MTC100

TETRA Handheld Computer.
Safe. Secure. Reliable.

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.

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

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 Li-Ion removable / rechargeable
AC Power Adaptor	Input: 110-240V A.C. 0.6A max 50-60Hz 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 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. Lilon 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 - multiple 1.2m drops onto concrete
Electrostatic Discharge	15kV air discharge, 8kV contact

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 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 (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 WPA Radius (EAP-TLS, PEAP, TTLS, and LEAP* 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 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.

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 Adapator	Interface adaptor for connection of A/C Travel Charger and connection for data and programming
Key Variable Loader (KVL) Adapator	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.

MOTOROLA

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