	TX 156.025–161.425 MHz
Voice frequency range:	RX 156.300–161.925 MHz
DSC	156.525 MHz
AIS 1,2	156.300 MHz, 162.025 MHz
VHF transmit power:	Variable up to 25W
AIS Transmit Power:	5W
Usable channels:	INT, USA, CAN, ATIS
Operating temperature range:	-25°C to +55°C (5°F to 131°F)

### Electrical

Power Supply	9.6 – 31.2 V DC
Antenna impedance	50 Ω
Transmitter output power	VHF: 25W, 1W AIS: 5W

### Audio

Audio output power – internal speaker	2.2W, 84dB W/m
External speaker/loudhailer	20W

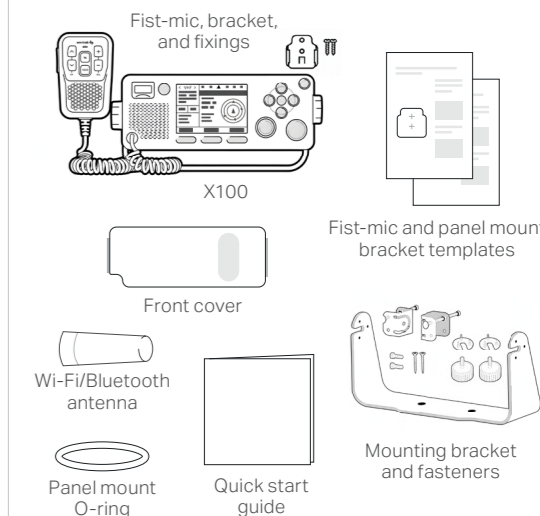
### Connectivity

NMEA 0183/NMEA 2000	NMEA 0183 v4 NMEA 2000 V3.000
Wireless LAN standards	IEEE802.11 b/g/n
Authentication and encryption	WEP (64/128 bit), WPA-PSK (TKIP), WPA2-PSK (AES)
Bluetooth	Low energy (BLE)

### Certifications

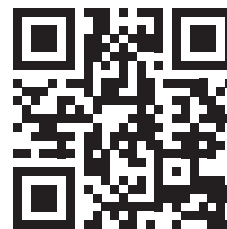
AIS class B SOTDMA	IEC 62287–2:2017
DSC/VHF	ETSI EN 301 025 v2.3.1 ETSI EN 300 698 v2.3.1 IEC 62238:2003
NMEA	IEC 61162-1 & IEC 61162-3
Environmental	IEC 60945 "Exposed" IEC 60529 IPx6 & IPx7

### In the box



### Functionality highlights

- USA, Canada, international and ATIS channel mappings
- Hi/Low adjustable VHF transmit power
- Multi-channel scanning: All | 16 | Custom
- Tri-channel watch: Ch16 plus two custom
- Quick channel and favourites function
- DSC/AIS phone book
- Customisable AIS CPA and collision alerts
- AIS silent mode (Transmit OFF) customisable timer
- DSC safety call/distress call/urgency call
- DSC group call: one to many.
- AIS target-linked DSC calling.
- Anchor watch and alarm
- Range adjustable AIS radar display
- AIS target radar display and target information
- Own GPS position, speed, and course
- MoB activation sensitivity adjustment



Scan here to  
learn more  
about the **X100**.

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