TECHNICAL SPECIFICATIONS

FREQUENCY RANGE	Tx	1.6 to 30 MHz (optional: 1.5 to 30MHz)
	Rx	250KHz to 30MHz
POWER OUTPUT		150W PEP
CHANNELS		Up to 1000
CONTACTS		Up to 500 entries
HF NETWORKS		Up to 20 networks (simultaneously scanning)
PRESETS		Up to 100 user defined presets
LANGUAGE SUPPORT		English, Arabic, Dari, Pashto, French, Portugese, Russian, Spanish, Polish
WAVEFORMS		Digital Voice (MELPe/TWELP)
		Open Protocol Digital Voice (TWELP)
		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		**RFU:** 190 x 222 x 67 mm (D x W x H) **Handset:** 67 x 73 x 210 mm (D x W x H)
		2330 Console: 228 x 190 x 79 mm (D x W x H) **2340 Control Head:** 46 x 218 x 102 mm (D x W x H)
WEIGHT		**RFU:** 2.82 kg **Handset:** 0.28 kg (no cable) **2330 Console:** 1.1 kg **2340 Control Head:** 0.77 kg
TEMPERATURE RANGE		Operational at –30 to +60°C; 95% RH maximum, non-condensing
VOLTAGE RANGE		10 to 35 V DC
CURRENT DRAW	Tx	14A
	Rx	650mA
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, Control Head: 2340, Desk Console: 2330

CONFIGURATIONS

Versatile design for mobile and base systems

Codan's Sentry-H 6120-BM base configuration delivers reliable and powerful communications over vast distances with power outputs from 150 to 1000 W. The ruggedised RF unit's versatile design makes installation into permanent and temporary bases simple, and it operates from wide ranging DC and AC power sources. The range of control options for the 6120-BM includes the robust 2320 Smart Handset, 2340 Control Head (Jotto console compatible) and the indoor 2330 Desk Console.

When space is limited, the 6120-BM's compact and highly integrated unit together with the robust handset makes mobile installation easy. It is engineered to provide 150 W of power, eliminating the need for an external power amplifier while ensuring that you get the best and most reliable communications.

2320 Handset shown

2340 Control Head shown

2330 Desk Console shown

OUR PROCESS

Solving challenging requirements is what we do best

ASSESS

Our technical consultants will conduct a detailed on-the-ground assessment of:
- Human needs
- Operational environment
- Opportunities and challenges
- Cultural context
- 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 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.
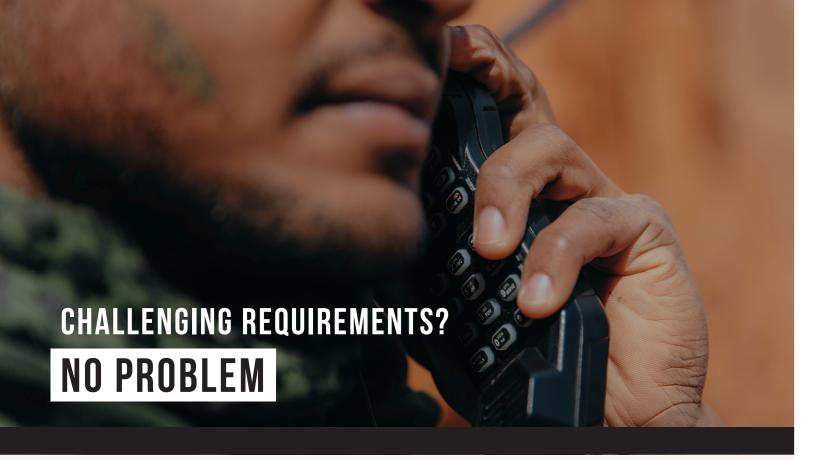
SUPPORT

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

CODAN COMMUNICATIONS | **DTC**

CODANCOMMS.COM

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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 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.

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.

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.

SECURE COMMUNICATION
The 6120-BM 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.

INTELLIGENT PERFORMANCE
Codan 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.

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.

YOUR CODAN 6120-BM SOLUTION

MOUNTING

CRADLE MOUNT
A low profile, quick fit/release mounting cradle designed and tested to meet MIL standards. Supports the transceiver and power supply.

SHOCK MOUNT
Provides additional protection for the transceiver or power supply when installed in high vibration environments as often found in mechanised and vehicular deployments.

GATEWAYS

3032 XPATCH
Codan's 3032 Crosspatch enables you to use a VHF/UHF radio and a 6120-BM Transceiver to extend a HF and VHF/UHF network.

POWER SOLUTIONS

3320 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 6120-BM transceiver and antenna.

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

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 phone.

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.

REMOTE

XTEND
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.

VIRTUAL 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.

INTERNET PROTOCOL
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.

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.

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

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.