

# DIMETRA MTS2 TETRA BASE STATION

## LESS CAPEX, LESS OPEX, MORE EFFICIENCY.

Compact and lightweight, the Motorola Solutions DIMETRA™ MTS2 base station is a deployable TETRA base station offering full feature performance and superb cost efficiency.

With its small and flexible modular design, the MTS2 reduces installation costs and makes site acquisition easier than ever. Excellent RF parameters support the greatest possible radio coverage quality.

### DESIGNED FOR EFFICIENCY

The ultra flexible MTS2 meets a growing demand for small, deployable base stations that ensure site acquisition and installation is as easy and economical as possible.

- Reduced site acquisition costs through lower site requirements, lower maintenance through less site visits and the ability to re-use MTS2 in different configurations
- Reduced installation costs due to easy transportability
- MTS2 fully complies with the RoHS directive.

### COMPACT DESIGN OPTIMISES SITE SPACE

Small, light and versatile, the MTS2 is a high performance base station that can be installed in all kinds of locations.

- A compact design, small and lightweight.
- 48 Kg for easy portability
- A width of just 45 cm allowing convenient fitting into a 19" cabinet
- High Transmit Power of 40 W without Transmit combining (25 W with Transmit combining)
- Triple Receiver Diversity allowing up to 3 receivers per carrier
- 'Best in Class' receiver sensitivity
- Wide frequency range of 350 - 470 MHz or 806 - 870 MHz
- Top cable entry and bottom to top cooling airflow allows the cabinet to be placed up against a wall or neighbouring equipment, saving additional space
- Supports a wide range of Radio Frequency Distribution System (RFDS) configurations with up to 3 receivers per carrier and duplexed receive/transmit antennas. Sites that do not allow multiple antennas can be set up with one single omni antenna pole, avoiding expensive mast constructions and complying with environmental requirements.



## FLEXIBLE CONFIGURATION FOR EASY SYSTEM ENHANCEMENT

The MTS2 is extremely flexible in its standard configuration.

- Fits conveniently into a 19 inch cabinet, avoiding the need for disassembly, re-racking or re-type approval. This allows the best possible space utilisation and support for both outdoor and shock absorbing transportable enclosures.
- Can easily be expanded to a 4 carrier system without having to change antenna installations. Key parts of MTS2 can be reused in an MTS4 cabinet.

## DESIGNED FOR RELIABILITY AND LOW MAINTENANCE

The MTS2 offers supreme reliability in various conditions plus a modular design including front access for easy servicing.

- Required battery capacity and heat dissipation is low due to excellent power efficiency, and with a strong integrated battery charger, power supply costs are kept to a minimum.
- Equipped with low noise fans, the MTS2 is fully operational up to 60°C at any transmit power level up to 25 Watts after combining or 40 Watts without combining.

## ADDITIONAL FEATURES

- Hybrid combiner - offering remote frequency agility, with no need for site visits
- Strong integral battery charger saves space and duplicated equipment
- Full front access and top cable entry – for easy maintenance
- Door alarming contacts as standard – for added security
- Remote transmit antenna monitoring as standard – for improved availability
- Support for 15 external user input alarms – for additional site monitoring
- Support for 2 external user output alarms – for additional site control
- Remote GPS allows for tunnel or underground housing
- Resilience supported through Local Site Trunking
- Multi-Slot Packet Data (MSPD) for enhanced data services
- TETRA Enhanced Data Service (TEDS) for high speed data services.

## SPECIFICATIONS

|  | UHF   | 800MHz  |
|--|---|---|
| <b>Frequency Bands</b>   | 350 - 470 MHz   | 806 - 870 MHz   |
| <b>Operating Bandwidth</b>   | 5 MHz   | 19 MHz  |
| <b>Base Radios</b>   | Up to 2 BRs (8 time slots)  |   |
| <b>Carrier Spacing</b>   | 25 kHz (25 / 50 kHz for TEDS)   |   |
| <b>Transmit Power at top of base station cabinet</b>                         | 40 Watt (without Tx combining)<br>25 Watt (with Tx hybrid combining)  |   |
| <b>Receiver Sensitivity at top of base station cabinet / input connector</b> | -120.0 dBm typical (static at 4% BER)<br>-113.5 dBm typical (faded at 4% BER)   | -119.5 dBm typical (static at 4% BER)<br>-113.0 dBm typical (faded at 4% BER) |
| <b>Diversity Reception</b>   | Single, dual or triple diversity  |   |
| <b>Combiner Options</b>  | Hybrid Combiner   |   |
| <b>Transmission</b>  | Ethernet, X21 or fractional E1 connection<br>Multi Protocol Label Switching (MPLS)<br>Two Ethernet Ports or Two E1 ports with inbuilt multiplexer for either loop protection or redundancy<br>(up to 10 base stations can be connected in loop)<br>Support for satellite transmission |   |
| <b>High Speed Data</b>   | TEDS QAM modulation schemes with 25 / 50 kHz channel bandwidths   |   |
| <b>Input Power</b>   | 100/115/230 V AC, 50/60 Hz and -48 V DC   |   |
| <b>Power Consumption</b>   | 640 Watt (with fans)  | 700 Watt (with fans)  |
| <b>Operating Ambient Temperature</b>   | -30 to 55 °C (without fans) / -30 to 60 °C (with fans)  |   |
| <b>Width x Height x Depth</b>  | 0.45m x 0.61m x 0.48m   |   |
| <b>Weight</b>  | 48 Kg (fully equipped with 2 base radios)   |   |

For more information, please visit us on the web at: [motorolasolutions.com/DIMETRA](http://motorolasolutions.com/DIMETRA)

