

Base Station MTR2000



Stay In Touch On The Move

The MTR2000 base station radio features enhanced analogue capabilities in a compact/economical package.

The MTR2000 base station/repeater utilises cutting edge technology, providing power levels equivalent to current analogue base stations and repeaters in its class. The smaller, 3 rack units, require less maintenance.

- Integral component of any conventional or Motorola Selectacom MX, Smartnet or Smartzone trunked analogue radio system.
- Unmatched flexibility.
- Available in 25-100 Watt or 2-40 Watt UHF, (1-40 Watt VHF) variable power models.
- VHF and UHF frequencies and features 12.5 or 25/30 kHz programmable channel spacing.
- Software-based design simplifies upgrades.
- Programming and diagnostic testing through personal computer.
- Shorter maintenance time through use of field replaceable units.
- Reliable solid-state performance.
- Continuous-duty cycle operation.
- Battery revert in the event of a site power failure.
- Self testing to reduce regular maintenance schedules.
- Alternative indoor cabinet enclosures.
- Attractive packages available in 40 Watt for VHF and UHF.

Base Station MTR2000



GENERAL

| Frequency Band | RF Power Output |
|-----------------------------|--|
| 132-174 MHz | 1-40 W |
| 132-154 MHz, 150-174 MHz | 25-100 W |
| 403-470 MHz | 2-40 W (6-40 W only ETS approved) |
| 403-435 MHz, 435-470 MHz | 25-100 W |
| Modulation: | FM |
| Temperature Range: | -30°C to +60°C |
| Antenna Connectors: | Transmit and Receive, Type "N" Female |
| No. of Frequencies: | 6 (Up to 32 optional) |
| Frequency Generation: | Synthesised |
| Channel Spacing: | 12.5 kHz/20 kHz/25 kHz/30 kHz |
| Mode of Operation: | Simplex/Semi-duplex/Duplex |
| Input Voltage AC: | 180-264 VAC, 47-63 Hz |
| Optional DC Only Operation: | 14.2 VDC (30/40 Watt Station) 28.6 VDC (100 Watt station) |

| | Dimensions | Weight |
|----------------------------|---|------------------|
| All Stations and Receivers | 19 x 16.5 x 5.25 in. † (483 x 419 x 133 mm) | 40 lbs † (19 kg) |

Alternative Cabinet Enclosures

| | | |
|---------------------|--|-------------------|
| 30" Indoor Cabinet | 30 x 22 x 20 in. (762 x 559 x 508 mm) | 66 lbs* (30 kg) |
| 46" Indoor Cabinet | 46 x 22 x 20 in. (1168 x 559 x 508 mm) | 75 lbs* (34 kg) |
| 60" Indoor Cabinet | 60 x 22 x 20 in. (1524 x 559 x 508 mm) | 102 lbs* (46 kg) |
| 70" Outdoor Cabinet | 70 x 22 x 20 in. (1778 x 559 x 508 mm) | 225 lbs* (103 kg) |
| 30" Modular Rack | 30 x 22 x 20 in. (762 x 559 x 508 mm) | 52 lbs* (24 kg) |
| 45" Modular Rack | 45 x 22 x 20 in. (1143 x 559 x 508 mm) | 59 lbs* (27 kg) |
| 52" Modular Rack | 52 x 22 x 20 in. (1321 x 559 x 508 mm) | 61 lbs* (28 kg) |

† Applies to standard station configuration *Enclosure Only

All specifications use the ETS 300-086 & ETS300-113 method for measurement.
All values subject to change without notice

RECEIVER

| | VHF | UHF |
|---|---|----------------------------|
| Frequency - Wideband: | 132-174 MHz | 403-470 MHz |
| Frequency - High Performance Preselector: (Option to the station) | 132-154 MHz 150-174 MHz | 403-433 MHz 433-470 MHz |
| High Performance Preselector Bandwidth: (Receiver Bandwidth) | 4.0 MHz 150-174 MHz | 433-470 MHz |
| Adjacent Channel Rejection: (12.5 and 25/30 kHz) (Selectivity): | 75 db/80 db | |
| Sensitivity 12 db SINAD | 0.35 µV | |
| Signal Displacement Bandwidth: (Off Channel Acceptance): (12.5/25 kHz) | 2 kHz | |
| Frequency Stability: (for temperature and Voltage Variation) | 1.5 ppm External Ref optional | |
| Intermodulation Rejection: (12.5 and 25/30 kHz) | 80 db / 85 db typical | |
| Spurious and Image Response Rejection: | 85 dB | |
| Optional High Performance Preselector: | 90 dB | |
| Audio Response: | +1,-3 dB from 6 dB per octave de-emphasis; 300-3000 Hz referenced to 1000 Hz at line input | |
| Audio Distortion: | Less than 3% at 1000 Hz; 60% RSD | |
| Line Output: | -20 dBm to 7 dBm @ 60% RSD, 1 kHz | |
| FM Hum and Noise: (750 µs de-emphasis) | 1000 Hz tone @ 60% RSD 50 dB 12.5 kHz: 45 dB | |
| RF Input Impedance: | 50 Ohms | |

TRANSMITTER

| | VHF | UHF |
|---|--|----------------------------|
| Frequency - 30/40 Watt: | 132-174 MHz | 403-470 MHz |
| Frequency - 100 Watt: | 132-154 MHz 150-174 MHz | 403-435 MHz 435-470 MHz |
| Electronic Bandwidth: (Transmit Bandwidth) | Full Sub-band (reduced with the addition of a duplexer/external circulator option) | |
| Output Impedance: | 50 Ohms | |
| Frequency Stability: (for temperature and Voltage Variation) | 1.5 ppm External Ref | |
| Intermodulation attenuation: (For ref isolation): | 40 dB for 40 W, 100 W 70 dB for 30 W | |
| Maximum Deviation: | 30 (VHF)/25 kHz: +/-5 kHz 12.5 kHz +/-2.5 kHz | |
| Audio Sensitivity: | -20 dBm to 0 dBm variable | |
| Spurious and Harmonic Emissions Attenuation: (Spurious and harmonic Emissions) | -36 dBm for frequencies smaller than 1 GHz and -30 dBm for frequencies smaller than 4 GHz | |
| FM Hum and Noise: (750 µs de-emphasis) | 300 to 3000 Hz bandwidth, 60% RSD 50 dB 12.5 kHz: 45 dB | |
| Audio Response: | +1,-3 dB from 6 dB per octave pre-emphasis; 300-3000 Hz referenced to 1000 Hz at line input | |
| Audio Distortion: | Less than 3% at 1000 Hz; 60% RSD | |

Contact your local Authorised Motorola Dealer to find out more about how communicating with the MTR 2000 will benefit your organisation

Your Authorised Motorola Dealer is:

PSICOMPANY.COM
1-800-826-2907

