

## **PRC1060/1070/1080** **VHF Tactical Squad Radios**



Datron's PRC1060/1070/1080 family are portable squad radios that offer handheld tactical communications capability in the 30 to 88 MHz band in 25 kHz steps. The radios have 2320 available channels and up to nine presettable memory channels. An RF power output of 100mW to 2W is user selectable.

The PRC1080 has embedded ECCM and COMSEC capability. It offers built-in full or partial-band frequency hopping and digital encryption, and is designed for use in situations where high-level anti-jam techniques and communications security are required. The PRC1070, while not containing either hopping or encryption, is upgradable to both functions by the addition of a single module. The PRC1060 is the same as the PRC1070 except that it is not upgradable. The PRC1060 also has an internal voice scrambler that can be enabled by the operator to provide a level of security if needed.

All squad radios are interoperable with most single-channel VHF/FM radios using a 150 Hz tone system. In addition, special user-selectable voice processing enhances single-channel FM voice quality when operating in Squad Radio-only networks. The PRC1080 is also interoperable with Datron's PRC2100V (Spectre V<sup>R</sup>) in hopping and encrypted modes.

The squad radios are easy to operate and maintain, and reliable in harsh field environments. They are completely waterproof and have been qualified to the exacting requirements of MIL-STD-810 for shock and vibration and other environments standards. An internal Built-in-Test (BIT) function makes it easy to identify a defective subassembly. All test messages are shown on the easily readable front panel display.

Datron offers a vehicle "docking station" (MT1060DS) that is ideal for security forces that require occasional mobile use. This device is a convenient way of mounting the radio in a vehicle next to the driver. Whenever the radio is in the docking station, vehicle power is used to both run the radio and charge an attached radio battery.

If additional RF power is needed, the optional MT1060MM forms the basis for a powerful mobile station. It can be located in a section of the vehicle next to the antenna and offers additional power conditioning, a remote-control interface, and a 30W RF power amplifier.

A full line of audio devices is also available for the squad radios including a "stealth" headset which allows "hands-free" operation. An optional carrying case provides the maximum flexibility in radio transport and protection.

- **30 to 88 MHz, 25 kHz Steps**
- **2320 Available Channels**
- **Programmable Memory Channels**
- **Embedded ECCM & COMSEC (PRC1080)**
- **Rugged (MIL-STD-810), Completely Immersible**
- **Portable/mobile Configurations**
- **0.1/2/30 Watts**
- **Straightforward Logistic Support**
- **Vehicular "Docking" Station**
- **Internal BITE**

## SPECIFICATIONS

### GENERAL

|                          |   |
|--------------------------|---|
| Frequency Range          | 30 to 88 MHz;   |
| Available Channels       | 2,320 in 25 kHz steps   |
| Preset Channels          | 9 Programmable memory channels  |
| Channel Programming      | Front panel or remotely via keyfill device  |
| Modes                    | PRC1060: FM, FF Clear Voice<br>PRC1070: FM, FF Clear Voice<br>PRC1080: FF Clear Voice, FF Encrypted voice, FH Voice, FH encrypted voice |
| Input Power Requirements | 7.5 Vdc;  |
| Battery Pack             | H4595 1.8AH, rechargeable NiCd  |
| Frequency Stability      | 15 ppm  |
| Antenna                  | 12" rubber duck or 3 ft. tape (AT892BB-ADPT)  |
| Antenna Port             | BNC for 50 ohm broadband antennas or for connection to external amplifier; whip antenna port.   |
| Display                  | Backlit, multi-function custom LED  |

### Mechanical, Environmental

|  |  |
|--|--|
| Size (H x W x D)   | 254.0 x 89 x 44 mm (10 x 3.5 x 1.75 inches)              |
| Weight   | 1.7 lbs (0.8 kg) w/o battery; 2.4 lbs (1.2 kg) w/battery |
| Color  | OD, black, or gray (customer specified)                  |
| Package  | Sealed, immersible to 1m                                 |
| Temperature  | -40 to +60 degrees C.                                    |
| Shock, Vibration, Humidity, Fungus, Altitude, Sand & dust. | Per MIL-STD-810  |

### Transmitter

|                       |                                  |
|-----------------------|----------------------------------|
| RF Power Output       | 100mW or 2W, operator selectable |
| Duty cycle            | Continuous service, all modes    |
| Harmonics             | -46 dB, 2nds; -50 dB, others     |
| Modulation            | Narrowband voice, +/- 7 kHz      |
| 150 Hz tone deviation | 3 kHz +/- 500 Hz                 |

### Receiver

|             |  |
|-------------|--|
| Sensitivity | 12 dB SINAD for 0.5uV input            |
| Squelch     | 150 Hz tone                            |
| Audio       | 400mW into 8 ohms; 12mW into 1000 ohms |

### Accessories

|                            |  |
|----------------------------|--|
| H2100                      | "Stealth" headset                            |
| MT1060DS                   | Vehicle docking station                      |
| MT1060MM                   | Mobile 30W RF booster amplifier              |
| AT892BB-ADPT               | 3 ft. tape antenna (broadband)               |
| 1080KIT                    | Upgrade kit for PRC1070 to add ECCM & COMSEC |
| CMS2100                    | Programming kit (software & manual)          |
| KF1088B, C992303, 1080ADPT | Programming hardware accessories             |

**Note: all specifications subject to change without notice**



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