



MIDLAND[®]

TITAN SERIES MOBILES

- UP TO 320 CHANNELS,
120 STANDARD
CHANNELS
- PROGRAMMABLE
UP TO 40 GROUPS
- PROGRAMMABLE
DTMF ANI OPTIONAL
- CHANNEL SCANNING
WITH DUAL PRIORITY
& PRIORITY SCAN
ESCAPE
- MIL-STD 810C/D/E
APPROVED



**ROCK
SOLID**



STANDARD HEAD



DELUXE HEAD

MIDLAND RADIO CORPORATION

5900 PARRETTA DRIVE, NORTH KANSAS CITY, MO 64120 USA

TEL: 816-241-8500, FAX: 816-241-5713

| Specifications | Low Band | VHF Model | UHF Model |
|--|--|--|--|
| With Standard Control Head | Lo Pwr: 70-0511B/C [dash], 70-0611B/C [remote] Hi Pwr: 70-0671B/C [remote], 70-0571B/C [dash] | Lo Pwr: 70-1341B [dash], 70-1441B [remote] Hi Pwr: 70-1391B [dash], 70-1491B [remote] | Lo Pwr: 70-1541B [dash], 70-1641B [remote] Hi Pwr: 70-1591B [dash], 70-1691B [remote] |
| With Deluxe Control Head | Lo Pwr: 70-0514B/C [dash], 70-0614B/C [remote] Hi Pwr: 70-0674B/C [remote], 70-0574B/C [dash] | Lo Pwr: 70-1344B [dash], 70-1444B [remote] Hi Pwr: 70-1394B [dash], 70-1494B [remote] | Lo Pwr: 70-1544B [dash], 70-1644B [remote] Hi Pwr: 70-1594B [dash], 70-1694B [remote] |
| Frequency Range | 36- 42 MHz [B band] / 42 - 50 MHz [C Band] | 150-174 MHz | 450-470 MHz [B Band] |
| Channels | 120 [320 Optional] | 120 [320 Optional] | 120 [320 Optional] |
| Channel Spacing | 20 kHz | 30 / 25 / 12.5 kHz [select by channel] | 30 / 25 / 12.5 kHz [select by channel] |
| Channel Stepping | 2.5 kHz | 2.5 / 5.0 / 6.25 kHz | 5.0 / 6.25 kHz |
| Maximum Channel Separation | 6 / 8 MHz | 24 MHz | 20 MHz |
| Maximum Offset Frequency | 6 / 8 MHz | 24 MHz | 20 MHz |
| Reference Oscillator | 12.8 MHz TCXO | 12.8 MHz TCXO | 12.8 MHz TCXO |
| Duty Cycle [correspond to EIA 20%] | 1 minute TX, 4 minute RX | 1 minute TX, 4 minute RX | 1 minute TX, 4 minute RX |
| Power Supply | 13.6V DC Negative Ground | 13.6V DC Negative Ground | 13.6V DC Negative Ground |
| Operating Voltage Range [*1] | 12.2 to 15.0 Volts | 12.2 to 15.0 Volts | 12.2 to 15.0 Volts |
| Absolute Voltage Range [*2] | 10.5 to 16.3 Volts | 10.5 to 16.3 Volts | 10.5 to 16.3 Volts |
| Current Drain [at normal test conditions, approx.] | @ standby: 400 mA, @ RX: 2.5A, @ TX: low 10A / hi 25A | @ standby: 400 mA, @ RX: 2.5A, @ TX: low 10A / hi 25A | @ standby: 400 mA, @ RX: 2.5A, @ TX: low 10A / hi 25A |
| RF Impedance | 50 Ω | 50 Ω | 50 Ω |
| Operation Temperature | -22°F to +140°F [-30° to +60°C] | -22°F to +140°F [-30° to +60°C] | -22°F to +140°F [-30° to +60°C] |
| Relative Humidity | 90° @ 50° ±2°C | 90° @ 50° ±2°C | 90° @ 50° ±2°C |
| Nominal Dimensions H x W x D | 2.75" x 7.25" x 8.75" [69 x 184 x 222 mm] | 2.75" x 7.25" x 8.75" [69 x 184 x 222 mm] | 2.75" x 7.25" x 8.75" [69 x 184 x 222 mm] |
| Weight | 6.0 lbs. [2.7 kg] lo power / 10.2 lbs. [4.6kg] | 6.0 lbs. [2.7 kg] lo power / 10.2 lbs. [4.6kg] | 6.0 lbs. [2.7 kg] lo power / 10.2 lbs. [4.6kg] |
| Military Specifications | MIL-STD 810 C/D/E Rain, Salt, Fog & Vibration | MIL-STD 810 C/D/E Rain, Salt, Fog & Vibration | MIL-STD 810 C/D/E Rain, Salt, Fog & Vibration |

Configurations: The basic TX/RX unit can be configured as a dash-mount radio by plugging either the 70-2202 or 70-2203 control head into the front of the unit. It can be configured as a trunk-mount radio w/ a trunk-mount front, cap & cable, & either the 70-2202 or 70-2203 control heads mounted as remote control heads.

[*1]: "Operating" means all the specifications of TIA/EIA-603 are met. [*2]: "Absolute" means the unit remains operational w/o damage

Receiver Specifications

| | | | |
|--|---|---|---|
| Frequency Stability | ± .00025% -22°F to +140°F [-30° to +60°C] | ± .00025% -22°F to +140°F [-30° to +60°C] | ± .00025% -22°F to +140°F [-30° to +60°C] |
| Sensitivity [12dB SINAD] | 0.25µV | 0.25µV | 0.25µV |
| Selectivity | [± 20 kHz]: -90dB | [± 25 kHz]: -85dB, [± 30 kHz]: -85dB | [± 25 kHz]: -75dB |
| Frequency Separation [at full rated specs] | 6/8 MHz Min | 24 MHz Min | 20/27 MHz Min |
| Acceptable Radio Frequency Displacement | 40% of Rated System Deviation | 40% of Rated System Deviation | 40% of Rated System Deviation |
| Spurious Rejection | -80 dB | -80 dB | -80 dB |
| Intermodulation | [± 50/100 kHz] -80 dB | [± 25 kHz] -80 dB, [± 12.5/15 kHz] -75 dB | [± 25 kHz] -80 dB, [± 12.5/15 kHz] -75 dB |
| Squelch Sensitivity | 0.18 µV Max | 0.18 µV Max | 0.18 µV Max |
| Audio Output [at 3% distortion or less] | internal: 5 W external: 10 W | internal: 5 W external: 10 W | internal: 5 W external: 10 W |
| Input Impedance | 50 Ω | 50 Ω | 50 Ω |

Transmitter Specifications

| | | | |
|--|--|--|--|
| RF Power Output | 60 W low pwr models, 110 W high pwr models | 60 W low pwr models, 110 W high pwr models | 60 W low pwr models, 110 W high pwr models |
| Frequency Stability | ±2.5 PPM -22°F to +140°F [-30°C to -60°C] | ±2.5 PPM -22°F to +140°F [-30°C to -60°C] | ±2.5 PPM -22°F to +140°F [-30°C to -60°C] |
| Modulation [direct FM] | 16K0F3E @ 5 kHz Max. | 11K0F3E, 16K0F3E @ 2.5 kHz Max. | 11K0F3E, 16K0F3E @ 2.5 kHz Max. |
| Frequency Separation [at full rated specs] | 6/8 MHz | 24 MHz | 24 MHz |
| Spurious and Harmonics | -80 dB | -80 dB | -80 dB |
| FM Hum and Noise | -50 dB | -50 dB | -50 dB |
| Audio Response | Per EIA/TIA-603 Specifications | Per EIA/TIA-603 Specifications | Per EIA/TIA-603 Specifications |
| Audio Distortion [at 60% deviation] | 2% @ 1 kHz | 1% @ 1 kHz | 2% @ 1 kHz |
| Output Impedance | 50 Ω | 50 Ω | 50 Ω |

FOR MORE INFORMATION, CONTACT:

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