

Mobile Computer MC27^{ex}-NI

Datasheet



BARTEC has developed in close cooperation with Zebra Technologies the MC27^{ex}-NI for worldwide use in hazardous areas.

Whether your workers are on the floor of a warehouse, manufacturing plant or outside in a port or yard, delivering goods or repairing equipment, a mobile computer will take productivity and task accuracy to a new level. But cost-effective devices have fallen short in features - until today. Introducing the MC27^{ex}-NI, the affordable Mobile Computers packed with all the features your business needs. Wi-Fi/cellular connect any worker - inside your facility or out in the field. Advanced industrial design delivers extreme comfort and ease of use. The integrated touchscreen and keypad supports today's 'green screen' apps, and tomorrow's touchscreen apps. Just add the scan handle accessory to create a gun-style design for intensive scanning tasks.

Powerful complimentary Mobility DNA tools are pre-loaded and ready to use, making it easier to stage, secure and troubleshoot devices; capture and send data to your applications right out of the box; and more.

The MC27^{ex}-NI is approved for ATEX/IECEx/UKEx Zone 2/22 and NEC Class I, II, III Div.2. Further local certifications are possible on customer request.

Explosion protection

Marking ATEX	Ex II 3G Ex ic IIB T4 Gc Ex II 3D Ex ic IIIC T130°C Dc IP64	Voice & Audio	Internal speaker and microphone; Bluetooth wireless headset support; high quality speaker phone
Certification	EPS 22 ATEX 1 012 X	Buttons	Physical scan, volume up/down; power
Marking IECEx	Ex ic IIB T4 Gc Ex ic IIIC T130°C Dc IP64	Keypad	34 key Numeric with FN keys; supports on-screen keypad
Certification	IECEx EPS 22.0004X	Barcode capture	<ul style="list-style-type: none"> — SE4100: 1D/2D Standard Range Imager — Typical reading range at Code 39 barcode: 5 mil: 6.1 to 24.1 cm (2.4 to 9.5 inch) 20 mil: 5.1 to 66.0 cm (2.0 to 26.0 inch) — supported symbologies/barcodes: see table
Marking NEC	Class I, Division 2, Groups A, B, C, D; Class II, Division 2, Groups F and G; Class III, Division 2; T4 Class I, Zone 2, Group IIC; Zone 22, Group IIIB	Camera	Rear camera: 13 MP, Phase Detection Auto Focus, with Flash LED
Certification	E321557	NFC	ISO14443 Type A and B: FeliCa and ISO 15693 cards. P2P mode and Card Emulation via Host (HCE) support
Marking UKEX	Ex II 3G Ex ic IIB T4 Gc Ex II 3D Ex ic IIIC T130°C Dc IP64	Radio Frequency Band	<ul style="list-style-type: none"> — for the rest of the world (excluding US + Canada) GSM: 850/900/1800/1900 UMTS: B1/B2/B3/B4/B5/B8/B9/B19 LTE-FDD: B1/B2/B3/B4/B5/B7/B8/B19/B20/B28 LTE-TDD: B38/B40/B41 LTE: Kategorie 6 — North America UMTS: B2/B4/B5 LTE: B2/B4/B5/B7/B12/B13/B14/B17/B66 LTE: Kategorie 6
Further Certifications	CE	WLAN-WiFi	<p>IEEE 802.11 a/b/g/n/ac/d/h/i/r/k/v; Wi-Fi certified; IPv4, IPv6, 1x1 MU-MIMO</p> <p>Data Rates: 2.4 GHz: 802.11b/g/n - 20 MHz, 40 MHz - up to 150 Mbps 5 GHz: 802.11a/g/n/ac - 20 MHz, 40 MHz, 80 MHz - up to 433 Mbp</p> <p>Operating Channels: Channel 1-13 (2412-2472 MHz): 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13; Channel 36-165 (5180-5825MHz): 36, 40, 44, 48, 52, 56, 60, 64, 100, 104, 108, 112, 116, 120, 124, 128, 132, 136, 140, 144, 149, 153, 157, 161, 165</p> <p>Channel Bandwidth: 20, 40, 80 MHz Actual operating channels/ frequencies and bandwidths depend on regulatory rules and certification agency</p> <p>Security and Encryption: WEP (40 or 104 bit); WPA/WPA2 Personal (TKIP, and AES); WPA3 Personal (SAE); WPA/WPA2 Enterprise (TKIP and AES); WPA3 Enterprise (AES) EAP-TLS (PAP, MSCHAP, MSCHAPv2), EAP-TLS, PEAPv0-MSCHAPv2, PEAPv1-EAP-GTC, LEAP and EAP-PWD; WPA3 Enterprise 192-bit Mode (GCMP-256) EAP-TLS; Enhanced Open (OWE)</p> <p>Certifications: WFA (802.11n, WPA2-Personal, WPA3-Personal, WPA2-Enterprise, WPA3-Enterprise)</p> <p>Fast Roam: 802.11r (Over-The-Air); PMKID caching; Cisco CCKM; OKC</p>
	Other approvals and certificates, see bartec.com	Bluetooth	Class 2, Bluetooth V5.0 with BR/EDR and Bluetooth Low Energy (BLE) Support

User environment

Operating temperature	-20 °C to +50 °C (-4 °F to +122 °F)
Charging temperature	0 °C to +40 °C (+32°F to +104°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	Multiple drops from 1.52 m (59.4 inches) to concrete from 10 °C to 50 °C (14 °F to 122 °F) per MIL-STD-810G
Tumble Specification	500 tumbles from a height of 0.5 m (19.7 inches); meets and exceeds IEC tumble specification

Technical data

Processor	Qualcomm Snapdragon™ 660 Octa-Core, 1,8 GHz
Memory (RAM)	3 GB
Mass storage	32 GB Flash
Storage expansion	User accessible MicroSD slot; supports up to 128 GB SDXC
SIM	1 Nano SIM slot
Operating system	<p>Android 11</p> <p>Delivered as GMS (Google Mobility Services) version</p> <p>Hardware supports future Android versions (up to Android 14)</p> <p>Configuration: Zebra's "Restricted Mode" can be set via StageNow, for control over Google Mobile Services (GMS) and other services</p>
Size (W x L x H)	200.5 mm x 70 mm x 38.5 mm (7.89 inch x 2.76 inch x 1.52 inch)
Weight (with battery)	296 g (0.65 lb)
Display	4" 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/3500 mAh (12.6 Wh); Must only be changed and charged outside potentially explosive atmosphere.
Notification	Audible tone; multi-color LEDs

Voice & Audio	Internal speaker and microphone; Bluetooth wireless headset support; high quality speaker phone
Buttons	Physical scan, volume up/down; power
Keypad	34 key Numeric with FN keys; supports on-screen keypad
Barcode capture	<ul style="list-style-type: none"> — SE4100: 1D/2D Standard Range Imager — Typical reading range at Code 39 barcode: 5 mil: 6.1 to 24.1 cm (2.4 to 9.5 inch) 20 mil: 5.1 to 66.0 cm (2.0 to 26.0 inch) — supported symbologies/barcodes: see table
Camera	Rear camera: 13 MP, Phase Detection Auto Focus, with Flash LED
NFC	ISO14443 Type A and B: FeliCa and ISO 15693 cards. P2P mode and Card Emulation via Host (HCE) support
Radio Frequency Band	<ul style="list-style-type: none"> — for the rest of the world (excluding US + Canada) GSM: 850/900/1800/1900 UMTS: B1/B2/B3/B4/B5/B8/B9/B19 LTE-FDD: B1/B2/B3/B4/B5/B7/B8/B19/B20/B28 LTE-TDD: B38/B40/B41 LTE: Kategorie 6 — North America UMTS: B2/B4/B5 LTE: B2/B4/B5/B7/B12/B13/B14/B17/B66 LTE: Kategorie 6
WLAN-WiFi	<p>IEEE 802.11 a/b/g/n/ac/d/h/i/r/k/v; Wi-Fi certified; IPv4, IPv6, 1x1 MU-MIMO</p> <p>Data Rates: 2.4 GHz: 802.11b/g/n - 20 MHz, 40 MHz - up to 150 Mbps 5 GHz: 802.11a/g/n/ac - 20 MHz, 40 MHz, 80 MHz - up to 433 Mbp</p> <p>Operating Channels: Channel 1-13 (2412-2472 MHz): 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13; Channel 36-165 (5180-5825MHz): 36, 40, 44, 48, 52, 56, 60, 64, 100, 104, 108, 112, 116, 120, 124, 128, 132, 136, 140, 144, 149, 153, 157, 161, 165</p> <p>Channel Bandwidth: 20, 40, 80 MHz Actual operating channels/ frequencies and bandwidths depend on regulatory rules and certification agency</p> <p>Security and Encryption: WEP (40 or 104 bit); WPA/WPA2 Personal (TKIP, and AES); WPA3 Personal (SAE); WPA/WPA2 Enterprise (TKIP and AES); WPA3 Enterprise (AES) EAP-TLS (PAP, MSCHAP, MSCHAPv2), EAP-TLS, PEAPv0-MSCHAPv2, PEAPv1-EAP-GTC, LEAP and EAP-PWD; WPA3 Enterprise 192-bit Mode (GCMP-256) EAP-TLS; Enhanced Open (OWE)</p> <p>Certifications: WFA (802.11n, WPA2-Personal, WPA3-Personal, WPA2-Enterprise, WPA3-Enterprise)</p> <p>Fast Roam: 802.11r (Over-The-Air); PMKID caching; Cisco CCKM; OKC</p>
Bluetooth	Class 2, Bluetooth V5.0 with BR/EDR and Bluetooth Low Energy (BLE) Support
GPS	Autonomous, Concurrent GPS; GLONASS; Galileo; BeiDou, and A-GPS. Supports IZAT™ XTRA
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 as well 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 for the rest of the world (Type: B7-A2N3-B211112211RW)	<ul style="list-style-type: none"> – Mobile Computer MC27^{ex}-NI – Standard battery – Cover for battery lock – Screen Protector – Quick Start Guide
Scope of delivery for North America (Type: B7-A2N2-B211112211NA)	<ul style="list-style-type: none"> – Mobile Computer MC27^{ex}-NI – Standard battery – Handstrap – Quick Start Guide
Also required	(not included in the delivery) <ul style="list-style-type: none"> – Base station or battery charging station for charging

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
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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
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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)
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Accessories

See datasheet: MC27^{ex}-NI Accessories

It is absolutely necessary to use original accessories from BARTEC !

Ordering information

MC27 ^{ex} -NI with 4G/LTE for the rest of the world (all excluding US + Canada)	B7-A2N3-B211112211RW
MC27 ^{ex} -NI with 4G/LTE for North America	B7-A2N2-B211112211NA

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Technical data subject to change without notice.