

## SQUAD RADIO

### Mobile Systems



Datron's Squad radios are compact, rugged, reliable tactical VHF/FM radios covering the 30 to 88 MHz band in 25 kHz steps. Each radio has the flexibility to be used in either a portable, or in a mobile configuration with the use of the accessories listed below. All configurations are designed for operation in harsh tactical environments.

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 battery, 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.

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 any 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, 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 +28Vdc configuration that uses the Squad Radio with both the MT1060DS and the MT1060MM to provide a high power system. The MT1060DS is mounted convenient to the operator, while the MT1060MM is mounted remotely in the rear of the vehicle next to the antenna. The vehicle antenna is connected directly to the Mobile Mount via a coaxial cable.

- **Complete 2W and 30W mobile stations**
- **Clear-channel or ECCM/COMSEC operation (PRC1080)**
- **“Jerk-and-Run” configuration**
- **Internal power conditioning**
- **Convenient driver operation**
- **Simultaneous battery charging**
- **Broadband high power RF amplifier**

# SQUAD RADIO

## SPECIFICATIONS (MT1060DS, MT1060MM)

### General

Systems	MT1060DS: used to make up a 2W system containing the appropriate Squad Radio mounted in the 1060DS; MT1060DS/MT1060MM: used to make up 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-MK2, 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

