

# PERSONAL RADIO

## SENTRY-U 6160-PR



Codan's Sentry-U 6160-PR provides a secure inter/intra communications platform that can be deployed to the forward edge of operations or with specialized units who require robust real time reporting. The 6160-PR includes auto re-transmission and integration with other Sentry products for added connectivity and mission control. Improved waveform technology reduces the risk of interception and detection.

### 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 squad members are enabled with a robust, reliable real time network.

### GPS RECEIVER

The 6160-PR coupled with its optional inbuilt GPS receiver enables C2 capabilities to field users and 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 initialization 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

### 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
- LPD waveform
- Multiple networks and grouping
- 2 x AA batteries provide communication for up to 17 hours

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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 programming 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 in tactical locations this vastly improves the network footprint and can act as a rebroadcast (MESH) station, providing commanders with a C2 edge on the electronic battlefield.

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

### EMERGENCY ERASING

With the 6160-PR emergency zeroise function the radio can be quickly erased in the field by an operator, ensuring network protection.

### 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")
- Cross frequency interoperability



6160-PR mobile docking station



Five-position charger station

### 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

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### 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	TDMA
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 raster	5 MHz
Spread spectrum method	DSSS
Voice encoding method	CVSD
Transmitter RF power	100 mW; 400 mW; 650 mW

#### 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

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.

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