MC75
3G Worldwide Enterprise Digital Assistant (EDA)

FEATURES
Industry-leading drop test, IP54 sealing and integrated antennas
Lightweight yet rugged; built for year-round use in nearly any environment

Powerful microprocessor designed for mobility:
XScale PXA270 @ 624 MHz
Desktop-like multimedia performance with lower power requirements

Microsoft’s latest operating system: Windows Mobile 6.0
Increased interoperability with existing enterprise infrastructure; enhanced security features; more flexible development platform; improved mobile messaging collaboration

The MC75: Setting a new standard for Enterprise Digital Assistants
No matter what your workers need to get the job done, Motorola’s MC75 Worldwide Enterprise Digital Assistant delivers all the features and functionality required to maximize workforce productivity in a rugged device with a minimum footprint...all at the right price. The MC75 redefines the standard for EDA mobile computers with simultaneous voice, data and GPS services* as well as an unprecedented number of enterprise class features. Users enjoy a 3G world cell phone with push-to-talk (PTT), integrated GPS with superior sensitivity and tracking capabilities, 1D and 2D bar code scanning, a high resolution color camera, 3G wireless WAN (WWAN), wireless LAN (WLAN), wireless PAN (WPAN) and IrDA connectivity — all in a single device.

When it comes to running business applications, the MC75 shines. The robust bandwidth of 3G combined with the latest mobile computing platform provides the maximum processing power required to handle virtually any business application — including voice and video. And the MC75 is extendable — a user accessible microSD slot enables the addition of storage and new functionality to meet evolving business needs. From field sales, field service and fleet management to government applications such as public safety, first response and security screening, maximize the efficiency of your workforce with simultaneous anywhere, anytime mobile voice and data...with the MC75.

Maximum value...and return on investment
The 3G based MC75 allows enterprises to standardize on one device for global deployments, reducing the complexity, support requirements and the cost of mobility solutions. By providing a single platform for worldwide voice and data services, the MC75 eliminates the need for multiple operating systems, multiple service providers and multiple devices. In addition, the multi-function MC75 eliminates the need to purchase and manage multiple devices per person — for example, a mobile computer and a cell phone. The reduction in capital and operational costs combines with increased workforce productivity to deliver maximum value on your investment.
Setting the standard for rugged EDA design

Whether your workers are in a truck, in a customer facility or out on the street, you can count on the MC75 to deliver the maximum uptime you need to protect worker productivity and achieve a low total cost of ownership (TCO). Designed for all day every day use inside and outside the enterprise, the MC75 offers an array of features that set the bar for rugged design of EDA-class devices. Motorola’s drop test is performed over the entire operating temperature range, ensuring dependable operation whether drops occur at room temperature or in extreme cold or heat — even on concrete. And the unit is sealed to ensure reliable operation, even when exposed to dust, rain, snow and spills.

Maximum voice quality and functionality

Designed from the ground up to support voice as well as data, the MC75 offers a superior voice experience. Functionality includes full duplex voice, push-to-talk (PTT) and voice dialing over the wireless WAN (WWAN) and WLAN, enabling one-to-one calls as well as walkie-talkie style instant communications. The device is voice-recognition ready, able to support advanced voice applications. And handset, headset and speakerphone modes provide workers with the convenience and flexibility to meet the needs of the job...and the moment.

Maximum wireless functionality: WWAN, WLAN, WPAN and IrDA

The MC75 offers your workers the convenience of comprehensive wireless connectivity — no need for any wires, anywhere, anytime. Support for 3G provides high-performance mobile voice and data services outside the four walls virtually anywhere in the world. Support for 802.11a/b/g provides a seamless wireless LAN connection, delivering a cost-effective voice and data connection inside the four walls and in hot spots. Wireless PAN connectivity provides a convenient wire-free connection to peripherals, such as Bluetooth® headsets and printers. And IrDA provides an additional means of wireless communications with mobile and desktop computers as well as other legacy business equipment.

Robust locationing with best-in-class GPS functionality

Chosen for its superior sensitivity and tracking capabilities, the high performance SiRFstarIII GSC3f/LP chipset enables a multitude of real-time location based applications, from directions for drivers to real-time fleet location for dispatchers. The chipset delivers expanded coverage for GPS applications by enabling the rapid and highly accurate capture of signals in some of the most challenging environments, including urban canyons and areas where foliage is very dense. And the low-power chipset delivers top-notch accuracy with minimal power requirements, conserving battery power to help provide end-users with location-based services.

Maximum advanced data capture capabilities

With the MC75 in hand, workers have the functionality needed to automate, enrich and error proof data collection. Choose between a 1D laser scanner or 2D bar code imager to enable the rapid and intuitive capture of the types of bar codes in use throughout your enterprise. And a 2 megapixel auto-focus color camera with flash can not only capture high quality pictures — for example, to document proof of condition for a damaged shipment or a broken piece of equipment, or a signature on a document — but can also decode 1D and 2D bar codes as well. As a result, paper forms can be eliminated and business processes streamlined, improving productivity and throughput throughout the enterprise.

The Motorola advantage

When you choose the Motorola MC75, you enjoy the advantages of a world-class partner channel, world-class management solutions and world-class services. Our award-winning partner ecosystem offers a best-in-class, broad set of ready-to-go and custom applications for the MC75, minimizing deployment time and cost. Compatibility with Motorola’s Mobility Software Suite offers extraordinary centralized control over your MC75 devices, including remote staging, provisioning, monitoring and troubleshooting of devices, the ability to secure data on the devices and much more. To help keep your MC75 up and running at peak performance, Motorola offers Service from the Start with Comprehensive Coverage. This unique service includes normal wear and tear, as well as coverage for internal and external components damaged through accidental breakage at no additional charge — significantly reducing your unforeseen repair expenses. And options such as Commissioning Service and Express Shipping help to further minimize downtime in the unlikely event your device requires repair.

For more information on how the MC75 can improve your operational efficiency, please visit us on the web at www.motorola.com/MC75 or access our global contact directory at www.motorola.com/enterprise/contactus

* Note: Simultaneous delivery of mobile voice, data and GPS services is carrier dependent. The CDMA/EVDO Rev. A network enables the simultaneous delivery of GPS and either voice or data.
MC75 Specifications

**Physical Characteristics**

Dimensions: 6 in. L x 3.3 in. W x 1.7 in. D

15.24 cm L x 8.4 cm W x 4.4 cm D

Weight (including standard battery): Standard 1.5X battery; 14.9 oz./422 g

Extended Capacity 2.5X battery; 15.7 oz./446 g

Display: Transreflective color 3.5” full VGA with backlight, 640 x 480

Touch Panel: Glass analog resistive touch

Backlight: LED backlight

Main Battery: Rechargeable Lithium Ion 3.7V, 3600 mAh Smart Battery

Ext. Cap. Battery: Optional 3.7V, 4800 mAh Smart Battery

Backup Battery: Ni-MH battery (rechargeable) 15mAh 2.4V (not user-accessible)

Expansion Slot: microSD slot (maximum 2 GB)

Network Connections: Ethernet (via cradle); full-speed USB, host or client

Notification: Vibrator and LED

Keypad Options: 26-key Numeric; 44-key QWERTY, 44-key AZERTY, 44-key QWERTZ

Audio: Speaker, receiver, microphone, headset jack, software support for full duplex record and playback (stereo)

**Performance Characteristics**

CPU: XScale™ PXA270 624 MHz processor

Operating System: Microsoft® Windows Mobile® 6.0

Memory: 128MB RAM; 256MB Flash

Interface: RS-232, USB 1.1

User Environment

Operating Temperature: 14°F to 122°F/-10°C to 50°C

Storage Temperature: -40°F to 140°F/-40°C to 60°C (w/o battery)

Humidity: 95% non-condensing

Drop Specification: 5 ft. drop to concrete, 2 drops per 6 sides at ambient temperature 73°F/23°C, 4 ft. drop to concrete, 6 drops per 6 sides over operating temperature range

Tumble Specification: 1,000 1.6 ft./5 m tumbles (2,000 drops)

Sealing: IP54

iDA: Integrated

Clock: Integrated real time clock

Light Immunity: Readability: Incandescent — 450 ft. candles; Sunlight — 8000 ft. candles; Fluorescent: 450 ft. candles

Electrostatic Discharge (ESD): ±15kV air discharge, ±8kV direct discharge

**Battery Performance**

Standby time: 150 hours

Talk time: 5 hours

User profiles: Outdoor WAN+GPS, 15min/hour voice communication, 10kB transmission every 10 min, and GPS on all time, 8 hours of operation.

Outdoor Voice,15min/hour voice communication, 8 hours of operation, and 75 hours standby time.

Note: Performance metrics above were measured with Battery reserve option set the highest (72 hours)

**Wireless WAN Data and Voice Communications**

WWAN Radio: GSM, 3G HSDPA, CDMA: EVDO Rev A

GPS: Integrated Assisted-GPS (A-GPS)

**Wireless LAN Data and Voice Communications**

WLAN Radio: Tri-mode IEEE® 802.11a/b/g

Data Rates Supported: 1, 2, 5.5, 6, 9, 11, 12, 18, 24, 36, 48 and 54 Mbps

Operating Channels: Chan 8-165 (5040 – 5825 MHz)

Chan 1-13 (2412-2472 MHz)

Chan 14 (2484 MHz) Japan only

Actual operating channels/frequencies depend on regulatory rules and certification agency

Security: WPA2, WEP[40 or 128 bit], TKIP, TLS, TTLS (MS-CHAP), TTLS (CHAP), TTLS-MD5, TTLS-PAP, PEAP-TLS, PEAP (MS-CHAP v2), AES, LEAP

Spreading Technique: Direct Sequence Spread Spectrum (DSSS) and Orthogonal Frequency Division Multiplexing (OFDM)

Antenna: Internal for LAN, External for WAN

Voice Communication: Integrated Voice-over-IP ready (P2P, PBX, PTT), Wi-Fi™-certified, IEEE 802.11a/b/g direct sequence wireless LAN

**Wireless PAN Data and Voice Communications**

Bluetooth: Class II, 2.0, on-board chip antenna

**Data Capture Specifications**

Options: Four configurations available: 1D laser scanner; 2D imager, 2D laser scanner and camera; 2D imager and camera

**Color Camera**

Resolution: 2 megapixel

Illumination: User controllable flash

Lens: Auto focus

1D Laser Scanner (SE950)

Range on 100% UPCA: 24 in./60 cm

Resolution: 4 Mil minimum element width

Roll: ±35° from vertical

Pitch Angle: ± 65° from normal

Slew Tolerance: ± 50° from normal

Ambient Light Immunity: 10,000 ft. candles/107,640 lux

Scan Rate: 104 (+/- 12) scans/sec (bi-directional)

Scan Angle: 47° x 3° default

35° x 3° reduced

2D Imager Engine (SE4400)

Optical Resolution: 640 x 480 V pixels (gray scale)

Roll: 360°

Pitch Angle: ± 60° from normal

Slew Tolerance: ± 50° from normal

Ambient Light: Total darkness to 9,000 ft. candles/96,900 lux

Range on 100% UPCA: 16 in./40 cm

Aiming Element (VLD): 650 nm ± 5 nm

Illumination Element (LED): 635 nm ± 20 nm

Field of View: Horizontal: 32.2°; Vertical: 24.5°

Continued on back
**Peripherals and Accessories**

- **Communication and Charging Cables**: Serial and USB v1.1 charging cables, printer cables, vehicle charging cable, power/charging cable
- **Battery Chargers**: 4-slot battery charger (1X, 1.5X, 2X and 2.5X), universal battery charger (requires adapters for 1X, 1.5X, 2X and 2.5X capacity batteries)
- **Vertical-specific attachments**: Snap-on magnetic stripe reader, payment snap-on (Debit and Credit), rigid case
- **Electrical Safety**: Certified to UL / cUL 60950-1, IEC / EN60950-1

**EMI/RFI**

- **USA**: FCC Part 15; Canada: ICES 003 Class B; Europe: EN55022 Class B, EN 55024, EN60601-1-2; Australia: AS/NZS CISPR 22

For countries outside USA, Canada, European Economic Area, Japan or Australia consult your local Motorola representative

**Warranty**

The MC75 is warranted against defects in workmanship and materials for a period of 12 months from date of shipment, provided that the product remains unmodified and is operated under normal and proper conditions.