## PERSONAL RADIO

## SENTRY-U 6160-PR (BLK)





**KEY FEATURES** 

- · Compact and lightweight
- · Full-duplex voice
- Conference mode
- Digital Voice
- Data Capability (125kbps max)
- VOX
- Wireless PTT
- AES-128 encryption
- Built in GPS
- · Multiple networks and grouping
- 2 x AA batteries provide communication for up to 17 hours

Codan's Sentry-U 6160-PR provides a secure communications platform that can be deployed to the forward edge of operations or with specialised units who require robust real time reporting. The 6160-PR includes auto re-transmission.

### PROGRAMMABLE NETWORKS

Coupled with ease of use and network spectrum efficiency the 6160-PR has 64 different networks operating on a common frequency. Each network is implemented by allocation of network programmable ID assignment. This provides greater flexibility in network structure and ensures all team members are enabled with a robust, reliable real time network.

### **GPS RECEIVER**

The 6160-PR coupled with its optional inbuilt GPS receiver enables situational awareness capabilities back to the command structures. This information is highly configurable and allows for autonomous variable position report times at the end of transmission or on demand by other users. To ensure the best GPS signal is gained the 6160-PR can also be fitted with an optional external antenna.

## **ENCRYPTION**

The 6160-PR has optional built in AES-128 encryption for users who require an extra layer of network security.

## SUPPORTED COMMUNICATION MODES

- Half-duplex digital voice with the initialisation of transmission by built-in PTT button or wireless PTT (WPTT)
- Half-duplex digital voice with automatic retransmission
- Full duplex digital voice communication (conference mode) supporting simultaneous data transmission (up to 19,2 kb/s); all radios from the network are able to operate in conference mode with up to four transmitting voice audio streams and an unlimited number of receive streams at once
- Max data transmission mode 125 kb/s

## RETRANSMISSION

Operational coverage is vastly improved by the 6160-PR's MESH networking capability, with up to 7 hops providing users with reliable, resilient communications. This capability greatly enhance users ability to overcome obstacles, structures or push the boundaries of the network footprint.

## INITIALIZATION OF TRANSMISSION

- Built-in PTT button
- Wireless PTT button (WPTT)
- Double wireless PTT button (DWPTT)
- VOX, in conference mode

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## **VOICE INFORMATION**

Automated (user configurable) network voice announcements provide operators with confirmation when selecting networks whilst remaining focused on the immediate situation.

## **QUICK PROGRAMMING**

The compact rugged fill gun programmer offers off-line programing in the field without the need for additional IT devices. Radios can be rapidly reconfigured to meet mission demands whilst still deployed.

## **MOBILE VERSION**

The 6160-PR mobile docking station allows the radio to be easily docked into a vehicle or similar platform. Increasing the communications coverage by utilising an external vehicle antenna. When deployed, this vastly improves the network footprint and can act as a rebroadcast (MESH) station, providing a robust communications network.

The docking station can be also intergrated with a vehicle intercom system providing full situation awareness to the forces.

## **ACCESSORIES**

- Radio holster MOLLE fixations mount the 6160-PR directly to an operator's equipment
- Radio mounting clip attaches the 6160-PR directly to any MOLLE fixation
- Wide range of headsets
- Wireless PTT switch (WPPT)
- Double wireless PTT switch (DWPTT)
- One and five bay chargers for charging battery in radio
- Adapter for the mobile set
- · Handset for operation with vehicular set
- Mobile antennas
- Programmer ("fill gun")



6160-PR mobile docking station



Five-position charger

## **Example headsets**



Single ear headset with mounting tape



Headset with hearing protection



Headset with bone conduction microphone



Multi-functional headset



In-ear bone conduction headset system with hearing protection and double PTT



In-ear bone conduction headset system with hearing protection

# PERSONAL RADIO SENTRY-U 6160-PR



SPECIFICATIONS	
GENERAL	
Frequency range	2405 to 2480 MHz (unlicensed ISM band)
Number of programmable pre-sets (channels)	16
Max data rate	125 kb/s
Encryption algorithm	AES-128
GPS receiver	In-built (with internal or external antenna)
Audio output	250 mW @ 8 Ohms (internal speaker) 20 mW @ 32 Ohms (external speaker)
Duplex mode	Proprietary TDMA (Time-division Multiple Access)
Number of users at duplex (conference)	4 simultaneous transmissions, no limitation on Rx
Radio range in open area	Up to 1200 m
Range of WPTT/DWPTT	Up to 2 m
Battery life (Tx/Rx/Standby = 1/7/16)	Up to 17 h (for 650 mW) (depending on operation mode)
Power supply	2 x AA NiMH battery or 2 x alkaline battery
RF	
Channel spacing	5 MHz
Modes	DSSS (Direct Sequence Spread Spectrum)
Voice encoding	CVSD (Continuously Variable Slope Delta Modulation)
Transmitter RF power	100 mW; 400 mW; 650 mW
ELECTRICAL AND MECHANICAL	
Dimensions (without antenna)	115 x 69 x 37 mm
Weight (with batteries and antenna)	<345 g
Weight of WPTT (with battery)	40 g
Dimensions of DWPTT	64 x 40 x 18 mm
Weight of DWPTT (with battery)	53 g
Interfaces	USB, RS232
Temperature range	Operational at -30°C to + 60°C
Environmental standards	MIL-STD810F Shock, Drop, Vibration, Humidity IP67 1m/30 minutes

Values noted are typical. Equipment descriptions and specifications subject to change without notice or obligation.

The radio meets the environmental requirements according to the MIL-STD 810F standard and also provides IP67 protection.

IP67 1m/30 minutes

Transceiver also complies: vibration – MIL-STD 810G Method 514.6, shock - MIL-STD 810G Method 516.6, humidity - MIL-STD 810G Method 507.5

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