

SECTION 6. TECHNICAL DATA

EQUIPMENT SPECIFICATIONS

Base Station

GENERAL —

Frequency Range:	All, 2400 – 2483.5 MHz Low, 2401.92 to 2439.94 MHz High, 2443.39 to 2481.41 MHz
Frequency Response:	200 Hz to 3.5 kHz
Power Requirements:	100-240VAC, 50-60Hz 12-14VDC or six AA batteries (NiMH optional)
Temperature Range:	32-122°F (0-50°C)
Size:	8" x 8" x 3.5" (20.32 x 20.32 x 8.89 cm)
Weight:	2.75 lb with battery (1.25 kg)
# of Beltpacs per Base:	15 can be registered; any 4 can have simultaneous full-duplex communication at one time (in single channel mode)
8-Wire I/O:	RJ45, 600Ω balanced out, high impedance in
Auxiliary Audio:	10-Ckt Phoenix connector, 600Ω balanced out, high impedance in, level adjustable
Headset Connectors:	4-pin mini-DIN
Electret microphone:	45 KΩ
Headset Output:	200mW into 32Ω
Top Panel Controls and Indicators:	Power button Left and Right headset controls Rotary knobs for headset volume (VOL) adjustment Headset SELECT buttons (O=Offense, X=Defense or ALL) Headset TALK buttons Registration controls CLEAR/BAND button REGISTER button RESET switch (recessed) STATUS indicator Headset transmit dual-color LEDs, left and right (red/green) – O, X, ALL RECEIVE LEDs (green) – O, X, ALL
Front Panel:	Auxiliary input and output level adjustments
Left Panel:	8-wire audio port Microphone gain adjustment Left headset connector
Right Panel:	Right headset connector Microphone gain adjustment 8-wire audio port Single/Dual selection switch Primary/Secondary selection switch
Rear Panel:	Auxiliary input and output connectors Antenna connectors
Antenna Type:	External ½ -wave dipole (R-TNC connector) RX/TX horizontal/vertical diversity
System Distortion:	<2%
Communication Security:	64-bit encryption dual-slot diversity

TRANSMITTER —

Type:	Frequency hopping, spread spectrum
Transmit Power:	100mW burst
Modulation Type:	Gaussian filtered FSK, TDMA
Frequency Stability:	13 ppm
Harmonics/Spurious:	Exceeds FCC and ETSI specifications over temperature

RECEIVER —

Type:	Frequency hopping, spread spectrum
RF Sensitivity:	<-90dBm w 10^{-3} BER
Frequency Stability:	13 ppm
Distortion:	<2%

Beltpac

* Frequency Range:	2400 MHz – 2483.5 MHz
Antenna:	Internal, horizontal/vertical diversity
Frequency Response:	200 Hz to 3.5 kHz
Transmit Power:	100mW burst
RF Sensitivity:	<-90dBm w 10^{-3} BER
Battery Requirements:	3.6V lithium ion, rechargeable
Battery Life:	Hands-free – up to 14 hours PTT – up to 20 hours
Temperature Range:	32-122°F (0-50°C)
Weight:	7.4 oz (.21 kg) with battery and pouch
Headset Connector:	4-pin, mini-DIN
Microphone:	Electret
Headset Output:	160mW into 32Ω
Controls:	Power PWR, Volume-up ▲, Volume-down ▼, O, X, ALL
Indicators:	Dual-color LED (red/green)

All-In-One Headset

* Frequency Range:	2400 MHz – 2483.5 MHz
Antenna:	Internal
Frequency Response:	200 Hz to 3.5 kHz
Transmit Power:	100mW burst
RF Sensitivity:	<-90dBm w 10^{-3} BER
Battery Requirements:	3.6V lithium ion, rechargeable
Battery Life:	Hands-free – up to 14 hours PTT – up to 20 hours
Temperature Range:	32-122°F (0-50°C)
Weight:	5.7 oz (.16 kg) with battery
Microphone:	Electret
Headset Output:	160mW into 32Ω
Controls:	Power, Volume-up ▲, Volume-down ▼, O, X, ALL
Indicators:	Transmit LED (red in defense / green in offense) Power LED (red/green)

* **NOTE:** Communicators will follow the frequency range determined by the setting on the Base Station (e.g. All, Low or High).