

assured communications •

RF-5800M-V520

FALCON II® MULTIBAND POWER AMPLIFIER

mobile

multimission

multiband

one radio

The RF-5800M-V520 is a high-performance, multiband vehicular or base station system for use with the RF-5800M-HH. For long-range applications and increased communications reliability, the RF-5800M-V520 provides 50W in the VHF band and 20W in the UHF band.

With automatic switching between antenna ports, the RF-5800M-V520 provides true multi-mission capability. The operator needs only to select the required net on the radio to switch between ground-to-ground, or ground-to-air, communications. The VHF antenna port provides 50W output for 30 to 90 MHz while the UHF antenna port provides 20W output from 90 to 512 MHz.

Other features provided by the RF-5800M-V520 include: an integrated handheld battery charger (battery remains attached to the radio) with simultaneous operation and charging, hot "jerk and run" (the handheld can remain powered on while being removed from vehicle system), VIC-1 and VIC-3 interface, and heat sinking for an extended-use duty cycle.

RF-5800M-V520 multiband power amplifier supports all modes and features of the FALCON II multiband radios, automatic position reporting using an internal or external GPS receiver, integration with computer-based situational awareness systems, tactical messaging, and image transmission applications.





Specifications for the RF-5800M-V520

| General | |
|---------------------|---|
| Frequency Range | 30-512 MHz |
| Input Power | 20 to 32 VDC MIL-STD-1275 compliant |
| Dimensions | 27.2 W x 19.3 H x 31.5 D cm |
| Weight | 11.8 kg (without shock tray) 18.1 kg (with shock tray) |
| RF Output Impedence | 50 ohms VHF/UHF, unbalanced |
| Collocation | 9% frequency and 1.5M antenna separation |
| Finish/Color | CARC/Green |

| Transmit | |
|----------------------|---|
| Output Power | 50 W: 30 to 90 MHz 20 W: 90 to 512 MHz |
| Harmonic Suppression | > 47 dBc typical |
| Spurious Suppression | > 50 dBc typical |

| Receive | |
|----------------|------------------------|
| FM Sensitivity | -112 dBm @ 12 dB SINAD |
| IF Rejection | > 60 dB |

| Environmental | |
|--------------------------|-------------------------------|
| Operating Temperature | -30°C to 60°C |
| Humidity | 90% per MIL-STD-810 |
| Shock/Vibration | Ground/Mobile per MIL-STD-810 |
| Sand/Dust | MIL-STD-810 |

| Compatibility | | |
|---------------------------|---|--|
| Multiband Handheld | RF-5800M-HH004 RF-5800M-HH104 (with GPS) | |
| 20M Multiband Handheld | RF-5800M-HH115 | |
| Intercom | AN/VIC-1 (V) AN/VIC-3 (V) | |
| Speaker | Power and audio connectors available | |

| Accessories | |
|--|--|
| Shock Mount Interface Assembly | Included |
| AC/DC Power Supply | For vehicular and base station applications |
| Headset | Various |
| Tactical Accessory Bag | Holds radio and entire complement of equipment |
| System Installation and Maintenance Manual | Included |
| Adapter Block | Included |
| 3.5 km Fieldwire Remote Control | Compatible |
| Ancillary Kit | Included |
| Data Cables | Wide variety of lengths |
| Fan Kit | 11146-2027-01 |

| Configurations | |
|----------------------|---|
| Vehicle Systems | RF-5800M-V520 RF-5800M-V521 (with GPS) |
| Base Station Systems | RF-5800M-B520 RF-5800M-B521 (with GPS) |

