

Mobile Computer MC93^{ex}-NI

Datasheet



BARTEC has developed in close cooperation with Zebra Technologies the next evolution of the world's best selling and most trusted enterprise mobile computer – the MC93^{ex}-NI for worldwide use in hazardous areas.

Users get simplicity with Android, ultimate processing power, a larger touch display, and much more. New data capture capabilities include an extraordinary scan range of up to 21.4 m.

The new battery runs nearly twice as long as the MC9200^{ex} series on a single charge. The MC93^{ex}-NI is the most rugged mobile computer ever created, ready to outlast virtually every device in its class in any environment. The Mobility DNA solution from ZEBRA complements the MC93^{ex}-NI with a comprehensive suite of software solutions for easy setup, tools to increase productivity, business and management solutions and kits for software development of your own solutions.

You get reliable, first-class WLAN connectivity by the use of 2x2 MU-MIMO technology in combination with the Mobility DNA Worry Free WiFi solution.

The MC93^{ex}-NI is approved for ATEX and IECEx Zone 2/22 and UL Class I, II, III Div.2. Further local certifications are possible on customer request.

Explosion protection

Marking ATEX	Ex II 3G Ex ic op is IIC T6 Gc Ex II 3D Ex ic op is IIIB T80 °C Dc IP 65
Certification	EPS 19 ATEX 1 239 X
Marking IECEx	Ex ic op is IIC T6 Gc Ex ic op is IIIB T80 °C Dc IP 65
Certification	IECEx EPS 19.0108X
Marking NEC	Class I, Div. 2, Groups A, B, C, D; Class II, Div. 2, Groups F, G; Class III; T6
Certification	UL E321557
Further Certifications	CE, FCC/IC
	Other approvals and certificates, see bartec.com

User environment

Operating temperature	-20 °C to +50 °C (-4 °F to 122 °F)
Charging temperature	0 °C to +45 °C (32°F to 113°F)
Storage temperature (without battery)	-40 °C to +70 °C (-40 °F to 158 °F)
Relative humidity	5 % ~ 95 % (non-condensing)
Protection class (IEC 60529)	IP 65
Drop Specification	3.1 m (122 inch) drops at room temperature per MIL-STD-810G, 2.4 m (94,5 inch) drops to concrete across temperature per MIL-STD-810G
Tumble Specification	6.000 tumbles from a height of 1 m (39.4 inch); meets and exceeds IEC tumble specification

Technical data

Processor	Qualcomm Snapdragon 660 octa-core 2.2 GHz
Memory (RAM)	4 GB
Mass storage	32 GB Flash pSLC
Storage expansion	User accessible MicroSD up to 32 GB SDHC and up to 256 GB SDXC
Operating system	Android 11 with Mobility Extensions Hardware supports future Android versions (up to Android 14) Configuration: Zebra's "Restricted Mode" can be set via StageNow, for control over Google Mobile Services (GMS) and other services.
Size (W x L x H)	88 mm x 240mm x 189 mm (3.5 inch x 9.4 inch x 7.4 inch)
Weight (with battery)	765 g (1.69 lb)
Display	4.3" IPS Display with LED Backlight
Resolution	800 x 400 pixel, WVGA
Front glass	Corning Gorilla glass
Touch function	Capacitive Touch
Usability	With stylus, finger or glove depending on the mode selected
Battery	Lithium-ion battery 3.6 V/7000 mAh (25.2 Wh); Fast charging (charge from 0% to 90% in less than 3.5 hours with appropriate accessories); Hot swap battery backup with temporary session persistence (only in non Ex area)
Notification	Audible tone; Multi-color LED bar (between keyboard & display), haptic feedback

Voice & Audio	Speaker, Microphone, PTT Voice (Internal Speaker and Bluetooth Wireless Headset Support).
Keypad	Backlit, Field replaceable keypads: – 53 Key alpha-numeric STD – 53 Key Terminal Emulation (VT) – 43 Key function numeric – 29 Key Numeric/Calculation
Barcode capture	– SE4770-SR: 1D/2D standard range omnidirectional imager; Reading range up to 91.6 cm (35.8 inch) depending on type, size and quality of the barcode – SE4850-ER: Extended range 1D/2D imaging engine; Reading range up to 21.4 m (842.5 inch) depending on type, size and quality of the barcode – supported symbologies/barcodes: see table
NFC	Tap to Pair, ISO 14443 Type A and B, Felica and ISO 15693 cards, P2P mode and Card Emulation via Host (HCE) support
WLAN-WiFi	IEEE 802.11 a/b/g/n/ac/d/h/i/r/k/v/w; Wi-Fi certified; IPv4, IPv6, 2x2 MU-MIMO Data Rates: 5 GHz: 802.11a/n/ac — up to 866.7 Mbps 2.4 GHz: 802.11b/g/n — up to 300 Mbps Operating Channels: Channel 1-13 (2412-2472 MHz); Channel 36-165 (5180-5825 MHz) Channel Bandwidth: 20, 40, 80 MHz Actual operating channels/ frequencies and bandwidths depend on regulatory rules and certification agency Security and Encryption: WPA3-Personal (SAE); WPA3-Enterprise; Enhanced Open - Based on opportunistic wireless encryption (OWE)*; WEP (40 or 104 bit); WPA/WPA2 Personal (TKIP and AES); WPA/ WPA2 Enterprise (TKIP and AES) - EAP-TTLS (PAP, MSCHAP, MSCHAPv2), EAP-TLS, PEAPv0-MSCHAPv2, PEAPv1-EAP-GTC and LEAP, EAP-PWD * Note that OWE is a separate Wi-Fi Alliance certification program and not WPA3 Multimedia: Wi-Fi Multimedia (WMM and WMM-PS; Including TSPEC) Certifications: WFA (802.11n, WMM-PS, 802.11ac, PMF, WMM-AC, Voice Enterprise, WiFi Direct and WPS 2.0) Fast Roam: PMKID caching; Cisco CCKM; 802.11r; OKC
Bluetooth	Class 2, Bluetooth V5.0 with BR/EDR and Bluetooth Low Energy (BLE) Support
Sensor	3-axis Accelerometer with MEMS Gyro
Mobility DNA	Mobility DNA solutions help you get more value out of our mobile computers by adding functionality aswell as simplifying deployment and management of our mobile devices. For more information on these Zebra-only features, please visit zebra.com/mobilitydna

PTT (Push-to-Talk) App	Powered by Zebra Technologies, BARTEC brings the enterprise-class push-to-talk application PTT Pro into hazardous areas. PTT Pro connects your workforce with enterprise-class instant PTT and secure messaging services. It supports direct messaging, image, audio, and video - regardless of whether your users are carrying a BARTEC mobile device in hazardous areas, or their own Android or Windows device in non-hazardous areas. For more information see bartec.com
Warranty	1 year
Service contracts	COMFORT and ALL-IN
Scope of delivery	— Mobile Computer MC93^{ex}-NI — Standard battery — Quick start guide
Also required	(not included in the delivery) — Base station or charging adapter for charging

Accessories

See datasheet: MC93^{ex}-NI Accessories

It is absolutely necessary to use original accessories from BARTEC !

Ordering information

MC93^{ex}-NI with marking NEC Class I, II, III Div 2 for North America

Supports only radio frequencies (channels/bandwidths) depending on regulatory rules of North America

Scanner: SE4770-SR; Keypad: 29 keys	B7-A2M2-PGHAG4NA
Scanner: SE4770-SR; Keypad: 43 keys	B7-A2M2-PGHCG4NA
Scanner: SE4770-SR; Keypad: 53 keys	B7-A2M2-PGHDG4NA
Scanner: SE4770-SR; Keypad: 53 keys - VT	B7-A2M2-PGHEG4NA
Scanner: SE4850-ER; Keypad: 29 keys	B7-A2M2-PGEAG4NA
Scanner: SE4850-ER; Keypad: 43 keys	B7-A2M2-PGECG4NA
Scanner: SE4850-ER; Keypad: 53 keys	B7-A2M2-PGEDG4NA
Scanner: SE4850-ER; Keypad: 53 keys - VT	B7-A2M2-PGEEG4NA

Ordering information

MC93^{ex}-NI with marking ATEX/IECEx Zone 2/22 for the rest of the world

Scanner: SE4770-SR; Keypad: 29 keys	B7-A2M3-PGHAG4RW
Scanner: SE4770-SR; Keypad: 43 keys	B7-A2M3-PGHCG4RW
Scanner: SE4770-SR; Keypad: 53 keys	B7-A2M3-PGHDG4RW
Scanner: SE4770-SR; Keypad: 53 keys - VT	B7-A2M3-PGHEG4RW
Scanner: SE4850-ER; Keypad: 29 keys	B7-A2M3-PGEAG4RW
Scanner: SE4850-ER; Keypad: 43 keys	B7-A2M3-PGECG4RW
Scanner: SE4850-ER; Keypad: 53 keys	B7-A2M3-PGEDG4RW
Scanner: SE4850-ER; Keypad: 53 keys - VT	B7-A2M3-PGEEG4RW

Supported Symbolologies / Barcodes

1D/Linear Symbol/Codes	Codabar Code 11 Code 32 Code 39 Code 93 Code 128 Coupon Code Chinese 2 of 5 Discrete 2 of 5 EAN/JAN-8 EAN/JAN-13 GS1 DataBar GS1 DataBar Expanded GS1 DataBar Limited GS1-128 Interleaved 2 of 5 ISBT 128 Korean 3 of 5 Matrix 2 of 5 MSI UPCA UPCE UPC/EAN supplementals RSS-14 RSS Expanded RSS Limited Trioptic Code Webcode
2D Stacked and 2D Matrix Symbol/Codes	Aztec Code Codablock A Composite Codes Data Matrix Dotcode MacroPDF417 Maxi Code MicroPDF417 Micro QR Code PDF417 QR Code TLC39
Postal Symbol/Codes	Australian Post (4-state) British Post (4-state) Canadian Post (4-state) Chinese 2 of 5 Japanese Post (4-state) Netherlands (KIX) Post Postnet US Planet US Postnet UPU 4 State Postal FICS USPS 4 State Postal (US4CB)