

The first rugged enterprise digital assistant

The flagship MC70 Enterprise Digital Assistant (EDA) is a rugged handheld mobile device that incorporates a mobile phone, PDA, computer, scanner and imager in a single unit designed for the rigors of all-day, everyday usage. This compact, lightweight device combines multi-mode wireless networking, voice and data communications, and advanced data capture in an enterprise productivity tool that can support nearly any application in any environment. Superior voice functionality includes outstanding acoustic performance and voice quality, handset, headset and speakerphone modes, as well as push to talk capability (if supported by your WLAN application or WWAN carrier). Your mobile workers will have everything they need to increase productivity and efficiency inside and outside your four walls — from field workers reading meters and repairing equipment to drivers delivering packages, hospital workers checking lab results and medication orders, and more.

Rugged construction delivers a low TCO

The industry leading innovative mechanical design and technology platform offer superior construction and expandability, delivering outstanding investment protection and a low TCO. Engineered to withstand rigorous use in extreme environments and working conditions, the MC70, including the internal WLAN and external WWAN antennas, can endure multiple drops, a wide range of temperatures, moisture, dust and more and still deliver reliable performance.

Built-in WWAN/WLAN/WPAN

The MC70 offers robust and cost-effective anytime, anywhere voice and data connectivity. For workers outside of your facility, support for eGPRS (EDGE) networks delivers global coverage, fast wireless data speeds that enable rich applications, and enterprise level security. Inside your facility, the MC70 connects to your wireless LAN for voice and data communications, providing better control over wireless WAN usage — and costs. And wireless PAN functionality, via Bluetooth, further increases employee productivity through wireless printing and more.

Reduce the cost and complexity of mobility

The versatile, effective MC70 is a smart investment, providing a cell phone, PDA and more - all in a single rugged device. Capital expenditures and IT support costs are significantly reduced. Superior manageability enables you to easily and remotely provision, track and support all your MC70 devices from one central location through Symbol's Mobility Services Platform. A full suite of accessories provides maximum application flexibility. And comprehensive maintenance and support services — required for even the most rugged products — ensure maximum uptime and value for your investment.

For more information on the MC70, contact us at + 852 2836 3162, or visit us on the web at www.manicon.com



FEATURES

BENEFITS

Symbol's industry-leading double impact testing (drop and tumble), IP54 sealing, integrated antennas

Lightweight yet rugged; built for year-round use in nearly any environment

Intel's latest processor, designed for mobility: XScale PXA270 @ 624 MHz

Desktop-like multimedia performance with lower power requirements

Microsoft's latest operating system: Windows Mobile 5.0 Premium or Phone Edition

Integrated multimedia, persistent memory and FIPS-140-2 security certification

WWAN: eGPRS/GSM compatibility

Voice and high-speed wireless data

WLAN: 802.11a/b/g tri-mode radio; comprehensive VoIP support

Cost-effective voice and data connectivity in the office

WPAN: Bluetooth v1.2, Class II

Wireless modem, printing synchronization, and more

High quality speakerphone, microphone and transducer

Superior voice quality and performance

On-board advanced data capture: 1D and 2D bar code scanning from 4 in. to 40 in.; image capture

Automate and error proof data collection and increase productivity

3.5 in. QVGA color screen

Easy to view in any lighting

Multiple keyboard options: QWERTY or numeric

Flexibility to meet diverse user and application needs

Support for standard and extended cards

Provides additional memory and expandable functionality

Multiple battery options: standard and extended

Ample power for full shifts in nearly any environment

MC70 Series Specifications

Physical Characteristics

Dimensions:	6 in. L x 3 in. W x 1.5 in H 15.3 cm L x 7.6 cm W x 3.7 cm H (all configurations)
Weight (inc. standard battery):	LAN/PAN configurations - 11.2 oz./314 g WAN/LAN/PAN configurations - 12 oz./336 g
Display:	Transflective color 3.5" QVGA with backlight, TFT-LCD, 65K colors, 240 W x 320 L (QVGA size)
Touch Panel:	Glass analog resistive touch
Backlight:	LED backlight
Main Battery:	Rechargeable Lithium Ion 3.7V, 1900 mAh Smart Battery
Extended Cap. Battery:	Optional 3.7V, 3800 mAh Smart Battery
Backup Battery:	Ni-MH battery (rechargeable) 20mAh 1.2V, 2 cells (not user-accessible)
Expansion Slot:	User accessible SDIO slot (with secure cover); accommodates extended cards (with cover removed); NOTE: terminals with extended cards cannot be accommodated in the charging cradle and will not be sealed
Network Connections:	Ethernet (via cradle); high-speed USB, host or client
Notification:	Vibrator and LED
Keypad Options:	26 Numeric key; 44 QWERTY key
Audio:	Speaker, receiver, microphone, headset jack, software support for full duplex record and playback (stereo)

Performance Characteristics

CPU:	Intel® XScale™ 624 Mhz processor
Operating System:	Microsoft® Windows™ Mobile 5.0 Premium, Microsoft® Windows™ Mobile 5.0 Premium Phone Edition
Memory:	64MB RAM/128MB ROM
Interface/Communications:	RS-232, USB 1.1

User Environment

Operating Temperature:	14°F to 155° F/-10°C to 68° C
Storage Temperature:	-40° F to 140° F/-40° C to 60° C
Humidity:	95% non-condensing
Drop Specification:	4 ft. drop to concrete, 6 drops per 6 sides over operating temperature range; 5 ft. drop to concrete, 2 drops per 6 sides at ambient temperature 73° F/23° C
Tumble Specification:	1,000 1.6 ft./5 m tumbles (2,000 drops)
Electrostatic Discharge (ESD):	+/-15kV air discharge, +/-8kV direct discharge

Wireless WAN Data and Voice Communications

Wireless Wide Area (WWAN) radio:	eGPRS/GSM (850, 900, 1800 and 1900 MHz)
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Wireless LAN Data and Voice Communications

Wireless Local Area (WLAN) radio:	Tri-mode IEEE® 802.11a/b/g
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Data Rates Supported:	1, 2, 5.5, 6, 9, 11, 12, 18, 24, 36, 48 and 54 Mbps
Operating Channels:	Chan 8-169 (5040 – 5845 MHz) (4920 – 4980 MHz) Japan only Chan 1-13 (2412-2472 MHz) Chan 14 (2484 MHz) Japan only Actual operating 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 1.2
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Data Capture Specifications

Options:	1D linear, 2D imager
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Linear 1D Scanner (SE800HP)

Optical Resolution:	0.005 in. minimum element width
Roll:	+/- 30° from vertical
Pitch Angle:	+/- 65° from normal
Skew Tolerance:	+/- 60° from normal
Ambient Light:	Sunlight: 8,000 ft. candles (86,112Lux) Artificial Light: 450 ft. candles (4,844Lux)
Shock:	2,000 +/- 5% G
Scan Rate:	50 (+/-6) scans/sec (bidirectional)
Scan Angle:	46.5° (typical)
Laser Power:	1.0 mW nominal

2D Imager Engine (SE 4400) Specifications

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 (96,900Lux)
Shock:	2,000 +/- 5% G
Focal Distance from Front of Engine:	Near: 5 inches, Far: 9 inches
Aiming Element (VLD):	650 nm +/- 5 nm
Illumination Element (LED):	635 nm +/- 20 nm

Field of View: Horizontal - 32.2°, Vertical - 24.5°

Peripherals and Accessories

Cradles: Single-slot serial/USB with spare battery charging for standard and extended batteries, four-slot Ethernet cradle, vehicle cradle

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 and 2X), universal battery charger (requires adapters for 1X and 2X capacity batteries)

Vertical-specific attachments: Snap-on magnetic stripe reader, snap-on trigger handle, 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 Symbol representative

Regulatory

Electrical Safety: Certified to UL / cUL 60950-1, IEC / EN60950-1

WLAN and Bluetooth: USA: FCC Part 15.247, 15.407
 Canada: RSS-210
 EU: EN 300 328-1, EN 301 893
 Japan: ARIB STD-T33, ARIB STD-T66, ARIB STD-T71
 Australia: AS/NZS 4268

Quad Band eGPRS / GSM (850, 900, 1800 and 900 bands): Global: 3GPP TS 51.010, GCF approved module
 USA: FCC Part 22, Part 24
 Canada: RSS-132, RSS-133
 EU: EN301 511
 Australia: AS/ACIF S 018, AS TS 001

RF Exposure: USA: FCC Part 2, FCC OET Bulletin 65 Supplement C
 Canada: RSS-102
 EU: EN 50360
 Australia: AS/NZ 2772.1, ARPANSA

EMI/RFI: North America: FCC Part 15
 Canada: ICES 003 Class B
 EU: EN55022 Class B, EN 301 489-1, EN 301 489-7, EN 310 489-17, EN 60601-1-2
 Australia: AS/NZS CISPR 22

Laser Safety: IEC Class2/FDA Class II in accordance with IEC60825-1/EN60825-1

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Warranty

The Symbol MC70 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.



A full suite of accessories provides convenient charging of MC70 devices and batteries as well as customization for a variety of vertical applications, from trigger handles that increase user comfort to magnetic stripe readers that enable on-the-spot credit card processing, and more.



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