

TECHNICAL SPECIFICATIONS

FREQUENCY RANGE	Tx	1.6 to 30 MHz (optional 1.5 to 30 MHz)
	Rx	250 kHz to 30 MHz
POWER OUTPUT		150 W PEP +/- 1 dB (two-tone or voice), user-programmable in 1 W steps (low/medium/high)
CHANNELS		Up to 1000
CONTACTS		Up to 500 entries
HF NETWORKS		Up to 20 networks (simultaneous scanning)
PRESETS		Up to 100 user-defined presets
LANGUAGE SUPPORT		English, Arabic, Dari, Pashto, French, Portuguese, Spanish, Polish
WAVEFORM	AUTOMATIC LINK ESTABLISHMENT (ALE)	MIL-STD-188-141D (Appendix A, Appendix C); FED-STD-1045; JITC Certified MIL-STD-188-141B; STANAG 4538 3G ALE
	DATA	MIL-STD-188-110D (Appendix C); MIL-STD-188-110A/B (STANAG 4539) data capability with data rates up to 19k2 bps
	SELCALL	CCIR 493-4 proprietary and open standard
	DIGITAL VOICE	TWELP (2400/1200/600/480/300 bit/s) MELPe (2400/1200 bit/s)
	DIGITAL VOICE (OPEN PROTOCOL)	TWELP (2400/1200/700/600 bit/s) Note: Actual vocoder rate combinations are dependent on other Export/Non-export controlled capabilities that may also be enabled.
	DIGITAL VOICE (STANAG 4591)	MELPe (2400/1200/600 bit/s) Note: Actual vocoder rate combinations are dependent on other Export/Non-export controlled capabilities that may also be enabled.
	ENCRYPTION	AES-256 or DES-56 digital voice and data (256 keys, direct entry via UI, and programmable via Codan KMS/KFS & USB flash drive) CES-128 voice (97 x 16-digit keys, direct entry via UI, and programmable via Codan KMS/KFS & USB flash drive, 4-digit session PIN)
	ECCM	6, 12, 25 hops per second (hps) Max Data Rate: 6hps (2400 bps), 12hps (1200 bps), 25hps (600bps) DV Vocoder Rates (TWELP only): 6hps and 12hps (1200/600/480/300 bps), 25hps (600/480 bps)
DIMENSIONS (D x W x H)		RFU: 190 x 222 x 67 mm 2320 Handset: 67 x 73 x 210 mm 2330 Console: 228 x 190 x 79 mm 2340 Control Head: 46 x 218 x 102 mm
WEIGHT		RFU: 2.82 kg, 2320 Handset: 0.28 kg (no cable), 2330 Console: 1.1 kg, 2340 Control Head: 0.77 kg
TEMPERATURE RANGE		Operational at -30°C to +60°C; 95% RH maximum, non-condensing
VOLTAGE RANGE		10 to 35 V DC
CURRENT DRAW	Tx	14 A
	Rx	650 mA
ENVIRONMENTAL STANDARDS		MIL-STD-810G (Immersion, Shock, Drop, Vibration, Humidity, Blowing Dust, Salt Fog, Fungus, Contamination, Altitude) Note: Refer to Sentry-H 6120-BM Datasheet for more specifics
PRODUCT TYPE NUMBERS		RF Unit: 2310, Smart Handset: 2320, Desk Console: 2330, Control Head: 2340

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



DESIGN

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.



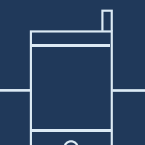
DEPLOY

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 interfaces and interoperability.



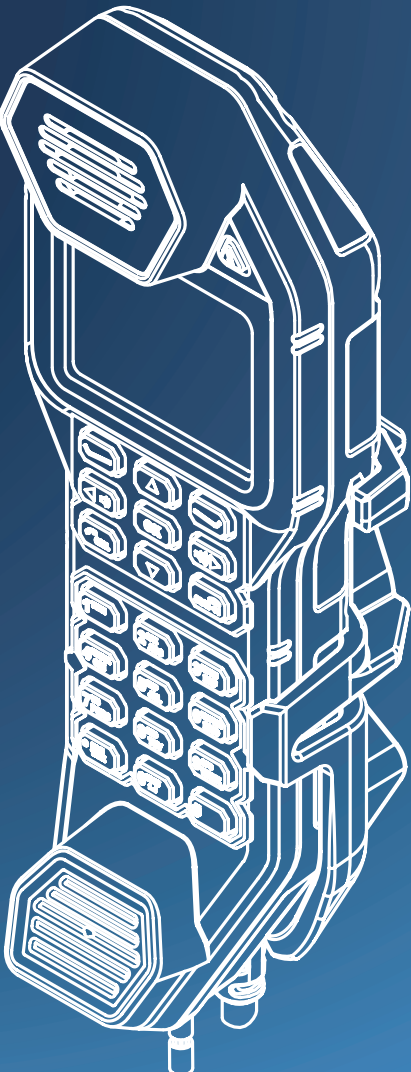
SUPPORT

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

AUSTRALIA +61 8 8305 0311 | UK +44 1489 566 750
US +1 571 563 7077 | UAE +971 44 53 72 01

SALES@CODANCOMMS.COM
WWW.DTCCODAN.COM

HF TRANSCEIVER
SENTRY-H 6120-BM

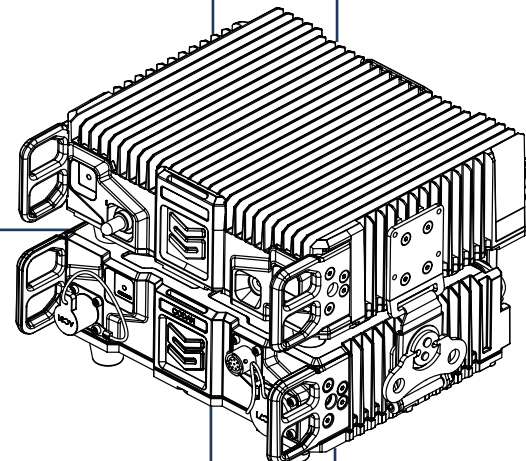


CHALLENGING REQUIREMENTS? NO PROBLEM

The Sentry-H 6120-BM is the most robust and affordable high-power radio we have ever built for voice and data communications, delivered in a small form-factor. It has an advanced SDR architecture, meaning you can upgrade at any time in the future to ensure sustainability in ever-changing, challenging conditions.

	ROBUST	With 60 years of experience in the field, Codan's 6120-BM radio is built with ruggedness and reliability as a focus. It has been tested to a broad range of stringent environmental standards including MIL-STD-810G – to get the job done no matter where you operate.
	INTEGRATED	Competing manpack-based tactical solutions require heavy components interconnected by large, unreliable, and difficult-to-install cabling. The 6120-BM eliminates this hassle and combines all key functions into a single compact unit.
	INTELLIGENT PERFORMANCE	The 6120-BM's internal SDR architecture comprises the latest-generation high-performance Digital Signal Processor (DSP), Field Programmable Gate Array (FPGA), and system on chip (SoC) technology devices. It provides exceptional performance and future upgradability via its IP / Ethernet connectivity.
	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.
	SECURE COMMUNICATION	The 6120-BM ensures your information and team remains safe and secure through use of AES-256 or DES-56 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 to keep your intel safe.
	INTUITIVE OPERATION	Codan knows that when lives are on the line, operation of the radio must be second nature. The 6120-BM provides an intuitive user interface that can be switched into various languages for fast and instinctive control.

YOUR SENTRY-H 6120-BM SOLUTION

MOUNTING			GATEWAYS			POWER SOLUTIONS		
CRADLE MOUNT	SHOCK MOUNT	3032 XPATCH		3320 POWER SUPPLY	BATTERY BACKUP	SOLAR		
A low profile, quick fit/release mounting cradle designed and tested to meet MIL standards. Supports the transceiver and power supply.	Provides additional protection for the transceiver or power supply when installed in high vibration environments as often found in mechanised and vehicular deployments.	Codan's 3032 Crosspatch enables you to use a VHF/UHF radio and a 6120-BM Transceiver to extend an HF and VHF/UHF network.		Used to power your transceiver system from universal AC mains, with comprehensive protection against unstable power sources.	12V deep cycle battery capable of supplying the 6120-BM transceiver and antenna.	Solar charging solutions are available to maintain a supply battery for the 6120-BM radio and antennas.		
DATA				HIGH POWER AMPLIFIERS				
EMAIL/FILE	CHAT	SMS		3061 500W	3062 1KW	3240 1KW		
Codan offers various solutions for email and file transfer for both HF and web based communications.	Codan's chat software enables users within a HF, or external network to communicate via chat.	Send and receive SMS messages on your HF radio to/from any cellular phone.	A reliable and affordable 500W high power solution for voice and data communication.	A reliable and affordable 1KW high power solution for voice and data communication.	An automatic antenna tuner developed to interface directly with Codan's 3061 and 3062 HF power amplifiers.			
REMOTE			ANTENNAS & MASTS					
XTEND	VIRTUAL CONTROL POINT	INTERNET PROTOCOL	BROADBAND	TUNED	MOBILE	MASTS		
The Codan XTEND app allows you to operate your 6120-BM 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.	Control the 6120-BM radio through a PC via the Virtual Control Point, a digital replica of a Sentry-H handset that emulates similar functionality.	Control and communicate through your 6120-BM transceiver using remote solutions through the internet, even if the transceiver is on the other side of the world.	Full size base station antennas designed to suit a wide range of HF communications requirements and installation scenarios.	A range of tuned antenna solutions that are suitable for installations with limited space.	Antennas designed for a wide range of vehicle types and applications.	Designed for tactical use where rapid deployment and ease of transportation is important.		
ASSET MANAGEMENT AND TRACKING			CONFIGURATIONS Versatile design for mobile and base systems					
WARRANTY AND WORLDWIDE SUPPORT Codan products are backed by an extensive distribution and support network, and include a three year extendable warranty.			RTS Codan's Radio Tracking Software provides an effective means to locate, track, and manage remote assets with no on-going subscription fees.					
			