

SQUAD RADIO

Mobile Systems



- **Complete 2W and 30W Stations**
- **Clear-channel or ECCM/COMSEC Operation**
- **“Jerk-and-Run” Configuration**
- **Internal Power Conditioning**
- **Convenient Driver Operation**
- **Simultaneous Battery Charging**
- **Broadband High Power RF Amplifier**

Datron's PRC1060/70/80 Squad radios are compact, rugged, easy-to-operate tactical VHF/FM radios covering the 30 to 88 MHz band in 25 kHz steps. The PRC1060 is a single-channel radio designed for a multitude of field applications in harsh environments. The PRC1070 is identical to the PRC1060 except it can be upgraded to a PRC1080. The PRC1080 incorporates internal full-band frequency hopping and digital encryption for use in anti-jam environments or where secure communications is required. Each radio has the flexibility to be used in either a portable or a mobile configuration.

The MT1060DS is a compact mobile mount (Docking Station) for the Squad Radio. It holds one radio plus its battery and is designed to mount between, or immediately in front of, the front seats of any vehicle. Since the radio receives its input power from the vehicle, it is not necessary to have a battery in the battery box. However, if a battery is installed in the battery box, it will automatically be charged while the radio is in the docking station. A coaxial cable routes the RF from the radio antenna port to the vehicular broadband antenna or to the MT1060MM (if used).

The MT1060MM is a 30 W RF booster amplifier, power conditioner, and power supply packaged in a rugged case. It is designed to be mounted in inaccessible locations on the vehicle as there are no controls on it. It is powered from the raw +28 Vdc vehicle power, and provides the required +12 Vdc output to drive the MT1060DS.

A complete 2W Mobile Station using the Squad radio is available from Datron. This is a +12Vdc configuration that uses the Squad Radio with the MT1060DS Docking Station to provide a convenient way to mount the radio in the front part of a vehicle where the driver can operate the radio. Power for the Squad radio is obtained from a converter inside the MT1060DS. An external microphone and loudspeaker can be connected to the MT1060DS, and the system allows charging of an attached radio battery via the antenna port while the radio is mounted.

Also available is a complete 30W Mobile Station, a +24Vdc configuration that uses the Squad Radio with both the MT1060DS Docking Station and the MT1060MM Mobile Mount to provide a high power system. The MT1060DS can be mounted convenient to the operator, while the MT1060MM is mounted remotely in the rear of the vehicle next to the antenna. Radio power is generated in the MT1060MM and supplied to the MT1060DS. The vehicle antenna is connected directly to the Mobile Mount via a coaxial cable.

SPECIFICATIONS (MT1060DS, MT1060MM)

GENERAL

Systems	MT1060DS: a 2W system containing the appropriate Squad Radio mounted in the 1060DS; MT1060DS/MT1060MM: a 30W system containing the appropriate Squad Radio mounted in the 1060DS, with the 1060DS connected to the 1060MM.
Frequency Range	30 to 88 MHz;
Available Channels	2,320 in 25 kHz steps
Preset Channels	9 Programmable memory channels
Modes	PRC1060: FM, FF Clear Voice PRC1070: FM, FF Clear Voice PRC1080: FF Clear Voice, FF Encrypted voice, FH Voice, FH encrypted voice
Input Power Requirements	MT1060DS: +10 - 16 Vdc, 1.5A; MT1060MM; +20 - 32Vdc, 5A, typ.
Output Power	MT1060DS: 8.3Vdc, 1.5A, to radio; MT1060MM: 14Vdc, 5A, to MT1060DS
Audio Output	MT1060DS: 2.0VRMS into 8 ohms
Microphone input	MT1060DS: 1.5uV for 7kHz deviation, 150 ohms
Antenna	4242-MK1, or equivalent broadband type
Antenna Port	MT1060DS: BNC for 50 ohm broadband antennas or for connection to MT1060MM; MT1060MM: BNC for 50 ohm broadband antennas
Battery charging	The radio battery will automatically be charged while the radio with the battery attached is in the MT1060DS (charge rate = C/20)

Mechanical, Environmental

Color	OD
Package(s)	Sealed, immersible to 1m
Temperature	-40 to +60 degrees C.
Shock, Vibration, Humidity, Fungus, Altitude, Sand & dust.	Per MIL-STD-810

Amplifier (in MT1060MM)

RF Power Output	30W, with MT1060MM, in circuit and activated; 100mW or 2W, operator selectable lower power modes
Duty cycle	Continuous service, all modes
Harmonics	-40 dB

Accessories

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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