BARTEC

BARTEC MC9400/9450^{EX2} Mobile Computer

for Zone 2/Div. 2 hazardous areas

android enterprise recommended

The next evolution in the ultra-rugged MC9000 series

Built for the toughest environments, the BARTEC MC9400/9450^{EX2} is the next evolution in the ultra-rugged MC9000 Mobile Computer Series, now with more power, advanced scanning, Wi-Fi 6E, and private and public 5G support. This mobile device is the ultimate tool to help streamline and error-proof processes in the toughest environments, from manufacturing and warehousing to ports and yards. It is faster, ready to power the new generation of industrial applications, and scanning is easier with the world's greatest scanning range.

The BARTEC MC9400/9450^{EX2} Mobile Computer is approved for ATEX and IECEx Zone 2/22 and NEC 500 Class I, II, III Div.2. Further local certifications are possible on customer request.

- World-class proven ultra-rugged design
- New Qualcomm platform delivers 2.5x times more processing power and support to Android 18
- Latest in wireless connectivity with Wi-Fi 6E and 5G (data only)
- Unmatched scanning performance with up to 30.5m reading range
- New optional front and rear cameras

The latest in wireless connectivity

Private and public 5G — new cost-effective wireless options

The BARTEC MC9450EX2 Mobile Computer is the first gun-style device to offer private and public 5G wireless data connectivity, bringing new affordable wireless networking options to expansive outdoor and indoor environments. And with two SIM card options — nano SIM and eSim — you can support private and public 5G data connections simultaneously for network redundancy or deploy different wireless networks in different areas of the business.

Wi-Fi 6E – maximum speed and performance, indoors and outside

Get the fastest Wi-Fi connections available, Wi-Fi 6E. With quadruple the bandwidth and capacity, triple the speed and up to triple the available spectrum, your workers get dependable and instant application response times, increasing productivity and workflow efficiency.

Advanced Bluetooth connectivity

Compared to Bluetooth 5.2, Bluetooth 5.3 increases energy efficiency for improved battery life; minimizes device interference for more reliable and higher quality connections, and enables more secure connections through enhanced security features.

Best-in-class data capture options

The latest in advanced scanning technology

Give your workers an unmatched scanning range with the new SE58 Extended Range Scan Engine with IntelliFocus™ technology. Scan barcodes in hand to over 100 ft./30.5 m away(2) — substantially farther than any scanner on the market. And the innovative green laser aimer is up to seven times more visible than the typical red aimer dot, making it easy to scan items on top warehouse racks.

Biometric facial recognition

Workers get easy device access, while you get the peace of mind that device access is restricted to pre-authorized users only, eliminating the risk of shared or compromised passwords.

Unmatched camera technology

Optional cameras are offered for the first time in BARTEC's intrinsically safe version of an MC9000 series Mobile Computer. The high-resolution front-facing camera is ideal for video-based collaboration. And the highest resolution rear camera in the class with HDR provides highly detailed photos, ideal for documenting incoming damaged shipments, quality checks and more.

Choose from four keypads to best match your data types

Select the keypad that will make data entry as easy as possible for your workers. And swap keypads on site to accommodate new data types or re-purpose devices in different areas of the business — without a trip to the service depot.

(2) Printing resolution, contrast and ambient light dependent.

Faster, more rugged and more flexible

The power to handle all your applications — simultaneously

Voice and line of business apps, simple 'green screen' legacy apps, apps powered by augmented reality and artificial intelligence — no matter how many applications workers need to use, the BARTEC MC9400/9450EX2 Mobile Computer can power them, all at once. Take application performance to the next level. Compared to the MC93ex-NI, the new Qualcomm platform delivers 2.5x more processing power, 50 percent more RAM, four times the Flash and eight times micro SD storage.

Full backwards accessory compatibility for cost-effective upgrades

Upgrade to BARTEC MC9400/9450EX2 Mobile Computer to put the advantages of the latest mobile features to work in your enterprise, while preserving your entire investment in MC93ex-NI accessories. And you can also utilize MC92 and older charging accessories with an adapter.

Advanced display technology for industrial environments

The large 4.3 in. display is easy to see indoors and outside, works when wet and is easy to use — even with thick gloves.

Rugged and ready for just about anything

The BARTEC MC9400/9450EX2 Mobile Computer is designed for your toughest environments. Muddy? Just hose it off. Submerged in water? No worries, it's waterproof. With Zebra's toughest drop and tumble testing, these devices have what it takes to handle the inevitable everyday drops on concrete in ports, yards, manufacturing plants and more. Two of the most vulnerable features are protected with Corning Gorilla Glass for maximum scratch- and shatter-resistance — the display and scanner window.

PowerPrecision+ advanced battery technology

PowerPrecision+ batteries are designed and manufactured to deliver superior performance, reliability and safety. Visibility into real-time battery statistics makes it easy to spot and replace batteries that can no longer hold a full charge, protecting productivity. Batteries are always ready to go with fast charging. Change batteries on the fly without losing any data with hot swap support(3). And drop and tumble testing is performed with the battery inserted, ensuring that your batteries are as rugged as your devices.

Get your legacy apps up and running instantly

Run 'green screen' apps right out of the box with pre-loaded and pre-licensed Ivanti All-Touch TE — no licenses to purchase, backend system changes or user training required.

Zebra Mobility DNA

Simplify every aspect of owning a BARTEC Mobile Computer with Zebra Mobility DNA, a comprehensive collection of applications that contain many no-cost tools. Make device management easier for IT personnel. Give workers time-saving features that improve productivity and workflow efficiency by making BARTEC devices even easier to use.

(3) Swaping and/or removing batteries is only allowed outside the hazardous areas.

Explosion protection

Marking ATEX Gas group IIB models	Ⓔx II 3G Ex ic op is IIB T4 Gc Ⓔx II 3D Ex ic op is IIIC T135 °C Dc IP65
Certification	EPS 24 ATEX 1 219 X
Marking ATEX Gas group IIC models (4)	Ⓔx II 3G Ex ic op is IIC T4 Gc Ⓔx II 3D Ex ic op is IIIC T135 °C Dc IP65
Certification	EPS 24 ATEX 1 219 X
Marking IECEx Gas group IIB models	Ex ic op is IIB T4 Gc Ex ic op is IIIC T135 °C Dc IP65
Certification	IECEx EPS 24.0075X
Marking IECEx Gas group IIC models (4)	Ex ic op is IIC T4 Gc Ex ic op is IIIC T135 °C Dc IP65
Certification	IECEx EPS 24.0075X
Marking NEC	Class I, Div. 2, Groups A, B, C, D; Class II, Div. 2, Groups F, G; Class III; T4
Certification	UL E321557
Further Certifications	CE, FCC/IC

Other approvals and certificates, see **www.bartec.com**

User environment

Operating temperature	-20 °C to +50 °C (-4 °F to 122 °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 IP 68 with battery per applicable IEC sealing specifications
Drop Specification	3.65 m (39.4 inch) drop to concrete at room temperature, exceeding MIL-STD810H; 2.4 m (94.5 inch) drop to concrete across temperature -20 °C to 50 °C, exceeding MIL-STD810H
Tumble Specification	6.000 tumbles from a height of 1 m (39.4 inch); meets or exceeds IEC tumble specification

Technical data

Processor	Qualcomm® 4490 octa-core; 2.4 GHz
Memory (RAM)	6 GB
Mass storage	128 GB Flash
Storage expansion	User accessible MicroSD MicroSD supports up to 2 TB
SIM (only MC9450EX2 models)	1 Nano SIM and 1 eSIM
Operating system	Android™ 14; upgradeable to Android™ 18
Size (W x L x H)	88 x 240 x 189 mm (3.5 x 9.4 x 7.4 inch)
Weight (with battery)	743 g (1.64 lb)
Display	4.3" Display with LED Backlight
Resolution	800 x 400 pixel, WVGA
Front glass	Corning Gorilla glass
Touch function	Capactive 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); hot swap battery backup with temporary session persistence (only in non Ex area)
Notification	Audible tone; multi-color LED; haptic feedback
Voice & Audio	Speaker, microphone, PTT voice (internal speaker and Bluetooth wireless headset support)
Buttons	Trigger scan button; keypad scan button
Keypad	Backlit, field replaceable keypads: – 29 Key Numeric/Calculation – 43 Key Numeric/Function – 53 Key AlphaNumeric STD – 53 Key Terminal Emulation (VT)
External I/O	USB 2.0 (bottom pogo connector) — high speed (host and client)
Barcode capture	– SE58 1D/2D Extended Range Scan Engine with IntelliFocus™ technology with green laser aimer; Reading range up to 30.5 m (1200.8 inch) depending on type, size and quality of the barcode – supported symbologies/barcodes: see table
Camera (only MC9450EX2 models)	Front: 8 MP; Rear: 16 MP autofocus; flash LED generates balanced white light; supports Torch mode + HDR (standard)
NFC	ISO 14443 Type A and B; FeliCa and ISO 15693 cards
Bluetooth	Class 2, Bluetooth v5.3
Sensor	Light Sensor: Automatically adjusts display backlight brightness Magnetometer: eCompass automatically detects direction and orientation Motion Sensor: 3-axis accelerometer with MEMS Gyro
Warranty	1 year for BARTEC MC9400/9450EX2 Mobile Computer 6 month for battery and accessories
Service contracts	Comprehensive coverage, available as 3 or 5 years
Scope of delivery	– BARTEC MC9400/9450EX2 Mobile Computer – Standard battery – Quick Start Guide – Mandatory accessories (IIC models only, see order information) (Charging accessories are sold separately)

Accessories

See datasheet:
BARTEC MC9400/9450EX2 Mobile Computer Accessories
Ensure safety in hazardous areas by using only original BARTEC accessories.

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(4) With mandatory use of accessories. See order information.

Wireless LAN

Radio	IEEE 802.11 a/b/g/n/ac/ax/d/h/i/r/k/v/w/mc; 2x2 MU-MIMO; Tri-band (2.4 GHz, 5 GHz, 6 GHz)2; Wi-Fi CERTIFIED 6™ (Wi-Fi 6E); Dual Band Simultaneous; IPv4, IPv6
Data Rates	2.4 GHz: 802.11b/g/n/ax — 20 MHz - up to 286.8 Mbps; 5 GHz: 802.11a/n/ac/ax — 20 MHz, 40 MHz, 80 MHz, 160 MHz — up to 2402 Mbps; 6 GHz: 802.11ax — 20 MHz, 40 MHz, 80 MHz, 160MHz - up to 2402 Mbps
Fast Roam	802.11r Fast BSS Transition; PMK Caching; Cisco CCKM; OKC
Operating Channels	Channel 1-13 (2401-2483 MHz): 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13; Channel 36-165 (5150-5850 MHz): 36, 40, 44, 48, 50, 52, 56, 60, 64, 100, 104, 108, 112, 114, 116, 120, 124, 128, 132, 136, 140, 144, 149, 153, 157, 161, 165; Channel 1-233 (5925-7125 MHz) Channel Bandwidth 20, 40, 80, 160 MHz. Actual operating channels/frequencies and bandwidths depend on regulatory rules and certification agency.
Security and Encryption	WEP (40 or 104 bit); Enhanced Open (OWE); WPA/WPA2 Personal (TKIP and AES); WPA3 Personal (SAE); WPA/WPA2 Enterprise (TKIP and AES); WPA3 Enterprise (AES); EAP-TTLS (PAP, MSCHAP, MSCHAPv2), EAP-TLS, PEAPv0-MSCHAPv2, PEAPv1-EAP-GTC, LEAP, EAP-PWD; WPA3 Enterprise 192-bit mode (GCMP256) - EAP-TLS; MC9450 only: EAP-SIM, EAP-AKA, EAP-AKA Prime
Certifications	Wi-Fi Alliance Certifications: Wi-Fi CERTIFIED n; Wi-Fi CERTIFIED ac; Wi-Fi CERTIFIED 6 (Wi-Fi 6E); WPA2-Personal; WPA2-Enterprise; WPA3-Personal WPA3-Enterprise (includes 192-bit mode); Protected Management Frames: Wi-Fi Enhanced Open; WMM (Wi-Fi Multimedia); WMM-Power Save WMM-Admission Control; Voice-Enterprise: Wi-Fi Direct; Wi-Fi Agile Multiband; Wi-Fi QoS Management; Wi-Fi Optimized Connectivity; Passpoint

Wireless WAN Data Communications (only MC9450EX2 models)

Radio Frequency Band	North America: – 5G FR1 (n2/5/7/8/12/13/14/25/26/30/38/41/48/66/71/77/78) – 4G (B2/4/5/7/8/12/13/14/17/25/26/29/30/38/41/48/66/71) – 3G (B2/4/5) Rest of world: – 5G FR1 (n1/2/3/5/7/8/12/18/20/26/28/38/40/41/66/71/77/78) – 4G (B1/2/3/4/5/6/7/9/10/14/17/18/20/26/28/38/39/40/41/42/43/66/71) – 3G (1/2/4/5/8) Gigabit LTE-A; 5G NR Sub-6 (NSA, SA); LTE/NR Carrier Aggregation; supports private networking (LTE/5G)
GPS	GPS, GLONASS, Galileo, QZSS Dual-Band GNSS — Concurrent L1/G1/E1 (GPS/QZSS, GLO, GAL) + L5/E5a/BDSB2a (GPS/QZSS, GAL) a-GPS Supports XTRA
Multimedia	Wi-Fi Multimedia™ (WMM) and WMM-PS; Including TSPEC

Supported Symbologies / 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)

Order information - Rest of world

BARTEC MC9400EX2 Mobile Computer - Gas group IIB models
– Marking ATEX/IECEx Zone 2/22
– WLAN only
– SE58 Extended Range Scan Engine with IntelliFocus™ technology
– Standard battery

Keypad: 29 keys	B7-A2F3-2110G1M6ASA6
Keypad: 43 keys	B7-A2F3-2110G1M6CSA6
Keypad: 53 keys	B7-A2F3-2110G1M6DSA6
Keypad: 53 keys - VT	B7-A2F3-2110G1M6ESA6

BARTEC MC9400EX2 Mobile Computer - Gas group IIC models
– Marking ATEX/IECEx Zone 2/22
– WLAN only
– SE58 Extended Range Scan Engine with IntelliFocus™ technology
– Standard battery
– Includes mandatory accessories: Screen protector and Leather handle cover (5)

Keypad: 29 keys	B7-A2F5-2110G1M6ASA6
Keypad: 43 keys	B7-A2F5-2110G1M6CSA6
Keypad: 53 keys	B7-A2F5-2110G1M6DSA6
Keypad: 53 keys - VT	B7-A2F5-2110G1M6ESA6

BARTEC MC9450EX2 Mobile Computer - Gas group IIC models
– Marking ATEX/IECEx Zone 2/22
– Supports WWAN frequency bands for the rest of the world (with exception of US, Canada, Puerto Rico and China)
– SE58 Extended Range Scan Engine with IntelliFocus™ technology
– Rear and front camera
– Standard battery
– Includes mandatory accessories: Screen protector, Leather handle cover and Leather carry case (5)

Keypad: 29 keys	B7-A2F5-25B1G1R6ASA6
Keypad: 43 keys	B7-A2F5-25B1G1R6CSA6
Keypad: 53 keys	B7-A2F5-25B1G1R6DSA6
Keypad: 53 keys - VT	B7-A2F5-25B1G1R6ESA6

Order information - North America

BARTEC MC9400EX2 Mobile Computer
– Marking NEC 500 Class I, II, III Div 2
– WLAN only
– SE58 Extended Range Scan Engine with IntelliFocus™ technology
– Standard battery

Keypad: 29 keys	B7-A2F2-1110G1M6ASNA
Keypad: 43 keys	B7-A2F2-1110G1M6CSNA
Keypad: 53 keys	B7-A2F2-1110G1M6DSNA
Keypad: 53 keys - VT	B7-A2F2-1110G1M6ESNA

BARTEC MC9450EX2 Mobile Computer
– Marking NEC 500 Class I, II, III Div 2
– Supports CBRS and WWAN frequency bands for North America only (US, Canada and Puerto Rico)
– SE58 Extended Range Scan Engine with IntelliFocus™ technology
– Rear and front camera
– Standard battery

Keypad: 29 keys	B7-A2F2-15A1G1R6ASNA
Keypad: 43 keys	B7-A2F2-15A1G1R6CSNA
Keypad: 53 keys	B7-A2F2-15A1G1R6DSNA
Keypad: 53 keys - VT	B7-A2F2-15A1G1R6ESNA

(5) Use of these accessories is mandatory in hazardous area to achieve gas group IIC protection.