# TECHNICAL SPECIFICATIONS

FREQUENCY RANGE	Tx	1.6 to 30 MHz (optional: 1.5 to 30MHz)
	Rx	250KHz to 30MHz
POWER OUTPUT		30 W RF± 1dB (two-tone or voice), user-programmable in 1W steps (low/medium/high)
CHANNELS		Up to 1000 entries
CONTACTS		Up to 500 entries
HF NETWORKS		Up to 20 networks (simultaneously scanning)
PRESETS		Up to 100 user defined presets
LANGUAGE SUPPORT		English, Spanish, Russian, French, Arabic, Dari, Pashto and Portuguese, Polish
		Digital Voice (MELPe/TWELP) Open Protocol Digital Voice (TWELP)
WAVEFORMS		Selcall: CCIR 493-4 proprietary and open standard
		MIL-STD-188-141D (Appendix A, Appendix C); FED-STD-1045; JITC Certified MIL-STD-188-141B; STANAG 4538 3G ALE
		MIL-STD-188-110D (Appendix C); MIL-STD-188-110A/B (STANAG 4539) data capability with data rates up to 19k2 bps
		ECCM: 6, 12, 25 hops per second (hps)
		Max Data Rate: 6hps (2400bps) 12hps (1200bps) 25hps (600bps)
		DV Vocoder Rates (TWELP only): 6hps and 12hps (1200bps, 600bps, 480bps, 300bps) 25hps (600bps, 480bps)
ENCRYPTION		AES-256 digital voice and data (256 keys, direct entry and programmable via Codan KMS/ KFS & USB flash drive)
		DES-56 digital voice and data (256 keys direct entry via UI)
		CES-128 voice (97 x 16-digit keys, direct entry and programmable via Codan KMS/KFS & USB flash drive, 4-digit session PIN)
SIZE		Radio with regular battery box: L: 324 x W: 245 mm x H: 96 mm (with handles) Radio with short battery box: L: 277 x W: 245 mm x H: 96 mm (with handles)
WEIGHT		Less than 4 kg including battery (with short battery box)
TEMPERATURE RANGE		Operational at -30 to +60°C; 95% RH maximum, non-condensing
ENVIRONMENTAL STANDARDS		MIL-STD-810G (Immersion, Shock, Drop, Vibration, Humidity, High temp, Low temp, Blowing Dust, Salt Fog, Fungus, Contamination, Altitude)
PRODUCT TYPE NUMBERS		RF Unit: 2410, Smart Handset (optional): 2320





The Sentry-H 6110-MP

# OUR PROCESS

Solving challenging requirements is what we do best



### **ASSESS**

Our technical consultants will conduct a detailed on-the-ground

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



### **DESIGN**

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



### **DEPLOY**

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



### TRAIN

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



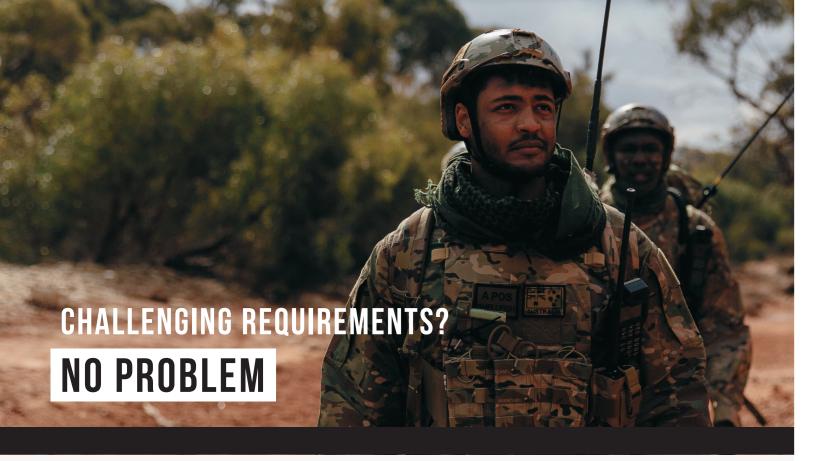
### **SUPPORT**

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

**CONTACT US** 

sales@codancomms.com **UK** +44 (0) 1489 566750 **UAE:** +971 44 53 72 01





Codan's Sentry-H 6110-MP delivers a rugged man-portable Software Defined Radio (SDR) solution for military organisations that demand uncompromised, secure voice and data communications, while on the move.



#### SMALL AND LIGHT

The 6110-MP sets a new standard for size and weight for HF manpack radios with ruggedness and reliability as a focus. Weighing less than 4 kg, depending on battery and battery compartment size, it is the smallest form factor HF manpack in its class.



### **HIGH POWER**

The 6110-MP packs a full 30W RF power output in a high efficiency SDR platform that can deliver up to 79 hours of battery run time. With extremely clean transmit signal and industry leading receiver performance, the 6110-MP provides exceptional HF communications clarity.



### **EXCEPTIONAL DIGITAL AND** ANALOGUE VOICE CLARITY

Codan's Digital Voice technology utilises TWELP (Tri-Wave Excited Linear Prediction) to provide a major improvement in High Frequency (HF) voice communications. A fully digital mode, coupled with highly optimised vocoder technology, provides clarity and connectivity when traditional methods fail.



#### INTELLIGENT PERFORMANCE

Codan 6110-MP's internal SDR architecture comprises the latest-generation highperformance Digital Signal Processor (DSP), Field Programmable Gate Array (FPGA), and system on chip (SoC) technology devices. It provides exceptional performance, and future upgradability via IP connectivity over Ethernet/Wi-Fi and USB.



#### **SECURE COMMUNICATION**

The 6110-MP ensures your information and team remains safe and secure through use of AES-256 bit encryption applied to data transfers, digital voice and 3G ALE. An option for internal frequency hopping is provided to prevent third party interference and monitoring and keep your intel safe.



#### INTUITIVE OPERATION

Codan knows that when lives are on the line, operation of the radio must be second nature. The 6110-MP provides an intuitive user interface that can be switched into various languages for fast and instinctive control.

## YOUR CODAN 6110-MP SOLUTION

### POWER SOLUTIONS

### **BATTERIES**

The 6110-MP is designed to operate from standard military off-the-shelf BB-2590 style batteries, capitalising on latest technology advances and supply flexibility.

### CHARGERS

A range of battery charging accessories are available from Codan, including those that can operate AC mains, DC and solar power sources.

The military standard battery compatibility of the 6110-MP provides an added advantage of being able to use the wide range of MOTS charging accessories that are now available.



### **HANDSETS**

### **CARRIAGE**

### H-250 AUDIO

A comprehensive range of H-250 compatible audio accessories are available including; handsets, headsets.

### 2320 HANDSET

The 2320 smart handset The 6110-MP backpack is enables remote operation designed for strong and of the manpack, with all the capability of the front panel in the palm of your hand.

#### BACKPACK

stable load carriage, with a fully adjustable harness system, maximizing comfort regardless of task.

### 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 a HF, or external network to communicate via chat.

### SMS

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



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.

### REMOTE

### VIRTUAL **CONTROL POINT**

Control the 6110-MP radio through a PC via the Virtual Control Point, a digital replica of your front panel that emulates similar functionality.

### INTERNET PROTOCOL

Control and communicate through your 6110-MP transceiver using remote solutions through the internet, even if the transceiver is on the other side of the world.

### **BROADBAND**

A range of tactical broadband antenna solution are available to support different mission requirements. From compact tuned long wires to larger, more efficient broadband dipoles, there is an antenna to suit.

### WHIPS

For tactical, on the move or temporary halt communications, a range of retractable tuned whip antennas are available.

### MASTS

Designed for tactical use where rapid deployment and ease of transportation is important.

**ANTENNAS & MASTS** 

### WARRANTY AND WORLDWIDE SUPPORT

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