MC75A0-HC

Rugged disinfectant-ready Enterprise Digital Assistant (EDA) for next generation healthcare mobility

Improve patient care and safety with the next evolution in EDA power

The MC75A0-HC takes its place as Motorola's premier rugged EDA for healthcare, offering all the features and functionality required to take healthcare quality and patient safety to the next level in your institution.

With this easy-to-use and easy-to-carry device, your healthcare workers can access patient information, perform a triple check to verify the right medication is about to be administered to the right patient, monitor patient vital signs, place pharmacy and lab orders, access test results and more — all in just seconds, anywhere inside the healthcare facility.

Add government-grade security for HIPAA compliance, a rugged design to endure daily use inside the hospital, a disinfectant-ready housing designed to withstand regular exposure to the harsh cleaning agents required to prevent the spread of germs and powerful tools for centralized management of all your mobile devices — including attached device accessories — and you have maximum value in a minimum footprint, all at the right price.

Streamline and error-proof your hospital applications with MAX *Data Capture*

With the MC75A0-HC in hand, your staff can electronically capture and transmit virtually any type of data from patient bedside right to your business systems. Our revolutionary scan engine delivers unparalleled performance on every 1D and 2D bar code, and is optimized for the read ranges and bar code densities common in healthcare — including those on small vials and test tubes. Omnidirectional scanning provides true point and shoot scanning simplicity — no need to align the bar code in the field of view. First-time, every time scanning of even damaged and poor quality bar codes enhances user confidence and data capture speed. In addition, the integrated 3.2 megapixel autofocus color flash-enabled camera enables the easy capture of high-resolution photographs, video footage and documents — complete with legible fine print.

The power to support all of your point-of-care applications

With the MC75A0-HC, your clinical staff can count on consistent desktop-like performance, regardless of whether your applications incorporate high resolution video, documents and images or large databases that must be resident on the device. The MC75A0-HC offers a robust processing platform, from operating system to memory architecture, including Microsoft Windows Mobile 6.5; a PXA320 processor with 806 MHz of blazing speed; and 256 MB RAM/1GB Flash with a user accessible microSD slot to accommodate up to 32GB of additional storage. And the ability to automatically switch between portrait and landscape display modes with a flick of the wrist provides additional real-estate and easier viewing for more complex applications.

A rugged design built for life in the hospital

Motorola MAX *Rugged* provides Motorola's signature rugged specifications, ensuring reliable performance despite drops, spills, wipedowns and disinfecting. With MIL-STD 810G — the latest military standards — and IEC specifications for drop, tumble and sealing, the device withstands 5 ft./1.52 m drops, 1,000 consecutive 1.6 ft./0.5 m tumbles and exposure to dust, water and more. The result is a dramatic reduction in repair requirements and downtime, providing a strong return on asset (ROA).

In addition, the ability to disinfect the MC75A0-HC frequently throughout the day helps prevent the spread of germs among patients and caregivers. The special housing can be safely sanitized with many common cleaning agents, without damaging the plastics or the sensitive electronic components.

Enable voice communications with different device types on different networks for superior collaboration

Inside the hospital, different types of workers use different types of devices. Administrators may carry Motorola's TEAM VoWLAN phones. Physicians may carry Motorola's small pocketable EDA, the ES400. Nurses and lab technicians may carry the MC75A0-HC for point-of-care applications as well as mobile voice. Campus security as well as custodial and patient transport staff may carry two-way radios. And biomedical engineers and materials management personnel may carry the MC75A or MC55.

Typically, these devices cannot 'speak' to each other, resulting in 'islands of voice'. But Motorola's Integrated Voice Solutions provide instant push-to-talk communications between these devices. And in the critical care setting of a hospital, the powerful and highly cost-effective one-to-one and one-to-many voice communications across workgroups ensures the lightning fast response times that save lives and improve the patient experience.

Advanced power management for full shift operation

In addition to the most powerful batteries in its class, enterprise-class accelerometer technology injects the MC75A0-HC with the intelligence to save power whenever the device is not in use. For example, the device can automatically revert to sleep mode if movement is not detected in the period of time you specify, or if the display is placed face down on a surface. In addition, Motorola-unique wireless LAN (WLAN) features also reduce processing requirements by filtering out unnecessary system traffic, conserving power for application access.

Maximum connectivity options

Simplify life for your clinical staff and your IT department with comprehensive wireless connectivity inside the facility. Support for 802.11a/b/g enables easy integration with virtually any wireless LAN — as well as the flexibility to segment voice traffic to ensure quality of service for VoWLAN communications. With the latest Bluetooth technology, clinical staff can connect wirelessly to a wide range of Bluetooth-enabled peripherals, from headsets and printers to medical equipment. And support for IrDA enables wireless communications with a wide range of medical equipment, such as infusion pumps.

Easy HIPAA compliance with government-grade security

The Motorola MAX *Secure* keeps your data safe with the most advanced set of security features available in this product class. Native FIPS 140-2 Level 1 certification and support for the most advanced encryption and authentication algorithms as well as Virtual Private Networks (VPNs) provide the compliance required for government-level applications, easily meeting HIPAA regulations. And Motorola's deep knowledge of wireless infrastructure enables the integration of FIPS and other security requirements without negatively impacting WLAN performance.

Get your applications up and running fast

In addition to the right set of features for your users and applications, the MC75A0-HC also reduces IT time and cost by enabling rapid and cost-efficient application migration and development. The industry standard platform enables easy integration into your existing technology environment. Since all Motorola mobile computers share this common platform, existing applications developed for other Motorola mobile computers can be ported to the MC75A0-HC with minimal effort. If you are deploying new applications, our robust award winning partner channel offers well-tested best-in-class healthcare applications. And another Motorola tool, PocketBrowser, makes it easy for your own resources to develop applications in-house. This tool provides a familiar and easy-to-use environment that enables the easy incorporation of the wide range of advanced data capture capabilities available in the MC75A0-HC — from bar code scanning to document and signature capture.

Powerful centralized management of the MC75A0-HC — and all your other mobile devices and peripherals

A Motorola-unique toolset provides unparalleled management of your mobile devices. Motorola Mobility Services Platform (MSP) allows your IT department to remotely stage, provision, monitor and troubleshoot tens of thousands of devices in locations all around the world, all from a central location. The result is a radical reduction of one of the largest costs associated with mobility — day-to-day management. Device-level intrusion protection solutions allow the addition of extra layers of security to protect data that is resident on the device and in transit to and from the MC75A0-HC and

your network. And AppCenter allows you to easily define which device features and software applications users can access, preventing unauthorized device usage that could reduce productivity.

The Motorola advantage: world class support

No matter what services you need, we have you covered. If you are implementing your first mobility solution, we can provide assistance at every stage — from planning through design and deployment. If you are adding new healthcare applications, we can help you identify whether your present wireless LAN can handle the increased load — as well as any other gaps that need to be addressed

to ensure smooth deployment. And since even the most rugged devices require a support plan, our Service from the Start with Comprehensive Coverage will keep your devices up and running at peak performance, providing the peace of mind you need in your critical care environment. This unique all-inclusive service covering normal wear and tear as well as internal and external components damaged through accidental breakage, all at no additional charge, significantly reduces your unforeseen repair expenses. And options such as Commissioning Service and Express Shipping further minimize downtime in the unlikely event a repair is required.

For more information on how the MC75A0-HC can improve patient safety and worker efficiency in your healthcare organization, please visit us on the Web at www.motorola.com/MC75A0hc or access our global contact directory at www.motorola.com/enterprisemobility/contactus

Motorola's MC75A0-HC:
The right features...the right functionality...maximum value.

Maximum power

Powerful microprocessor designed for mobility: PXA320 @ 806 MHz
Desktop-like multimedia performance optimized for longer shift life

Microsoft's latest operating system: Windows® Mobile® 6.5
Increased interoperability with existing enterprise infrastructure; enhanced security features; more flexible development platform; improved mobile messaging collaboration

256MB RAM/1GB Flash
Provides memory space required to enable robust performance for database applications

User accessible microSD card slot
Provides additional memory and expandable functionality up to 32GB

Maximum rugged design

Motorola MAX *Rugged*: Industry-leading drop, tumble and sealing specifications with a disinfectant-ready housing
Lightweight yet rugged; built for year-round use in nearly any environment; can be sanitized with common medical disinfectants to help prevent the spread of germs and disease

Maximum wireless performance

WLAN: 802.11a/b/g tri-mode radio; comprehensive VoIP support
Cost-effective voice and data connectivity in the hospital, nursing home, clinic and beyond; 802.11a enables segmentation of voice traffic to ensure voice quality

WPAN: Bluetooth® v2.1 with EDR[1]
Wireless connectivity to modems, printers, headsets and more; additional profiles for expanded connectivity to more device types with either Microsoft or Stonestreet stacks; v2.1 simplifies pairing, improves security and reduces power consumption

IrDA
Wireless connectivity to legacy medical and other business equipment

Maximum manageability

Comprehensive centralized device management
Compatibility with Motorola Mobility Services Platform (MSP) and Motorola Mobility Suite provides superior centralized and remote management of all devices anywhere in the world — from a single console

Maximum security

Motorola MAX *Secure*
FIPS 140-2 certification and support for the most advanced encryption and authentication algorithms as well as Virtual Private Networks (VPNs) enables compliance with the most stringent industry security regulations, including sensitive government applications; MSP enables remote wipe and lock in the event a device is lost or stolen

Maximum flexibility

Motorola MAX *MPA*: Mobility Platform Architecture 2.0
Provides the latest best-in-class technology architecture; preserves existing application investments by enabling easy and cost-effective porting of applications from other Motorola mobile computers

Motorola MAX *Data Capture*: 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 bar codes in a single device improves patient safety and reduces data errors; optimized for the read ranges and high density bar codes typical in healthcare

Motorola MAX *Sensor*
Enterprise-class Interactive Sensor Technology (IST) enables leading edge motion-based applications, including dynamic screen orientation, power management and free-fall event logging

Multiple voice modes: handset, headset and speakerphone
Flexibility to use the right mode at the right time; high quality speaker, microphone and receiver provide superior voice quality and performance

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

Backwards compatible with MC70 and MC75 accessories
Provides investment protection for existing investments

Comprehensive accessory suite
Add-on functionality expands solution reach, protects investment and maximizes TCO — rich accessory ecosystem offers hands-free scanning, RFID, the ability to read insurance, patient identification, driver's license, debit and credit cards and more

1   The MC75 offers the option of either the standard Microsoft Bluetooth stack or the platform based Stonestreet One stack, for enhanced application portability.

MC75A0-HC 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):	WLAN standard 1.5X battery: 14 oz./398 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 with SDHC Support (up to 32GB)
Network Connections:	Ethernet (via cradle); full-speed USB, host or client
Notification:	Vibrator and LED
Keypad Options:	QWERTY (AZERTY; QWERTZ; Numeric and DSD available through special field request)
Audio:	VoWLAN; TEAM Express compliant; support for wired and wireless (Bluetooth) headsets; headset, handset and speaker phone modes

Performance Characteristics

CPU:	PXA320 @ 806 MHz processor
Operating System:	Microsoft® Windows Mobile® 6.5 Classic
Memory:	256MB RAM; 1GB 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 158° F/-40° C to 70° C (without battery)
Humidity:	95% non-condensing
Drop Specification:	Multiple 5 ft. drops to concrete at room temperature; Multiple 4 ft. drops to concrete across the operating temperature range; meets and exceeds applicable MIL-STD 810G specifications
Tumble Specification:	1,000 1.6 ft./0.5 m tumbles (2,000 drops); per applicable IEC tumble specifications
Sealing:	IP54 per applicable IEC sealing specifications
IrDA:	Infra-red port for connection to printers and other devices
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

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 (MS-CHAP v2), TTLS (CHAP), TTLS-MD5, TTLS-PAP, PEAP-TLS, PEAP (MS-CHAP v2), AES, LEAP, CCXv4 certified; FIPS 140-2 certified
Spreading Technique:	Direct Sequence Spread Spectrum (DSSS) and Orthogonal Frequency Division Multiplexing (OFDM)
Antenna:	Internal for LAN
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, v2.1 with Enhanced Data Rate (EDR) integrated antenna

Data Capture Options

2D imager; 3.2 MP auto-focus flash-enabled digital color camera; captures 1D and 2D bar codes, color photographs and video, signatures and documents

Color Camera

Resolution:	3.2 megapixel
Illumination:	User controllable flash
Lens:	Auto focus

2D Imager Engine (SE4500-DL)

Focus Distance:	From center of exit window: 5 in./13 cm
Sensor Resolution:	752 x 480 pixels
Field of View:	Horizontal: 33°; Vertical: 25°
Skew Tolerance:	±60°
Pitch Tolerance:	±60°
Roll Tolerance:	360°
Ambient Light Immunity:	9,000 ft. candles/96,900 lux
Aiming LED (VLD):	655 ± 10 nm Laser
Illumination Element (LED):	625 ± 5 nm LEDs (2x)

Motorola Interactive Sensor Technology

Motion-sensor: 3-axis accelerometer that enables motion-sensing applications for dynamic screen orientation, power management and free-fall detect

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 and 2.5X), universal battery charger (requires adapters for 1X, 1.5X and 2.5X capacity batteries)
Vertical-specific	Snap-on Magnetic Stripe Reader (MSR); Mobile Payment Module (Debit and Credit); Mobile Payment Module with Chip and PIN (Debit and Credit)

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 MC75A0-HC peripherals and accessories, please visit www.motorola.com/mc75a or www.motorola.com/mc75a0hc

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
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 301 489-3 EN 301 489-7, EN 301 489-17, 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 MC75A0-HC 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.

The MC75A0-HC is a true global product that is supported in all industrial countries. Please visit www.motorola.com for a complete list of supported countries.

Cleaning Instructions

Approved Cleanser Active Ingredients:	100% of the active ingredients in any cleaner must consist of one or some combination of the following: isopropyl alcohol; bleach/sodium hypochlorite; hydrogen peroxide; mild dish soap
Harmful Ingredients:	The following chemicals are known to damage the plastics on the MC75A0-HC and should not come in contact with the device: ammonia solutions, compounds of amines or ammonia; acetone; ketones; ethers; aromatic and chlorinated hydrocarbons; acqueous or alcoholic alkaline solutions; ethanolamine; toluene; trichloroethylene; benzene; carbolic acid; TB-lysoform
Cleaning Instructions:	Do not apply liquid directly to the MC75A0-HC. Dampen a soft cloth or use pre-moistened wipes. Do not wrap the device in the cloth or wipe, but gently wipe the unit. Be careful not to let liquid pool around the display window or other places. Allow the unit to air dry before use.
Special Cleaning Notes:	Many vinyl gloves contain phthalate additives which are often not recommended for medical use and are known to be harmful to the housing of the MC75A0-HC. The MC75A0-HC should not be handled while wearing vinyl gloves containing phthalates, or before hands are washed to remove contaminant residue after gloves are removed. If products containing any of the harmful ingredients listed above are used prior to handling the MC75A0-HC, such as hand sanitizers that contain ethanolamine, hands must be completely dry before handling the MC75A0-HC to prevent damage to the plastics.

MAX *Rugged*   **MAX** *Secure*   **MAX** *Sensor*   101100 **MAX** *Data Capture*   MPA **MAX** *MPA*

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