

# MTC100

TETRA Handheld Computer.  
Safe. Secure. Reliable.



## Key Features

- Integrated TETRA Modem for Wide Area communications
- Real-time secure access to information sources to enhance decision making and reporting
- Windows Mobile® 5 OS with security and messaging enhancements
- Secure applications environment offers device management and data protection
- Ruggedised platform meeting IP54 and MIL STD810-F specs to ensure reliable operation in working environments

Public Safety, Local Government, Transportation, Utilities and many other user groups are all adopting TETRA as the first choice for critical communication needs.

Motorola is a world leader in the development and deployment of TETRA communication solutions, and the MTC100 TETRA Handheld Computer is the world's first PDA with TETRA wireless capability.

## Powerful and Flexible

The MTC100 offers a host of features designed to enhance the productivity and effectiveness of its users. Offering multi-mode wireless connectivity users can be connected to enterprise data where and when needed.

For mobile users in the field, TETRA provides a secure wide-area data bearer – whether accessing databases or submitting field reports. The optional WiFi capability also allows connection to your wireless LAN where available, providing flexibility in access to mobile information.

## Rugged Mobile Computing

Designed and tested to offer reliable computing in the field, the MTC100 runs the industry standard Windows Mobile® 5 operating system, with security and memory enhancements suited to deployment of your critical applications.

The MTC100 delivers rapid access to data through multiple wireless networks. The integrated GPS receiver enables access to mapping and development of location based services.

The integrated camera and LED flash can capture images for use in reports, while Bluetooth® enables connection to wireless devices such as printers and data capture devices.

## Specification Sheet

### MTC100 TETRA Handheld Computer

#### MODELS

|                         |  |
|-------------------------|--|
| MTC100 Standard Edition | Handheld PDA with Windows Mobile® 5 Premium Edition, 128MB SDRAM, 196MB Flash ROM, Integrated TETRA Radio Modem      |
| MTC100 Enhanced Edition | As Standard Edition, plus: Integrated 802.11b/g Wireless Modem, Integrated Bluetooth® radio, Integrated GPS receiver |



## Specifications

#### PERFORMANCE CHARACTERISTICS

|                  |   |
|------------------|---|
| Processor        | Intel® XScale™ PXA27x, 520MHz   |
| Memory           |   |
| Internal         | 128MB SDRAM / 196MB Flash ROM   |
| Expansion        | User accessible SD slot with protective cover, supports SD cards up to 4GB. |
| Operating System | Microsoft® Windows Mobile® 5 Premium Edition                                |
| Power Supply     |   |
| Battery          | 3.7V 3600mAh extended capacity<br>Li-Ion removable / rechargeable           |
| AC Power Adaptor | Input: 110-240V A.C. 0.6A max 50-60Hz<br>Output: 5V D.C 3A Centre Positive  |

#### PHYSICAL

|                 |                                    |
|-----------------|------------------------------------|
| Dimensions (mm) | 155 x 89 x 33 typ to 155 x 89 x 44 |
| Weight (g)      | 450g maximum, 430g typical         |

#### USER INTERFACE & DISPLAY

|                    |   |
|--------------------|---|
| Display Image Size | 3.5" (89mm) diagonal  |
| Type               | 240 x 320 Transflective TFT panel, 256K colours   |
| Backlight          | LED backlight with variable brightness control  |
| Touch Panel        | Glass 4-wire resistive analog, 3H hardness<br>Stylus - can be tethered to PDA   |
| Status Indicators  |   |
| Power              | two colour charge indication LED  |
| WiFi Status        | W-LAN coverage indicator LED  |
| TETRA              | tri-colour service status LED   |
| Hardware Buttons   |   |
| Front Face         | 4 assignable function buttons, 5-way navigation and select joystick, Power button (On / Off / Backlight)                    |
| Side faces         | One assignable function button per side   |
| Reset              | Warm reset, cold reset via discreet switch  |
| Audio              | Integral speaker and microphone with OS support for voice record and audio playback (Voice over TETRA WAN is NOT supported) |

#### ENVIRONMENTAL SPECIFICATIONS

|                            |  |
|----------------------------|--|
| Operating Temperature (°C) | -20 to + 60.<br>Lion battery performance degrades at -10C.               |
| Storage Temperature (°C)   | -30 to + 75  |
| Humidity                   | MIL-STD 810F Method 507.4  |
| Dust & Water Sealing       | IP54 (cat.2) IEC 529 class   |
| Drop / Shock               | MIL-STD 810F Method 516.5 Proc IV<br>- multiple 1.2m drops onto concrete |
| Electrostatic Discharge    | 15kV air discharge, 8kV contact  |

#### PERIPHERALS AND ACCESSORIES

|                                   |  |
|-----------------------------------|--|
| A/C Travel Charger                | Suitable for charging PDA via Charge/Programming Adaptor or connection to the Desk Charging Cradle   |
| Desk Charging Cradle              | Desktop charging and docking station with slot for charging additional battery. USB Serial connection allowing connection to PC for Activesync synchronisation and for configuration of the TETRA Modem (using CPS software)           |
| Charge / Programming Adaptor      | Interface adaptor for connection of A/C Travel Charger and connection for data and programming   |
| Key Variable Loader (KVL) Adaptor | Interface adaptor for connection to Motorola KVL device for configuration of crypto keys (required for options using TETRA Air Interface Encryption). Also provides connection for AC Travel Charger and USB interface for programming |
| Carrying & Other Accessories      | A range of carrying solutions is available including carry cases, carry strap and belt clip.   |

#### WIRELESS DATA COMMUNICATIONS - ALL MODELS

|                           |   |
|---------------------------|---|
| Wide Area Network (TETRA) |   |
| Radio Type                | TETRA TOM100 Modem  |
| Data Services             | TETRA SDS and Packet Data   |
| Data Rates (PD)           | Single Slot: 7.2 Kbps gross<br>Multi Slot: up to 28.8kbps gross                 |
| Frequency band            | 380 - 400, 410-430 MHz  |
| Transmit power            | 1W (30 dBm)   |
| Antenna Type              | External antenna  |
| Security                  | TETRA Air Interface Encryption<br>(Class 2, Class 3) TEA1, TEA2, TEA3 algorithm |

#### WIRELESS DATA COMMUNICATIONS - ENHANCED MODEL ONLY

|                                |  |
|--------------------------------|--|
| Personal Area Network (PAN) *1 |  |
| Radio Type                     | IEEE 802.15 Bluetooth® 1.1 and 1.2, Class  |
| Frequency band                 | 2.4000 to 2.4835 GHz   |
| Antenna Type                   | Internal embedded antenna  |
| Local Area Network (W-LAN)     |  |
| Radio Type                     | IEEE 802.11 b/g Modem  |
| Data Rates                     | 802.11g - up to 54 Mbps  |
| Frequency band                 | 2.4000 to 2.4970 GHz   |
| Antenna Type                   | Internal embedded antenna  |
| Security                       | WEP 64/128 bit<br>WPA Radius (EAP-TLS, PEAP, TTLS, and LEAP*<br>WPA-PSK and Microsoft VPN IPSEC and PPTP |

#### DATA CAPTURE & GPS

|                           |  |
|---------------------------|--|
| Camera                    |  |
| Resolution                | 1.3M pixel CMOS CCD sensor                                   |
| Flash                     | Ultra-bright LED illumination                                |
| GPS (Enhanced Model Only) |  |
| Receiver                  | 16 channel receiver with DGPS and SBAS (WAAS, EGNOS) support |

#### REGULATORY COMPLIANCE

|   |  |
|---|--|
| Radio (R&TTE Article 3.2)               | EN 303 035-1 V1.2.1                          |
| EMC (R&TTE Article 3.1.b)               | EN 301 489-01 V1.3.1<br>EN 301 489-18 V1.2.1 |
| Electrical Safety (R&TTE Article 3.1.a) | EN 60950:2001                                |
| Environmental                           |  |
| Directive 2002/96/EC                    | WEEE   |
| Directive 2002/95/EC                    | RoHS   |

\*1 Bluetooth® is a low-power, short-range wireless technology that enables certain types of wireless communication between compatible Bluetooth-enabled devices. In order for Bluetooth® devices to communicate with one another, they must utilize the same Bluetooth® profile. This device supports Bluetooth® 1.2 and supports "Public Area Network (PAN)", "Hardcopy Cable Replacement (HCP)" and "Basic Printing" profile. To determine the profiles supported by other devices, contact their respective manufacturer.



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MTC100/SPEC-ENG(03/07)

[www.motorola.com](http://www.motorola.com)

Motorola, Ltd. Jays Close, Viabes Industrial Estate, Basingstoke, Hampshire, RG22 4PD, UK