

MC50 Enterprise Digital Assistant



Redefine Mobility for Enterprise-Class Applications

The MC50 from Symbol Technologies is first in a class of mobile computers that combines an enhanced PDA-style form factor with optimal performance to operate enterprise-level applications. This small, lightweight mobile computer features advanced data capture options, flexible voice and data communication and easy wireless local area network (WLAN) synchronization.

Increase Productivity and Gain Access to Real-time Information

With data capture, voice telephony, smart battery, device level management, wireless and security options, on-the-go professionals are empowered to make rapid, informed decisions. This convenient mobile computer delivers enterprise-class functionality, including support for e-mail, phone, scheduling/calendar, signature capture, CRM, sales force automation and other enterprise applications. With the MC50 in hand, retail store managers, merchandisers and salespeople have the necessary tool to create and maintain a competitive advantage.

Deploy and Manage Mobility Systems More Effectively

The MC50 enables superior manageability and rapid integration into new or existing IT infrastructures. Its Microsoft® Windows Mobile™ software platform offers compatibility with Microsoft, Oracle®, Siebel®, SAP® and IBM® customer relationship management (CRM) software for easy, fast rollouts into any environment. Adding mobility management software allows you to quickly deploy and manage thousands of MC50 devices with instant visibility and control over all the mobile computers, wireless networks and applications from an intuitive, Web-based interface.

Enhanced Durability for Frequent, Extended Use

The MC50 is designed to be more durable than a consumer-grade PDA. Extra reliability is built into every aspect of the MC50 – from battery contacts to keypads to acoustics – to ensure it exceeds the performance demands of daily, high-volume usage. Managers, supervisors and sales professionals can feel more confident using the MC50 from anywhere at anytime, whether it is on the road, on the sales floor or at a customer site.

Symbol Enterprise Mobility Services

Symbol Enterprise Mobility Services ensure that your mobility solution works seamlessly and at maximum efficiency – from defining your business requirements through ongoing service and support.

Features	Benefits
Enterprise-level foundation	Combines mobile computing, data capture and wireless networking for a totally integrated solution
Durable design	Enhances product lifecycle with less downtime than consumer-grade devices
Deployment-ready systems	Designed to run – out of box – fast and easy
High-speed CPU performance	Operates enterprise-level applications
Diverse data capture options	Captures information accurately and quickly every time
Wireless networking based on the standard IEEE 802.11b (WLAN)	Enables real-time communications and decision-making with secure mobile transactions
Ready voice over IP (VoIP)	Designed to perform seamless voice communications via push-to-talk, peer-to-peer, PBX connectivity, 1-to-1 or 1-to-many
Mobility Services Platform (MSP)	Reduces TCO with accelerated rollout and ongoing visibility into mobile devices, networks and applications
Smart battery	Ensures maximum uptime
User-accessible SDIO slot with cover	Provides technology flexibility while improving acoustics
User-friendly keypad options	Offers flexible functionality and keypad design for efficient, productive data entry

MC50 Specification Highlights

Physical Characteristics	
Dimensions:	
NAV	1D: 4.77 in. H x 2.95 in. W x .94 in. L (12.1 cm H x 7.5 cm W x 2.4 cm L) 2D Imager: 4.77 in. H x 2.95 in. W x 1.13 in. L (12.1 cm H x 7.5 cm W x 2.9 cm L) CCD Camera: 4.77 in. H x 2.95 in. W x 1.11 in. L (12.1 cm H x 7.5 cm W x 2.8 cm L)
Qwerty:	1D: 5.35 in. H x 2.95 in. W x .94 in. L (13.6 cm H x 7.5 cm W x 2.4 cm L) 2D Imager: 5.35 in. H x 2.95 in. W x 1.13 in. L (13.6 cm H x 7.5 cm W x 2.9 cm L) CCD Camera: 5.35 in. H x 2.95 in. W x 1.11 in. L (13.6 cm H x 7.5 cm W x 2.8 cm L)
Weight (including standard battery):	NAV 1D: 6.42 oz/ 182 g QWERTY 1D: 6.77 oz/ 192 g
Display:	Transflective color 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, 1560 mAh
Extended Capacity Battery:	Optional 3.7V, 3600 mAh
Backup Battery:	Ni-MH battery (rechargeable) 15mAh 1.2V, 1 cell
Expansion slot:	User accessible SDIO slot (with secure cover)
Notification:	Vibrator and LED
Keypad Options:	NAV: 4 application keys and 5-way navigation key QWERTY: 37-key
Audio:	Speaker, receiver, microphone, headset jack Software support for full duplex record and playback (stereo)
Performance Characteristics	
CPU:	Intel® XScale™ 520 Mhz processor
Operating System:	Microsoft® Windows Mobile™ 2003 Second Edition
Memory:	64MB RAM/ 64MB ROM

Interface/ Communications:	RS-232, USB 1.1
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User Environment

Operating Temperature:	0° to 50° C (32° to 155° F)
Storage Temperature:	-25° to 60° C (-13° to 140° F)
Humidity:	95% non-condensing
Drop Specification:	3' drop to tile over concrete, 1 drop per side at 21° C (70° F)
Electrostatic Discharge (ESD):	+/-8kV air discharge, +/-8kV direct discharge

Wireless Data and Voice Communications

Wireless Local Area (WLAN):	IEEE® 802.11b
Data Rate:	1/2/5.5/11 Mbps
Frequency Range:	Country dependent; typically 2.4 to 2.5 GHz
Output Power:	14.5dBm (typical)
Security:	WEP, TKIP, LEAP, PEAP, EAP-TLS, WPA (pre-shared key)
Spreading Technique:	Direct sequence
Antenna:	Internal
Voice Communication:	Integrated Voice-over-IP ready (P2P, PBX, PTT) Wi-Fi™-certified, IEEE 802.11b direct sequence wireless LAN

Data Capture Specifications

Options:	2D imager, linear CMOS or CCD camera
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2D Imager Engine (SE 4400) Specifications:

Field of View:	Horizontal: 32.2°, Vertical: 24.5°
Optical Resolution (gray scale):	640 (H) x 480 (V) pixels
Roll:	360°
Pitch Angle:	+/- 60° from normal
Skew Tolerance:	+/- 50° from normal
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
Minimum Print Contrast:	Minimum 25% absolute dark/light reflectance measured at 650 nm
Symbologies:	1D Symbology: UPC/EAN, Code 128, UCC.EAN128, RSS, Code 39, Code 93, I 2 of 5, Discrete 2 of 5, Codabar, MSI 2D Symbology: MaxiCode, PDF417, DataMatrix, QRCode Postal Codes: U.S. Postnet, U.S Planet, UK Postal, Australian Postal, Japan Postal
Image File Formats:	BMP, TIFF, JPEG

Linear CMOS (CSE600):

View Angle:	40° +/- 2°
Pitch Angle:	+/- 50° from normal
Roll:	+/- 20° from vertical
Skew Tolerance:	+/- 30° from normal
Minimum Print Contrast:	35% MRD measured at 675 nm
Supported Symbologies:	UPC /EAN, Code 39, I 2 of 5, Discrete 2 of 5, Code 128, UCC.EAN128, Code 93, Codabar

CCD Camera:

Image Sensor:	1/4 in. type 1 1 mega-pixel CCD
Maximum Frame Rate:	7.5 fps
Minimum Subject Illumination:	2 lux (at 5 fps)
Number of Output Pixels:	1144 (H) x 880 (V)

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Image Output Interface:	UYVY 8-bit
Lens F-Number:	f2.8
Scan Triggers:	Left and right trigger buttons
Peripherals and AccessoriesCradles:	Single-slot USB with spare battery (1X and 2X) charging, four-slot Ethernet or USB
Communication and Charging Cables:	USB v1.1, 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, universal cable cup adapter attachable cables

Peripherals and Accessories:

Cradles:	Single-slot USB with spare battery (1X and 2X) charging, four-slot Ethernet or USB
Communication and Charging Cables:	USB v1.1, 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, universal cable cup adapter attachable cables

Regulatory

Electrical Safety:	UL60950 (UL marking), CSA C22.2 No. 60950 (c-UL marking), EN60950/IEC 950
EMI/RFI:	EU/International EN 301 489-1, -17 EN61000-4-2: 1995, ESD $\pm 8\text{kV}$ air/ $\pm 4\text{kV}$ contact EN61000-4-3: 1997, Radiated Immunity 3V/m EN61000-4-4: 1995, EFT $\pm 0.5\text{kV}$ EN61000-4-5: 1995, Surge $\pm 0.5\text{kV}$ EN61000-4-6: 1
Laser Safety:	IEC Class2/FDA Class II in accordance with IEC60825-1/EN60825-1