



## Symbol MC70 Data Sheet



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

<b>Dimensions:</b>	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)
<b>Weight (inc. standard battery):</b>	LAN/PAN configurations - 11.2 oz./314 g WAN/LAN/PAN configurations - 12 oz./336 g
<b>Display:</b>	Transflective color 3.5" QVGA with backlight, TFT-LCD, 65K colors, 240 W x 320 L (QVGA size)
<b>Touch Panel:</b>	Glass analog resistive touch
<b>Backlight:</b>	LED backlight
<b>Main Battery:</b>	Lithium Ion 3.7V, 1900 mAh Smart Battery
<b>Extended Cap. Battery:</b>	Optional 3.7V, 3800 mAh Smart Battery
<b>Backup Battery:</b>	Ni-MH battery (rechargeable) 20mAh 1.2V, 2 cells (not user-accessible)
<b>Expansion slot:</b>	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
<b>Network Connections:</b>	Ethernet (via cradle); full-speed USB, host or client
<b>Notification:</b>	Vibrator and LED
<b>Keypad Options:</b>	26 Numeric key; 44 QWERTY key
<b>Audio:</b>	Speaker, receiver, microphone, headset jack, software support for full duplex record and playback (stereo)
<b>Performance Characteristics</b>	
<b>CPU:</b>	Intel® XScale™ 624 Mhz processor
<b>Operating System:</b>	Microsoft® Windows™ Mobile 5.0 Premium, Microsoft® Windows™ Mobile 5.0 Premium Phone Edition

<b>Memory:</b>	64MB RAM/128MB ROM
<b>Interface/ Communications:</b>	RS-232, USB 1.1
<b>User Environment</b>	
<b>Operating Temperature:</b>	14°F to 122° F/-10°C to 50° C
<b>Storage Temperature:</b>	-40° F to 140° F/-40° C to 60° C
<b>Humidity:</b>	95% non-condensing
<b>Drop Specification:</b>	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
<b>Tumble Specification:</b>	1,000 1.6 ft./ .5 m tumbles (2,000 drops)
<b>Electrostatic Discharge (ESD):</b>	+/-15kV air discharge, +/-8kV direct discharge
<b>Wireless WAN Data and Voice Communications</b>	
<b>Wireless Wide Area (WWAN) radio:</b>	eGPRS/GSM (850, 900, 1800 and 1900 MHz)
<b>Wireless LAN Data and Voice Communications</b>	
<b>Wireless Local Area (WLAN) radio:</b>	Tri-mode IEEE® 802.11a/b/g
<b>Data Rates Supported:</b>	1, 2, 5.5, 6, 9, 11, 12, 18, 24, 36, 48 and 54 Mbps
<b>Operating Channels:</b>	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
<b>Security:</b>	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
<b>Spreading Technique:</b>	Direct Sequence Spread Spectrum (DSSS) and Orthogonal Frequency Division Multiplexing (OFDM)
<b>Antenna:</b>	Internal for LAN, External for WAN
<b>Voice Communication:</b>	Integrated Voice-over-IP ready (P2P, PBX, PTT), Wi-Fi™-certified, IEEE 802.11a/b/g direct sequence wireless LAN
<b>Wireless PAN Data and Voice Communications</b>	
<b>Bluetooth:</b>	Class II, v 1.2
<b>Data Capture Specifications</b>	
<b>Options:</b>	1D linear, 2D imager
<b>Linear 1D Scanner (SE800HP)</b>	
<b>Optical Resolution:</b>	0.005 in. minimum element width
<b>Roll:</b>	+/- 30° from vertical
<b>Pitch Angle:</b>	+/- 65° from normal
<b>Skew Tolerance:</b>	+/- 60° from normal
<b>Ambient Light:</b>	Sunlight: 8,000 ft. candles (86,112Lux)
<b>Artificial Light:</b>	450 ft. candles (4,844Lux)
<b>Shock:</b>	2,000 +/- 5% G
<b>Scan Rate:</b>	50 (+/-6) scans/sec (bidirectional)
<b>Scan Angle:</b>	46.5° (typical)
<b>Laser Power:</b>	1.0 mW nominal

<b>2D Imager Engine (SE 4400) Specifications:</b>	
<b>Optical Resolution (gray scale):</b>	640 H x 480 V pixels (gray scale)
<b>Roll:</b>	360°
<b>Pitch Angle:</b>	+/- 60° from normal
<b>Skew Tolerance:</b>	+/- 50° from normal
<b>Ambient Light:</b>	Total darkness to 9,000 ft. candles (96,900Lux)
<b>Shock:</b>	2,000 +/- 5% G
<b>Focal Distance from Front of Engine:</b>	Near: 5 inches, Far: 9 inches
<b>Aiming Element (VLD):</b>	650 nm +/- 5 nm
<b>Illumination Element (LED):</b>	635 nm +/- 20 nm
<b>Field of View:</b>	Horizontal - 32.2°, Vertical - 24.5°
<b>Peripherals and Accessories:</b>	
<b>Cradles:</b>	Single-slot serial/USB with spare battery charging for standard and extended batteries, four-slot Ethernet cradle, vehicle cradle
<b>Communication and Charging Cables:</b>	Serial and USB v1.1 charging cables, printer cables, vehicle charging cable, power/charging cable
<b>Battery Chargers:</b>	4-slot battery charger (1X and 2X), universal battery charger (requires adapters for 1X and 2X capacity batteries)
<b>Vertical-specific attachments:</b>	Snap-on magnetic stripe reader, snap-on trigger handle, rigid case
<b>Regulatory</b>	

<b>Electrical Safety:</b>	to UL / cUL 60950-1, IEC / EN60950-1
<b>WLAN and Bluetooth:</b>	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
<b>Quad Band eGPRS / GSM (850, 900, 1800 and 900 bands):</b>	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
<b>RF Exposure:</b>	USA: FCC Part 2, FCC OET Bulletin 65 Supplement C Canada: RSS-102 EU: EN 50360 Australia: AS/NZ 2772.1, ARPANSA
<b>EMI/RFI:</b>	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 A 22
<b>Laser Safety:</b>	IEC Class2/FDA Class II in accordance with IEC60825-1/EN60825-1
<b>Warranty</b>	
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.>	

### About Symbol Technologies

Symbol Technologies, Inc., The Enterprise Mobility Company™, is a recognized worldwide leader in enterprise mobility, delivering products and solutions that capture, move and manage information in real time to and from the point of business activity. Symbol enterprise mobility solutions integrate advanced data capture products, radio frequency identification technology, mobile computing platforms, wireless infrastructure, mobility software and world-class services programs. Symbol enterprise mobility products and solutions are proven to increase workforce productivity, reduce operating costs, drive operational efficiencies and realize competitive advantages for the world's leading companies.

