

## TECHNICAL SPECIFICATIONS

		ENVOY X1	ENVOY X2
FREQUENCY RANGE	Tx	1.6 to 30 MHz	1.6 to 30 MHz
	Rx	250 kHz to 30 MHz	250 kHz to 30 MHz
CHANNELS		100	1000
SCAN GROUPS		10	20
TEMPERATURE RANGE		-30°C to +60°C	-30°C to +60°C
HUMIDITY		95%	95%
OUTPUT POWER		125 W PEP	125 W PEP
VOLTAGE RANGE		10.8 to 13.8 V DC	10.8 to 13.8 V DC
CURRENT DRAW	Tx	12.5 A	12.5 A
	Rx	500 mA	500 mA
WAVEFORM		Analogue Voice Digital Voice (MELPe/TWELP) Open Protocol Digital Voice (TWELP) STANAG 4591 Digital Voice (MELPe) Selcall FED-STD ALE	Analogue Voice Digital Voice (MELPe/TWELP) Open Protocol Digital Voice (TWELP) STANAG 4591 Digital Voice (MELPe) Selcall FED-STD ALE & MIL-STD ALE MIL-STD-110-188A/B & STANAG 4539 Data STANAG 4538 3G ALE
DIMENSIONS	RFU	210 x 270 x 65 mm (D x W x H)	210 x 270 x 65 mm (D x W x H)
	Handset	75 x 32 x 151 mm (D x W x H)	75 x 32 x 151 mm (D x W x H)
	Console	190 x 228 x 79 mm (D x W x H)	190 x 228 x 79 mm (D x W x H)
WEIGHT	RFU	2.8 kg	2.8 kg
	Handset	0.3 kg	0.3 kg
	Console	1.1 kg	1.1 kg
SUPPORTED ACCESSORIES	Morse key, GPS Receiver	Data Modem (internal/external), 2240 Smartlink, Crosspatch, Telephone Interconnect, External Encryptor, Voice Recorder, GPS Receiver, PC, Custom	
SUPPORTED APPLICATIONS	TPS-3250, KMS/KFS, Codan Chat (ALE only), RTS, VCP, XTEND	TPS-3250, KMS/KFS, Codan Chat, RC50-C, Sprint Chat/Net, RTS, VCP, XTEND	
LANGUAGES	English, Arabic, Dari, Pashto, French, Portuguese, Spanish, Polish		
PROTECTION	Over Voltage, Under Voltage, Over Temperature, Reverse Polarity		
PRODUCT TYPE NUMBERS	RF Unit: 2210, Full Handset: 2220, Limited Key Handset: 2221, Console: 2230		

# OUR PROCESS

Solving challenging requirements is what we do best

Our technical consultants will conduct a detailed on-the-ground assessment of:

- Human needs
- Operational environment
- Opportunities and challenges
- Cultural context
- Scenario planning



## ASSESS

Our field service team will then design a custom solution for those challenges, using the right hardware and software from Codan or one of our technology partners.



## DESIGN

Our specialist logistics team gets the hardware and the resources to wherever you are, getting your system up and running fast.



## DEPLOY

We'll train operators and communications staff on how to use the system – which will be a short process, thanks to our easy-to-use interfaces and interoperability.



## TRAIN

We're available to be deployed within 24 hours for any support required. And we're always on hand for any advice you require.



## SUPPORT

# HF TRANSCEIVER ENVOY



# CHALLENGING REQUIREMENTS? NO PROBLEM

The Codan Envoy smart radio series are the most intuitive, reliable, and advanced radios we have ever built. Envoy's clear and dependable High Frequency (HF) digital voice and data communications means you have the confidence to communicate anywhere and anytime without the need for existing infrastructure.



## EXCEPTIONAL DIGITAL AND ANALOGUE VOICE CLARITY

Codan's Digital Voice technology provides significantly reduced hiss, crackle, pops, and multipath effects typical of HF, making voice quality similar to modern cellular phones with continued operation in degraded and fading channels.



## GPS SUPPORT

Supporting connection to GPS via NMEA0183 compatible GPS receivers, the Envoy is capable of sending GPS position and calculating distance and bearing. When combined with Codan mapping software, this feature also enables position tracking of deployed vehicles and route planning with pre-programmed waypoints.



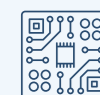
## UNPARALLELED PERFORMANCE

Envoy provides superior specifications that minimise chances of interference from adjacent stations and supports connection of dual antennas for short and long-range propagation.



## INTUITIVE OPERATION

Envoy's large high-resolution, sunlight-readable colour display, and intuitive menu system makes operation similar to modern smartphones. Making calls is as simple as navigating to your contact list, locating the desired contact, and pressing the "call" button.



## SOFTWARE-DEFINED ARCHITECTURE

Envoy uses the latest-generation high-performance Digital Signal Processor (DSP), Field-Programmable Gate Array (FPGA), and system on chip (SoC) technology. Built upon a proven SDR platform with thousands of hours of operation in the field, Envoy delivers market-leading performance and future upgradability through software updates that support evolving standards and ensure sustainability.



## ENCRYPTED COMMUNICATION

The Envoy radio has a choice of encryption options to suit the required level of communications security. All voice encryption options for Envoy can be activated by a single hotkey and can be automatically enabled on pre-defined channels or networks.

# YOUR ENVOY SOLUTION

## GATEWAYS

### 2240 SMARTLINK

SmartLink provides the ability to support multiple personnel and locations from a single Envoy RF unit and provides an in-built 802.11 wireless access point and two wired Ethernet ports for connectivity.

### 3032 XPATCH

Codan's 3032 Crosspatch enables you to carry 'HF on your belt' using a VHF/UHF radio and a Codan Envoy Transceiver to extend an HF and VHF/UHF network.

## DATA

### EMAIL/FILE

Codan offers various solutions for email and file transfer for both HF and web based communications.

### CHAT

Codan's chat software enables users within an HF, or external network, to communicate via chat.

### SMS

Send and receive SMS messages on your HF radio to/from any cellular phone.

## REMOTE

### XTEND

The Codan XTEND app allows you to operate your Envoy HF radio via your smartphone or tablet. Using the widespread familiarity of smartphone devices, XTEND provides an exceptionally easy-to-use alternative to a dedicated radio control point.

### VIRTUAL CONTROL POINT

Control the Envoy radio through a PC via the Virtual Control Point, a digital replica of an Envoy 2220 handset that emulates similar functionality.

### INTERNET PROTOCOL

Control and communicate through your Envoy transceiver using remote solutions through the internet, even if the transceiver is on the other side of the world.

## ASSET MANAGEMENT AND TRACKING

### RTS

Codan's Radio Tracking Software provides an effective means to locate, track, and manage remote assets with no on-going subscription fees.

## WARRANTY AND WORLDWIDE SUPPORT

Codan products are backed by an extensive distribution and support network, and include a three year extendable warranty.

## POWER SOLUTIONS

### 3020 POWER SUPPLY

Used to power your transceiver system from universal AC mains, with comprehensive protection against unstable power sources.

### BATTERY BACKUP

12V deep cycle battery capable of supplying the Envoy transceiver and antenna.

### SOLAR

Solar charging solutions are available to maintain a supply battery for the Envoy HF radio and antennas.

## HIGH POWER AMPLIFIERS

### 3061 500W

A reliable and affordable 500W high power solution for voice and data communication.

### 3062 1KW

A reliable and affordable 1KW high power solution for voice and data communication.

### 3240 1KW

An automatic antenna tuner developed to interface directly with Codan's 3061 and 3062 HF power amplifiers.

## ANTENNAS & MASTS

### BROADBAND

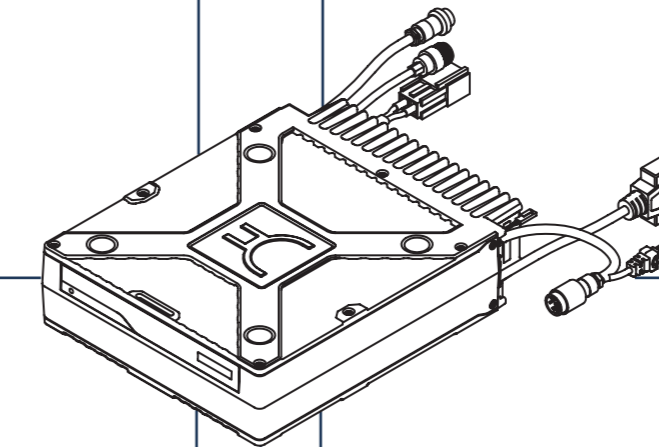
Full size base station antennas designed to suit a wide range of HF communications requirements and installation scenarios.

### TUNED

A range of tuned antenna solutions that are suitable for installations with limited space.

### MOBILE

Antennas designed for a wide range of vehicle types and applications.



## CONFIGURATIONS

Versatile design for mobile, base, and complex systems

Envoy is designed using a modular approach, with a handset for mobile applications and a desk console for bases. The use of IP over Ethernet enables geographical separation of radio and console, without the need for expensive adaptor devices. Envoy is available in rapidly deployable cases.

