

## 5100 SERIES PORTABLE SPECIFICATIONS

The following are general specifications intended for use in testing and servicing this transceiver. For current advertised specifications, refer to the specification sheet available from your sales representative. Values are typical and are subject to change without notice.

### GENERAL

|                             |                                                                                                                                     |
|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------|
| Frequency Range             | VHF: 136-174 MHz<br>UHF: 403-470 MHz, 450-512 MHz<br>800 MHz: 806-870 MHz                                                           |
| Operating Modes             | Project 25 conv. and trunked, SMARTNET, SmartZone, Conventional analog, Multi-Net                                                   |
| Zones/Channels              | 16 zones with 16 channels per zone                                                                                                  |
| Transmit/Receive Separation | Any frequency within the range                                                                                                      |
| Channel Spacing             | VHF: 12.5, 25, and 30 kHz<br>UHF: 12.5 and 25 kHz<br>800 MHz: 12.5 and 25 kHz                                                       |
| Maximum Deviation           | 25 kHz analog - 5 kHz<br>12.5 kHz analog - 2.5 kHz<br>12.5 kHz analog NPSPAC - 4.0 kHz                                              |
| Frequency Stability         | 1.5 PPM -22° to +140° F (-30° to +60° C)                                                                                            |
| Dimensions (w/o antenna)    | 6.7" H x 2.52" W x 1.9" D (17.0 cm x 6.4 cm x 4.8 cm)                                                                               |
| Weight (w/std battery)      | 24 oz. (675 g)                                                                                                                      |
| Supply Voltage              | 7.5 volts DC nominal                                                                                                                |
| Battery Life                | 13 hours typical w/std 3300 mAh NiMH battery                                                                                        |
| Current Drain (maximum)     | Standby - 110 mA<br>Receive (rated audio out) - 350 mA<br>Low Tx Power - 1.2 A<br>High Tx Power - 2.6 A (800 MHz), 2.4 A (VHF, UHF) |

### RECEIVER

|                              |                                                                            |
|------------------------------|----------------------------------------------------------------------------|
| Sensitivity                  | 0.35 $\mu$ V (analog mode 12 dB SINAD), 0.35 $\mu$ V (digital mode 5% BER) |
| Selectivity                  | 60 dB                                                                      |
| Spurious and Image Rejection | 65 dB                                                                      |
| Intermodulation              | 70 dB                                                                      |
| Hum and Noise                | 40 dB at 25 kHz, 34 dB at 12.5 kHz                                         |
| Maximum Frequency Spread     | Any spread within the range                                                |
| Audio Power Output           | 500 mW                                                                     |
| Audio Distortion             | Less than 5% at 1 kHz                                                      |

### TRANSMITTER

|                                 |                                                                     |
|---------------------------------|---------------------------------------------------------------------|
| RF Power Output                 | VHF: 5W (high), 1W (low)<br>UHF: 4W (high), 1W (low)<br>800 MHz: 3W |
| Spurious and Harmonic Emissions | 70 dB (VHF/UHF), 60 dB (800 MHz)                                    |
| FM Hum and Noise                | 40 dB at 25 kHz bandwidth                                           |
| Audio Modulation                | 11K0F3E, 14K0F3E, 16K0F3E, 8K10F1E, 20K0F1E                         |
| Audio Distortion                | Less than 3% at 1 kHz                                               |
| Maximum Frequency Spread        | Any spread within the band                                          |