



DIMETRA EXPRESS

COMMUNICATIONS MADE SIMPLE

DIMETRA Express is a flexible TETRA system. By integrating the switch and base radios in a one-box or modular system it makes it quick and easy to set up, deploy, and manage your communications. This allows you to simplify everyday operations whilst reducing costs and complexity over the long term.

You can quickly integrate DIMETRA Express into your network using a single IP address, provision multiple subscribers, and complete installation using web browser-based applications and tools. Once it's up and running, DIMETRA Express is easy to manage and operate through the simple web-based network management and dispatch applications.

DIMETRA Express offers the voice, short data, and telephony services your teams demand. And it's expandable to multiple sites, so it can grow as your business does.



DIMETRA
EXPRESS MTS4
TETRA SYSTEM



DIMETRA
EXPRESS MTS2
TETRA SYSTEM



DIMETRA
EXPRESS MTS1
TETRA SYSTEM



DIMETRA
EXPRESS
STANDALONE
TETRA SYSTEM



SPECIFICATIONS

Configurations¹:

- DIMETRA Express Standalone System: Standalone Express Server plus new or existing Motorola Solutions Base Stations
- DIMETRA Express MTS1 System: Standalone Express Server and 1 Base Radio (4 Time Slots)
- DIMETRA Express MTS1 Dual Configuration System: Standalone Express Server and 2 Base Radios (8 Time Slots)
- DIMETRA Express MTS2 System: Integrated Express Server and 1 Base Radio (4 Time Slots)
- DIMETRA Express MTS4 System: Integrated Express Server and 1 - 3 Base Radios (4 - 12 Time Slots)

TETRA Voice Services, Short Data Services and Packet Data Services²

VoIP Telephony Interconnect

Analogue Gateway²

Authentication²

Air Interface Encryption (AIE)²

iTM Integration²

Geographic Redundancy²

Wireline Interoperability with WAVE PTX²

Object Call

APIs:

- Dispatch Console²
- Voice Logging²
- Air Traffic Information Access²
- Fault Forwarding NBI²
- ECADI²
- Dispatch Communication Server (DCS)³

TRACES UMR - enables collection of UMR data from the DIMETRA Express system for TRACES⁴

Web-Based Console Local Language Support

Web-Based Network Management⁵:

- Basic and Advanced View Option
- Real-Time System Health Monitor
- Bulk Loading of Radio Users and Talkgroups

Web-Based Dispatch Console^{2,5}:

- Group PTT
- Individual Call
- Emergency Alarm
- Text Messaging
- Console Patching

Web-Based Radio Control Manager^{2,5}:

- Dynamic Group Number Assignment (DGNA)
- Radio Stun

Remote service access (VPN)

Expandable to additional sites with DIMETRA MTS1, MTS2 or MTS4 Base Stations using Ethernet IP network site links

Physical Dimensions [HxDxW]:

- MTS1: 0.597m x 0.206m x 0.263m
- MTS2: 0.61m x 0.48m x 0.45m
- MTS4: 1.43m x 0.57m x 0.55m
- Express Server: 0.079m x 0.175m x 0.260m

Weight:

- MTS1: 25.5 Kg (excluding mounting bracket and Express Server)
- MTS2: Approx. 45 Kg
- MTS4: Approx. 148 Kg
- Express Server: Approx. 3.8 Kg

Dual and Triple Receiver Diversity options (MTS1 Dual Diversity only)

Hybrid Combiner

Auto Tune Cavity Combiner: MTS4 only

Wide frequency range:

- MTS1, MTS2, MTS4: 350-470 MHz
- MTS2, MTS4: 350-470 MHz and 806-870 MHz

Receiver sensitivity:

- MTS2, MTS4 350-470 MHz: -120 dBm typical (static at 4% BER)
-113.5 dBm typical (faded at 4% BER)
- MTS2, MTS4 806-870 MHz: -119.5 dBm typical (static at 4% BER)
-113 dBm typical (faded at 4% BER)
- MTS1 350-470 MHz: -119.5 dBm typical (static at 4% BER)
-113 dBm typical (faded at 4% BER)

Operating bandwidth: 5 MHz

Transmit power: 5 Watt to 40 Watt (configurable),
(MTS1 1 Watt to 10 Watt - configurable)

Temperature range: -30 to +60C (MTS1 -30 to +55C)

Input power:

- MTS1: 48V DC
- MTS2 and MTS4: 100/115/230V AC, 50/60 Hz, or 48V DC
- Express Server: 100-240V AC, 50/60 Hz (external power adapter) or 6V to 36V DC

Power consumption:

- MTS1: 75 Watt to 100 Watt
- MTS2: 450 Watt maximum when fully equipped
- MTS4: 1100 Watt maximum when fully equipped
- Express Server: 60 Watt maximum consumption

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 (MTS2 and MTS4 only)

Full front access and top cable entry for easy maintenance (MTS2 and MTS4 only)

Remote transmit antenna monitoring as standard for improved availability

MTS1 outdoor sealing kit option

Security Update Service⁶

¹ One base radio can be a redundant base radio. The MTS1 only supports this feature when in dual configuration with 2 Base Radios.

² Licensed feature.

³ DCS API also enables a third party dispatch application to connect two or more DIMETRA Express systems together.

⁴ TRACES is sold separately.

⁵ Web based applications for Microsoft Windows and Android devices (using Chrome Browser).

⁶ Access to this service is dependent on the customer having a valid software maintenance license applied to the system, i.e. a service contract.

All specifications are subject to change without notice.

For more information, please visit: motorolasolutions.com/dimetraexpress

Motorola Solutions Ltd. Nova South, 160 Victoria Street, London, SW1E 5LB, UK.

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