MC75

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 re-defines 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.

3G WWAN: HSDPA and CDMA-EVDO Rev A broadband connectivity over the cellular network
High performance wireless broadband voice and data anywhere in the world

- Connection to most carriers in the world with one platform
- Best in class cellular broadband throughput with up to 3 Mbps download
- Integrated voice and data services: allows workers to conduct a phone call while maintaining a data connection (where supported by carrier)
- Optimum operating cost and future proofed device

WLAN: 802.11a/b/g tri-mode radio; comprehensive VoIP support
Cost-effective voice and data connectivity in the office and hot spots

An industry first: multi-mode data capture via a bar code scanner plus a color camera
Ability to capture high quality pictures, documents and signatures as well as 1D and 2D barcodes in a single device improves workforce automation, increases productivity and reduces data errors

2 megapixel auto-focus flash-enabled color camera designed to meet the needs of enterprise class applications

- Autofocus provides superior image quality and provides greater application flexibility — including document capture
- User controllable flash enables workers to activate or de-activate the flash as needed
- In bar code reading mode, the screen reticule provides an aiming aid to ensure accurate first-time capture of bar codes
- Preserves application investment: Bar code scanning applications that utilize the laser scanner or imager on other Motorola mobile computers require little if any changes, reducing application development costs and enabling rapid deployment

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 headset, handset 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 GSM/HSDPA cellular network supports all three services simultaneously. 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:	Transflective 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
IrDA:	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)
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 (MS-CHAP v2), 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, v 2.0; on-board chip antenna

Data Capture Specifications	
Options:	Four configurations available: 1D laser scanner; 2D imager; 1D 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
Skew 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° ± 3° default 35° ± 3° reduced

2D Imager Engine (SE4400)	
Optical Resolution:	640 H x 480 V pixels (gray scale)
Roll:	360°
Pitch Angle:	± 60° from normal
Skew 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°

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WPAN: Bluetooth® v2.0
Wireless connectivity to modems, printers, headsets and more; v2.0 provides additional throughput (up to 2.1 Mbps), improved security and additional profiles for expanded connectivity to more device types

SiRFstarIII GSC3ef/ LP GPS chipset
Assisted and autonomous GPS support for robust location-based applications; SUPL 1.0 compliant; high performance, power-efficient processor capable of acquiring and maintaining a signal lock in areas where signals are typically weak, expanding the coverage area for GPS applications; faster time to first fix (TTFF); flexibility to operate in either standalone or assisted GPS (aGPS) mode (carrier dependent) for faster and more accurate positioning — especially in challenging areas

IEEE 1725 compliance for the entire MC75 system — including all models, all batteries and all power-related accessories (such as cradles and charging cables)
Mitigates battery system failure, bringing a new level of reliability and quality to the entire MC75 system

128MB RAM/256MB Flash
Provides memory space required to enable robust performance for database applications

User accessible microSD card slot
Provides additional memory and expandable functionality

High quality speaker, microphone and receiver
Superior voice quality and performance

Multiple voice modes: handset, headset and speakerphone
Flexibility to use the right mode at the right time

3.5 inch color high definition VGA display (640 x 480)
Easy to view in any lighting; supports display of high resolution images including video and maps

MC75
Worldwide Enterprise Digital Assistant (EDA)

Backwards compatible with MC70 accessories
Provides investment protection for existing investments

Mobility Platform Architecture (MPA) 1.5
Enables easy and cost-effective porting of applications from other Motorola mobile computers

Multiple keyboard options: numeric, QWERTY, QWERTZ and AZERTY
Flexibility to meet diverse user and application needs

Internal WWAN diversity antenna
Better signal reception, more dependable connection

Comprehensive accessory suite
The MC75 re-uses and expands the comprehensive MC70 accessories offering

IrDA
Wireless connectivity to legacy printers and other business equipment

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 CISPRA 22

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

*For a complete list of MC75 Peripherals and Accessories, please visit www.motorola.com/mc75

Regulatory

Electrical Safety:	Certified to UL / cUL 60950-1, IEC / EN60950-1
Environmental:	RoHS-compliant
WLAN and Bluetooth:	**USA:** FCC Part 15.247, 15.407 **Canada:** RSS-210 **EU:** EN 300 328, EN 301 893 **Japan:** ARIB STD-T33, ARIB STD-T66, ARIB STD-T71 **Australia:** AS/NZS 4268
Quad Band GSM/ EDGE, plus Tri-band HSDPA:	**Global:** 3GPP TS 51.010, 3GPP TS 34.121, 3GPP TS 34.123 GCF approved module **USA:** FCC Part 22, Part 24 **Canada:** RSS-132, RSS-133 **EU:** EN301 511, EN301 908 **Australia:** AS/ACIF S 024, AS TS 001
CDMA-EVDO Rev. A:	Verizon/Sprint/AllTel/Bell Mobility/Telus For latest information, contact your local Motorola representative
RF Exposure:	**USA:** FCC Part 2, FCC OET Bulletin 65 Supplement C **Canada:** RSS-102 **EU:** EN 50360 **Australia:** Radiocommunications Standard 2003
EMI/RFI:	**North America:** FCC Part 15, Class B **Canada:** ICES 003 Class B **EU:** EN55022 Class B, EN 301 489-1, EN 301 489-7, EN 301 489-17, EN 301 489-19, EN 301 489-24, EN 60601-1-2 **Australia:** AS/NZS CISPRA-22
Laser Safety:	IEC Class2/FDA Class II in accordance with IEC60825-1/EN60825-1

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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.

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