BARTEC

Mobile Computing

User Manual

Mobile Computer MC 75Ax^{ex}-NI and Mobile Computer MC 75A6^{ex}HF-NI

Type B7-A27.-..../........

BARTEC

User Manual - TRANSLATION

Mobile Computer

MC 75Ax^ex-NI and MC 75A6^ex HF-NI

Type B7-A27.-…./…….

ATEX Zone 2 and Zone 22

UL Class I, II Division 2

UL Class III

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Mobile Computer MC 75Ax^{ex}-NI and MC 75A6^{ex} HF-NI

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1.   Basic Safety Instructions

1.1   Notes on this manual

Please read carefully before commissioning the devices.

The user manual is a constituent part of the product. It must be kept in the direct vicinity of the device and accessible at all times to installation, operating and maintenance personnel.

It contains important notes, safety instructions and test certificates which are necessary for perfect functioning when the devices are being operated and handled.

The user manual is written for all people who carry out handling, commissioning, operation and maintenance work on the product, whereby the directives and standards applicable to areas with a gas or dust atmosphere (99/92/EC, EN 60079-17, EN 60079-19, IEC 60079-17, IEC 60079-19) must be observed when doing such work.

Familiarity with and strict adherence to the safety instructions and warnings in this manual are essential for safe handling and commissioning. Careful handling and consistent observation of these instructions can prevent accidents, personal injuries and damage to property.

The illustrations in these operating instructions serve to make the information and descriptions more clear. They are not necessarily true to scale and may deviate slightly from the actual construction of the device.

Safety instructions and warnings are specially highlighted in this manual and marked by symbols.

⚠ **DANGER**

DANGER indicates a hazardous situation which, if not avoided, will result in death or serious injury.

⚠ **WARNING**

WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.

⚠ **CAUTION**

CAUTION indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

ATTENTION

ATTENTION identifies a potentially damaging situation which, if not avoided, could damage the equipment or something in its environment.

ⓘ Important instructions and information on effective, economical and environmentally compatible handling.

1.1.1 Languages

The original user manual is written in German. All other available languages are translations of the original user manual.

The user manual is available in German and English. If you require any other languages, please ask BARTEC or request them when placing the order.

1.1.2 Changes to the document

BARTEC reserves the right to alter the contents of this document without notice. No guarantee is given for the correctness of the information. In case of doubt, the German safety instructions shall apply because it is not possible to rule out errors in translation or in printing. In the event of a legal dispute, the "General Terms and Conditions" of the BARTEC group shall apply in addition.

The respective up-to-date versions of data sheets, manuals, certificates, EC Declaration of Conformity may be downloaded at **www.bartec-group.com** under products and solutions in the area "Automatic Technology" or ordered directly from BARTEC GmbH.

1.1.3 Handling the Product

The product described in these user manual has been tested and left the factory in perfect condition as regards meeting safety requirements. To maintain this condition and ensure that this product operates perfectly and safely, it may be used only in the manner described by the manufacturer. Appropriate transportation, suitable storage and careful operation are also essential for the perfect and safe operation of this product. The Mobile Computer must be installed properly and securely if it is to work perfectly and correctly.

The safe and perfect mounting of the Mobile Computer is a precondition for faultless and correct operation.

1.2 Use in Accordance with the Intended Purpose

1.2.1 Exclusive Purpose

The Mobile Computer MC 75Ax^{ex}-NI is a handheld piece of electrical equipment. It serves the purpose of the mobile recording, processing and radio transmission of data within potentially explosive atmospheres.

It is used exclusively in combination with devices which comply with the requirements placed on the overvoltage category I.

The admissible operating data of the device used must be considered.

1.2.2 Improper Use

Any other use is not in accordance with the intended purpose and can cause damage and accidents. The manufacturer will not be liable for any use beyond that of its exclusive intended purpose.

1.3 Owner's/Managing Operator's Obligations

The owner/managing operator undertakes to restrict permission to work with the Mobile Computers to people who:

▶ are familiar with the basic regulations on safety and accident prevention and have been instructed in the use of the Mobile Computer;

▶ have read and understood the documentation, the chapter on safety and the warnings.

The owner/managing operator must check that the safety regulations and accident prevention rules valid for the respective application are being observed.

1.4 Safety Instructions

1.4.1 General Safety Instructions

▶ Take the device out of the hazardous area before wiping it with a dry cloth or cleaning it!

▶ Do not open devices in a hazardous area.

▶ The general statutory regulations or directives relating to safety at work, accident prevention and environmental protection legislation must be observed, e.g. the German industrial health and safety ordinance (BetrSichV) or the applicable national ordinances.

▶ In view of the risk of dangerous electrostatic charging, wear appropriate clothing and footwear.

▶ Avoid the influence of heat that is higher or lower than the specified temperature range.

▶ Protect the device from external influences! Do not expose the device to any caustic/aggressive liquids, vapours or mist! In the event of malfunctioning or damage to the enclosure, take the device out of the potentially explosive area immediately and bring it to a safe place.

1.5 Safety Instructions for Operation

For electrical systems the relevant installation and operating regulations must be complied with (e.g. Directive 99/92/EC, Directive 94/9/EC and the national applicable ordinances EN 60079-14 and the DIN VDE 0100 series)!

The disposal of this equipment must comply with the national regulations on the disposal of waste.

1.5.1 Maintenance

Regular servicing is not necessary if the equipment is operated correctly in accordance with the installation instructions and environmental conditions. In this context, please refer to Chapter "Maintenance, Inspection, Repair".

1.5.2 Inspection

Under IEC 60079-19 and EN 60079-17, the owner/managing operator of electrical installations in hazardous areas is obliged to have these installations checked by a qualified electrician to ensure that they are in a proper condition.

1.5.3 Repairs

Repairs on explosion-protected operating equipment may be done only by authorised persons working in accordance with the latest developments in technology and using original spare parts. The applicable regulations must be observed.

1.5.4 Commissioning

Before commissioning, check that all components and documents are there.

1.6 Ex Protection Type, Certification and Standards

Markings specifying Ex protection and certification are put on the device. For Ex protection markings, see Chapter 3 "Technical Data".

The Mobile Computers conform to Directive 94/9/EC for devices and protective systems for use to their intended purpose in potentially explosive areas (ATEX Directive). For the standards conformed to, see Chapter 3 "Technical Data".

1.7 Warranty

> ⚠ **WARNING**
>
> **It is not permissible to make any modifications or implement any conversions unless the manufacturer gives his approval in writing.**
>
> If components other than those specified are used, protection against explosion can no longer be assured. It cannot be guaranteed that parts procured from other suppliers have been designed and produced in conformance to safety requirements and with the necessary stress tolerance.
>
> ▶ Contact the manufacturer to obtain approval before making any modifications or conversions. Use only original spare parts and original expendable parts.

ⓘ The manufacturer grants a complete warranty only and exclusively for the spare parts ordered from him, the manufacturer.

As a fundamental rule, our "General Conditions of Sale and Delivery" apply. These are made available to the owner/managing operator at the latest on formation of a contract. Guarantee and liability claims for personal injury and damage to property are excluded if they are due to one or more of the following reasons:

Unintended use of the Mobile Computers.

−   Incorrect handling, commissioning, operation and servicing.

−   Failure to observe the information in the User Manual with respect to transport, storage, assembly, handling, commissioning, operation and service.

−   Independent structural changes.

−   Faulty monitoring of parts subject to wear and tear.

−   Incorrectly performed repairs.

−   Cases of disaster through the impact of foreign bodies and force majeure.

We grant a warranty period of one year starting from the date of delivery from the Bad Mergentheim factory on the Mobile Computers and their accessories (exception: battery 6 months). This warranty covers all parts of the delivery and shall be restricted to the free replacement or repair of the defective parts in our Bad Mergentheim factory. For this purpose, any packaging supplied must be kept where possible. In the case of warranty, the goods must be returned to us after written agreement. There shall be no claim to repair at the sight of erection.

The versions, components, monitors and windows shown in this User Manual are merely examples and may deviate from the actual display.

The information contained herein refers to the explosion-protected version of series MC 75Ax^{ex}-NI.

This User Manual contains all important information on the subject of explosion protection. The original user manuals and product information of ZEBRA with information on handling and commissioning are also available. In the case of overlaps, the information in this User Manual shall take priority and shall supersede the information from ZEBRA.

1.8 Co-applicable documents – Set of documents

BARTEC

– User Manual to the Mobile Computer series MC 75Ax^{ex}-NI – the use of the explosion-protected version of the Mobile Computer series MC 75Ax^{ex}-NI is described in this User Manual.

– Technical datasheet for the explosion-protected version of the Mobile Computer series MC 75Ax^{ex}-NI – This technical datasheet contains the most important explosion-relevant technical data as well as general technical data.

ZEBRA

The set of documentation of the MC75Ax contains information on the respective user requirements and covers the following:

– Rapid Start Instructions for the MC 75Ax (MC75A Quick Start Guide) – The commissioning of the Mobile Computer MC75Ax is described in this User Manual.

– User Manual for the Enterprise Digital Assistant MC75Ax (MC75A User Guide) – The use of the Mobile Computer MC75Ax is described in this User Manual.

– Integration Manual for the Enterprise Digital Assistant MC75Ax (MC75A Integrator Guide) – The setting up of the Mobile Computer MC75Ax including accessories is described in this User Manual.

– User Manual for Microsoft® applications for Windows Mobile® 6 for Enterprise Mobility devices – The use of Microsoft applications is described in this User Manual.

– Manual for Enterprise Mobility applications – The use of example applications is described in this Manual which have been developed using Enterprise Mobility.

– EMDK Help File (Enterprise Mobility Developer Kit) – This help file contains API information on the writing of applications.

1.9 Configuration

This Manual refers to the following configurations:

Configuration	Radio link	Display	Memory	Data entry	Operating system	Keypad
MC 75A0^{ex}-NI	WLAN: 802.11 a/b/g WPAN: Bluetooth	3.5"-VGA colour display	256 MB RAM/1 GB flash memory	Laser scanner or 2D Imager or 1D Laser scanner and camera or 2D Imager and camera	Windows Mobile® 6.5 Classic	Numerical or QWERTY
MC 75A6^{ex}-NI	WLAN: 802.11 a/b/g WPAN: Bluetooth WWAN: HSDPA GPS: SiRF III				Windows Mobile® 6.5 Professional	
MC 75A8^{ex}-NI	WLAN: 802.11a/b/g WPAN: Bluetooth WWAN: EvDO * GPS: SiRF III				Windows Mobile® 6.5 Professional	
MC 75A6^{ex} HF-NI	WLAN: 802.11a/b/g WPAN: Bluetooth WWAN: HSDPA GPS: SiRF III			2D Imager and camera and RFID HF reader	Windows Mobile® 6.5 Professional	Numerical

* Sprint or Verzion

Other specific information on the keypad is provided under Technical Data or in the ZEBRA documentation.

2. Product Description

2.1 Definition

The **Mobile Computer MC 75Ax**^{ex}**-NI** and the **Mobile Computer MC 75A6**^{ex} **HF-NI** are 3.5G Worldwide Enterprise Digital Assistant (EDA) devices and have been modified by BARTEC for use in potentially explosive atmospheres of

– **ATEX/IECEx Zone 2** and **Zone 22** and
– **UL Class I, II, Division 2** and
– **UL Class III**

The extensive communication options which are otherwise standard are therefore available to the user also in the potentially explosive atmosphere.

Its ergonomic design and ease of operation make it an ideal support to achieve fast data availability in corporate processes. A keypad in different versions is available for manual data entry.

Further options for the entry of data are provided by the integrated 1D- or 1D-/2D-Scan Engine for the entry of barcodes. A 3.2 megapixel camera and/or a RFID HF-Reader (13.56 MHz) are available for data entry as an option.

Thanks to the ergonomically positioned scan trigger on the MC 75Ax^{ex}-NI, data may be easily entered with one hand. Several technologies are available for data communication with other systems and corporate areas.

– Wireless WAN (WWAN)
– Wireless LAN (WLAN),
– Wireless PAN (WPAN) (Bluetooth)
– IrDA connection

Thanks to the integrated modules in the device, smooth voice and data transmission is possible with simple integration into the corporate network.

Further advantages of use are its heavy-duty design, easy-to-read 3.5" VGA colour display with Touch technology and a high performance lithium-ion battery.

In the MC 75Ax^{ex}-NI, the PXA320 processor with 806 MHz ensures the fast speed of processes and the operating system Microsoft® Windows Mobile® 6.5 in connection with the Enterprise Mobility Developer Kits (EMDK) from ZEBRA ensures simple application development.

There is an integrated 256 MB RAM in the device for storage and 1 GB Flash to store user-defined applications and data. BARTEC offers Micro SD memory cards for larger applications and data volumes.

2.2   Operation

The Mobile Computer MC 75Ax^{ex}-NI is a handheld electrical device. It serves the purposes of the mobile entry, processing and radio transmission of data within potentially explosive atmospheres.

It is used exclusively in combination with devices which comply with the requirements placed on the overvoltage category I.

The **Mobile Computer MC 75Ax^{ex}-NI** and the **Mobile Computer MC 75A6^{ex} HF-NI, Type B7-A27.-…./……** have been modified for use in the following potentially explosive atmospheres

– ATEX/IECEx Zone 2 and Zone 22

– UL Class I Division 2 Groups A, B, C and D

– UL Class II Division 2 Groups F and G

– UL Class III

The **Mobile Computer MC 75Ax^{ex}-NI** and the **Mobile Computer MC 75A6^{ex} HF-NI, Type B7-A27.-…./……..** may **not be used** in the following zones:

– ATEX/IECEx Zone 0

– ATEX/IECEx Zone 1 and Zone 21

– UL Class I Division 1

– UL Class II Division 1

3. Technical Data

3.1 Explosion protection

ATEX Zone 2 and Zone 22	
Type	**MC 75Ax**ex**-NI and MC 75A6**ex **HF-NI**
	B7-A273-…S/W…..
Ex protection	⟨Ex⟩ II 3G Ex ic IIC T6 Gc
	⟨Ex⟩ II 3D Ex ic IIIC T80°C Dc
Certificate	EPS 12 ATEX 1 481 X
Standards	EN 60079-0:2012
	EN 60079-11:2012
IECEx	
Type	**MC 75Ax**ex**-NI and MC 75A6**ex **HF-NI**
	B7-A273-…S/W…..
Ex protection	Ex ic IIC T6 Gc
	Ex ic IIIC T80°C Dc
Certificate	IECEx EPS 12.0029X
Standards	IEC 60079-0:2011 Edition 6
	IEC 60079-11:2011 Edition 6
ATEX and IECEx Directives	ATEX 94/9/EC
	EMV 2004/108/EC
	R&TTE 1999/5/EC
	RoHS 2002/95/EC
Product labelling	CE 0168
UL Division 2	
Type	**MC 75Ax**ex**-NI**
	B7-A272-…S/W…..
Ex protection	Class I Division 2 Groups A, B, C and D
	Class II Division 2 Groups F and G
	Class III
Type	**MC 75A6**ex **HF-NI**
	B7-A271-64CS/WRRAAR00
Designation	Class I Division 2 Groups A, B, C and D
Certificate USA and Canada	E321557
Standards	ISA 12.12.01-2007
	UL 60950-1 1st edition
	C22.2 No. 213-M1987
	C22.2 No. 60950-1-03 1st edition
Further approvals	
China	CNEx12.1429X
South Africa	S-XPL/13.0306X

3.2   Other applicable standards

Electrical safety	
EN 60950-1:2006+A11:2009	Setting up of IT safety - Part 1. General requirements
IEC 60950-1:2005 Ed. 2.0	
EMC	
GSM Digital Cellular Radio	EN 301 489-1 V1.8.1, EN301 489-7 V1.3.1
UMTS Digital Cellular	EN 301 489-1 V1.8.1, EN 301 489-24 V1.4.1
Radio Wideband Systems	EN 301 489-1 V1.8.1, EN 301 489-17 V2.1.1
Short Range Devices (SRD)	EN 301 489-1 V1.8.1, EN 301 489-3 V1.4.1
IT Emissions	EN55022:2006 +A1:2007 (Class B)
Harmonic Current Emissions	EN 61000-3-2:2006 (Class A)
Voltage Fluctuation & Flicker	EN 61000-3-3:2008
Radio Frequency Devices	47 CFR Part 15, Subpart B, Class B
Digital Apparatus	ICES 003 Issue 4, Class B
Radio	
GSM Essential Requirements	EN 301 511: V9.0.2
GSM Conformance Specification	3GPP TS 51.010-1 v.4.9.0 (GSM 11.10-1)
UMTS Essential Requirements Spurious Emissions	EN 301 908-1 V3.2.1
UMTS Essential Requirements Transmitter / Receiver	EN 301 908-2 V3.2.1
UMTS RF	3GPP TS 34.121
UMTS Protocol	3GPP TS 34.123
Wideband 2.4 GHz Systems	EN 300 328 V1.7.1
Broadband Radio Access (5 GHz)	EN 301 893 V1.5.1
Short Range devices (1-40 GHz)	EN 300 440-2 V1.3.1
SAR	EN 50360:2001 (Max average 10g SAR 0.992 W/Kg)
	EN 50371:2002
	EN 62311:2008
	FCC 47CFR Part2; OET Bulletin 65c
	RSS 102 Issue 3
Laser Products	IEC Class 2 Laser Product
	EN 60825-1:2007
	IEC 60825-1:2007
	21CFR1040.10 Class IIa or II

3.3 Features

3.3.1 Performance features

CPU	PXA320 Processor with 806 MHz

Operating system
  MC 75A0^{ex}-NI
  MC 75A6^{ex}-NI, MC 75A8^{ex}-NI
	Windows Mobile 6.5
	Classic
	Professional

Memory	256 MB RAM; 1 GB Flash
Extension slot	Micro SD slot with SDHC support (up to 32 GB)
	Optionally extendable with Micro SD card: 1 GB Order number 17-C1Z0-0007 2 GB Order number 17-C1Z0-0008 4 GB Order number 17-28BE-F006/000A 8 GB Order number 17-28BE-F006/000B
Interfaces	RS232 USB

3.3.2 Physical features

Dimensions   **in mm/inch**
          WWAN:
          WLAN:
          RFID:
	Height x width x depth
	178 x 84 x 44 mm 7 x 3.3 x 1.7 inch
	152 x 84 x 44 mm 6 x 3.3 x 1.7 inch
	178 x 84 x 48 mm 7 x 3.3 x 1.9 inch

Weight   **including battery 1.5x**
          WWAN:
          WLAN:
          RFID:
	Depends on version and configuration
	approx. 423 g approx. 15 oz
	approx. 398 g approx. 14 oz
	approx. 467 g approx 16.5 oz

Display	Transflective 3.5"-VGA colour display 640 x 480 pixels
Touchscreen	Analogue-resistive glass touchscreen
Background lighting	LED technology
Network connections	Ethernet (via charge station); Full-Speed USB, Host or Client
Notification	Vibration function and LED
Keypad versions	Numerical, QWERTY
Audio	VoWWAN; VoWLAN, compatible with TEAM Express, Support of hardwired and wireless headsets (Bluetooth), mode for headset, earphones and hands-free set
Interactive sensor technology	Three-axes accelerometer for motion sensor application for dynamic screen orientation, power monitoring and recognition of free fall

3.3.3   User environment

Operating temperature	-10 °C to +50 °C	+14 °F to +122 °F
Operating temperature during charging	0 °C to +40 °C	+32 °F to +104 °F
Storage temperature (without battery)	-40 °C to +70 °C	-40 °F to +158 °F
Air humidity	5 % to 95 % (non-condensing)	
Class of protection (EN 60529)	IP 54	

3.3.4   Application development

PSDK (Platform Software Development Kit) and EMDK (Enterprise Mobility Developer Kit) is available via the ZEBRA Website under SUPPORT & DOWNLOADS.	
Available for	− C − Java − .Net
Browser support:	
Pocket Browser or "RhoMobile Suite" for application development is available via the ZEBRA Website under PRODUCTS / SOFTWARE / RhoMobile.	
RhoMobile Suite Toolkit consists of: − RhoMobile Suite − RhoConnect − RhoElements − RhoStudio	Technology-independent applications are prepared using this toolkit. Device type, operating system and screen size no longer play a role. RhoMobile applications run simply on all popular mobile devices used in your company.
Further applications are available from ZEBRA, e.g.	**HF RFID API** − with demo for application development. **Rem Capture** − for the processing of registration files. **Application Launcher** − for the classification of applications in categories and access regulation for individual applications or operating system. **Data Wedge** − Barcodes in applications can be read such as Excel or Word using. **AppCenter** − to define access regulations for the applications.

3.3.5 Voice and data transmission Wireless LAN

WLAN radio module	
Radio standard	Tri Mode IEEE 802.11a/b/g
Data rate	IEEE802.11a: up to 54 Mbit/sec. IEEE802.11b: up to 11 Mbit/sec. IEEE802.11g: up to 54 Mbit/sec.
Frequency range (country-dependent)	IEEE802.11a: 5 GHz IEEE802.11b: 2.4 GHz IEEE802.11g 2.4 GHz

Operating channels
         IEEE802.11a
         IEEE802.11b/g
	Channel 8 - 165 5040 MHz - 5825 MHz
	Channel 1 - 13 2412 MHz - 2472 MHz
	Channel 14 2484 MHz Japan only
	
	The actual operating channels and frequencies are subject to the applicable rules and the certification authorities

Safety	WPA2, WEP (40 or 128 Bit), TKIP, TLS, TTLS (MS-CHAP), TTLS (MS-CHAP Ver. 2), TTLS (CHAP), TTLS-MD5, TTLS PAP, PEAP TLS, PEAP (MS-CHAP v2), AES, LEAP, CCXv4 Certification, FIPS-140-2 Certification
Spread procedure	DSSS (Direct Sequence Spread Spectrum) and Orthogonal Frequency Division Multiplexing
Voice communication	Voice-over-IP integrated and prepared (P2P, PBX, PTT), WLAN according to IEEE 802.11 a/b/g, WI-Fi™ Certification and DSSS
Antenna	internal

3.3.6 Voice and data transmission Wireless WAN

WWAN radio module	
GSM optional	HSDPA (850, 900, 1800, 1900 and 2100 MHz)
CDMA optional	EVDO Rev. A (800 and 1900 MHz); Verizon or Spirit
GPS (only MC 75A6^{ex}-NI and MC 75A8^{ex}-NI)	Integrated independent or Assisted-GPS (A-GPS) via SUPL, chip set SiRFstarIII GSC 3f/LP
Antenna	external

3.3.7 Voice and data transmission Wireless PAN

Bluetooth	Class II, Version 2.1 with EDR
Maximum data rate	Up to 2.1 Mbit/s
Antenna	Internal chip antenna

3.3.8 RFID HF

RFID Radio	13.56 MHz
Read range	0 to 5 cm (0 to 1.96 inch)
SAM card	ISO 7816 in line with encryption
Supported RFID types	**ISO 14443-A:** MIFARE™ (Classic, UltraLight,DESFire) **ISO 14443-B:** Calypso® (GTML, GTML2, CD21, CD Light, CDS3, CD97, CD97BX, TanGO, Celego-Citi, CT2000), ASK CTS256 and CTS512, STMicroelectronics SRI FeliCa® **ISO15693:** NXP I.Code SLI, TI Tag-it

3.3.8.1 Colour camera (optional)

Resolution	3.2 megapixel
Exposure	Flash (can be controlled by user)
Object lens	Autofocus

3.3.8.2 SE950 1D Standard Range Scan Engine

Range at 100 % UPC-A	approx. 60 cm
Resolution	4 mil minimum width
Roll	± 35° from the vertical
Pitch angle	± 65° from the starting position
Skew tolerance	± 50° from the starting position
Ambient light	107.640 lux
Scan rate	104 (± 12) scans/sec. (bi-directional)
Scan angle	47° ± 3 ° standard 35° ± 3° reduced
Laser power	1.0 mW nominal value

3.3.8.3 SE4500 1D/2D Imager Engine

Reader range	Approx. 6 cm to 50 cm approx. 2.3 inch to 19 inch
Focus distance	From centre of the scanner window SR --- 19 cm
Resolution	752 x 480 Pixel HxV (grey phase)
Roll	360°
Pitch angle	± 60° from the starting position
Skew tolerance	± 60° from the starting position
Ambient light	96.900 lux
Aiming element (VLD)	655 Nm ± 10 nm
Illumination element (LED)	625 Nm ± 5 nm LEDs (2x)
Field of view	Horizontal 40 ° Vertical 25 °

3.3.9 Decodable barcode types

SE950 1D-Standard Range Scan Engine		SE4400 1D/2D Imager Engine	
		Only decodable by 2D Imager	
1D Codes		2D Codes	
Code 11	Interleaved 2 aus 5	Aztec	Micro PDF-417
Code 39	MSI	Australian 4-state	Micro QR
Code 93	RSS-14	Canadian 4-state	Maxi Code
Code 128	RSS-Limited	Composite AB	PDF-417
Codabar	RSS-Expanded	Composite C	QR Code
Coupon code	Trioptic 39	Data Matrix	TLC39
Chinese 2 from 5	UPCA	Dutch Kix	UK 4-state
Discreet 2 from 5	UPCE	Japanese 4-state	US Planet
EAN-8	UPC/EAN add-ons	Macro PDF-417	US Postnet
EAN-13	Webcode	(Macro) Micro PDF-417	USPS 4-state (US4CB)

3.4 Battery

Battery	(only rechargeable in safe range)
− Type B7-A2Z0-0007	Lithium-ion battery 3.7 V/3600 mAh
− Type B7-A2Z0-0008	Lithium-ion battery 3.7 V/4800 mAh
Operating temperature	
− During charging	0 °C to +40 °C +32 °F to 104 °F
− During discharging	-10 °C to +50 °C +14 °F to 122 °F
Storage temperature	-20 °C to +50 °C -4 °F to 122 °F
Relative air humidity	20 % - 95 % (non-condensing)
Backup battery	Ni-MH battery 2.4 V/15 mAh (rechargeable) Integrated in the device and only replaceable in the factory.
Battery performance	**depends on the device settings**
Standby time	approx. 150 hours
Talk time	approx. 5 hours

3.5 External interfaces

Restrictions:

− The 16-pole data interface should only be used outside the potentially explosive atmosphere and exclusively with the devices stated by the manufacturer!

− The headset connection should only be used outside the potentially explosive atmosphere and exclusively with the devices stated by the manufacturer!

PIN1

PIN	Description		PIN	Description
1	Power GND		9	RS232_TxD
2	Cradle_Detect		10	RS232_RxD
3	RS232_DCD/Trigger		11	RS232_RTS
4	USB_D-		12	RS232_CTS
5	USB_D+		13	RS232_DTR
6	USB_GND		14	RS232_DSR
7	USB_Vbus		15	External_5.0V_Out
8	USB_ID		16	External_DC_In_5.4V

3.6 ATEX product labelling

A Labelling plate ATEX	Labelling plate UL
II 3 G Ex ic IIC T6 Gc / II 3 D Ex ic IIIC T80°C Dc / EPS 12 ATEX 1 481 X Ambient Temp: / Ex ic IIC T6 Gc -10°C to +50°C / Ex ic IIIC T80°C Dc / IECEx EPS 12.0029 X	LISTED 39MG / Class I, II, III Div 2 / Groups A, B, C, D, F and G T6 / E.D.P.: EQ. For use in haz. loc. / AMB. is -10°C to +50°C / Use only battery P/N B7-A2Z0-0007 or -0008 by BARTEC
B Warning: laser	
LASER LIGHT - DO NOT STARE INTO BEAM / CLASS 2 LASER PRODUCT / LASERLICHT - NICHT IN DEN STRAHL BLICKEN / LASER KLASSE 2 / LUMIÈRE LASER - NE PAS REGARDER DANS LE / FAISCEAU APPAREIL A LASER DE CLASSE 2 / 630-680 nM, 1 mW / **BARTEC**	See also Chapter 3.7
C Type plate ATEX and UL	**D** Warning: battery for ATEX
BARTEC 97980 Bad Mergentheim, Germany / P/N: / S/N: / IMEI: / Made in Philippines/Assembled in Germany / I/P: 5,4 V/3 A / See Operation Manual for special conditions! / ICES/NMB: / FCC ID: / IC: MFD: / Complies with 21CFR1040. 10 and 1040. 11 except for / deviations pursuant to Laser Notice No. 50, dated July / 26, 2001, and EN60825-1:1994 + A1:2002 + A2:2001, / IEC60825-1: 1993 + A1:1997 + A2:2001	WARNING: CHANGE AND CHARGE BATT. OR USE THE / HEADPH. PORT ONLY IN AN AREA KNOWN TO BE NON-HAZ. / **Not for UL**

3.7 Laser labels

In compliance with IEC 60825 and EN 60825, Clause 5 the following information is provided:

LASER LIGHT - DO NOT STARE INTO BEAM
CLASS 2 LASER PRODUCT
LASERLICHT - NICHT IN DEN STRAHL BLICKEN
LASER KLASSE 2
LUMIERE LASER - NE PAS REGARDER DANS LE
FAISCEAU APPAREIL À LASER SE CLASSE 2
630-680nm, 1mW

CAUTION - CLASS 3R LASER LIGHTWHEN
OPEN, AVOID DIRECT EYE EXPOSURE.
VORSICHT - LASERLICHT KLASSE 3R.
WENN ABDECKUNG GEÖFFNET DIREKTE
BESTRAHLUNG DER AUGEN VERMEID EN.
ATTENTION - LUMIÉRE LASER DE
CLASSE 3R EN CAS D'OUVERTURE.
EXPOSITION DANGEREUSE AU FAISCEAU

Complies with 21CFR1040, 10 and 1040. 11 except for
deviations pursuant to Laser Notice No. 50, dated July
26, 2001, and EN60825-1:1994+A1:2002+A2:2001,
IEC60825-1:1993+A1:1997+A22001

DEUTSCH	
KLASSE 1 KLASSE 1 LASER PRODUKT KLASSE 2 LASERLICHT NICHT IN DEN LASERSTRAHL SEHEN KLASSE 2 LASER PRODUKT	
ENGLISH CLASS 1 CLASS 1 LASER PRODUCT CLASS 2 LASER LIGHT DO NOT STARE INTO BEAM CLASS 2 LASER PRODUCT	**FRENCH / FRANÇAIS** CLASSE 1 PRODUIT LASER DE CLASSE 1 CLASSE 2 LUMIERE LASER NE PAS REGARDER LE RAYON FIXEMENT PRODUIT LASER DE CLASSE 2
ITALIAN / ITALIANO CLASSE 1 PRODOTTO AL LASER DI CLASSE 1 CLASSE 2 LUCE LASER NON FISSARE IL RAGGIOPRODOTTO AL LASER DI CLASSE 2	**PORTUGUESE / PORTUGUÊS** CLASSE 1 PRODUTO LASER DA CLASSE 1 CLASSE 2 LUZ DE LASER NÃO FIXAR O RAIO LUMINOSO PRODUTO LASER DA CLASSE 2
DUTCH / NEDERLANDS KLASSE 1 KLASSE-1 LASERPRODUKT KLASSE 2 LASERLICHT NIET IN STRAAL STAREN KLASSE-2 LASERPRODUKT	**DANISH / DANSK** KLASSE 1 KLASSE 1 LASERPRODUKT KLASSE 2 LASERLYF SE IKKE IND I STRÅLEN KLASSE 2 LASERPRODUKT
NORWEGIAN / NORSK KLASSE 1 LASERPRODUKT, KLASSE 1 KLASSE 2 LASERLYS IKKE STIRR INN I LYSSTRÅLEN LASERPRODUKT, KLASSE 2	**FINNISH / SUOMI** LUOKKA 1 LUOKKA 1 LASERTUOTE LUOKKA 2 LASERVALO ÄLÄ TUIJOTA SÄDETTÄ LUOKKA 2 LASERTUOTE

4. Transport and Storage

4.1 Transport

ⓘ Report any transport damage or incomplete deliveries immediately after receipt in writing to the forwarding company and BARTEC GmbH.

Any damage caused through incorrect storage shall not be covered by the warranty provisions of BARTEC GmbH.

4.2 Storage

ATTENTION
Property damage through incorrect storage!
▶ Observe storage temperatures.
▶ Keep humidity away from the Mobile Computers.

Additional information on the batteries

The batteries of BARTEC (Type B7-A2Z0-….) are developed and manufactured in accordance with the highest industrial standards. The operating time or storage period of a battery is restricted, however. The actual life of a battery is influenced by different factors, e.g. hot, cold, rough operating environment and falling from a great height. If a battery is kept longer than six months, the performance may be impaired on a permanent basis. Keep the batteries in a dry, cool place. For longer periods of storage, remove the batteries from the device to prevent self-discharge, rusting of metallic parts and the escape of electrolyte.

Batteries kept for the duration of 6 months or longer should be charged and then discharged again at least every 3 months. If electrolyte has escaped, do not touch the areas affected and dispose of the batteries as prescribed. Replace the battery if the operating time has shortened considerably.

The standard warranty period for all BARTEC batteries is 6 months, whereby it is irrelevant whether the battery was acquired separately or was contained in the scope of delivery of the MC 75A^{ex}-NI.

5. Commissioning

Before you assemble the device, make sure that all components and documents exist.

Scope of delivery: 1 x MC 75Ax^ex-NI
1 x Lithium-ion battery
1 x Battery cover
1 x Screen protector
1 x Stylus
1 x User Manual

Optional: Authorised accessories from BARTEC:

 – Micro SD card
 – Replacement stylus
 – Battery 1.5x and 2.5x
 – Battery cover 1.5x and 2.5x
 – Charging station
 – Cradle
 – Screen protector

Accessories:

 – SIM card
 – SAM card (for MC 75A6^ex HF-NI only)

⚠ DANGER

Avoid electrostatic charging in potentially explosive atmosphere.
Risk of fatal injury in an explosive atmosphere!

▶   Do not dry wipe or clean the devices.

▶   Wear suitable clothing and shoes.

▶   Do not use rubber gloves or similar.

⚠ DANGER

Unintended use endangers explosion protection.
Risk of fatal injury in an explosive atmosphere!

▶   Do not make any changes to the Mobile Computer.

▶   In the case of functional disturbances or damage to the enclosure, the device should be removed immediately from the potentially explosive atmosphere to a safe place. Remove battery to decommission the device!

▶   Do not use any battery replicas or batteries from other manufacturers.

5.1   Requirements in potentially explosive atmosphere

Mobile Computer

1. The Mobile Computer may not be opened.
2. Do not use, swap or replace any non-specified components.
3. Do not retrofit any components to the internal plugs or slots.
4. Protect the Mobile Computer from impact!
5. Do not expose the Mobile Computer to caustic/aggressive liquids, vapours, mists!
6. Avoid the impact of moisture outside the specifications.
7. Avoid thermal impact outside the specified temperature range.
8. Use the 16-pole data interface only outside the potentially explosive atmosphere and exclusively with the devices specified by the manufacturer!
9. Use the headset connection only outside the potentially explosive atmosphere and exclusively with the devices specified by the manufacturer!

Battery

1. The battery may not be opened.
2. Only charge the battery outside the potentially explosive atmosphere.
3. Only use the battery for the purpose listed in this User Manual. Is only suitable for the Mobile Computer MC 75Ax^ex-NI (Type B7-A27.-..../........).
4. There is a danger of burning if used incorrectly. Do not expose the battery to temperatures of more than +50 °C (122 °F).
5. Battery acid may escape from the cells and cause burning in the case of damage.
6. Defective batteries must be disposed of immediately, whereby the provisions on battery disposal applicable in the respective region must be observed.
7. The battery may explode if it catches fire!
8. Do not short circuit the battery!

Accessories

1. Only install or replace accessories outside the potentially explosive atmosphere.
2. Use accessories exclusively which have been tested or certified by BARTEC for this purpose.
3. The end user can replace the Micro SD card, SIM card or SAM card (only for MC 75A6^ex HF-NI) himself.
4. The end user cannot replace the keypad himself. The devices are adjusted to the selected keypad version.
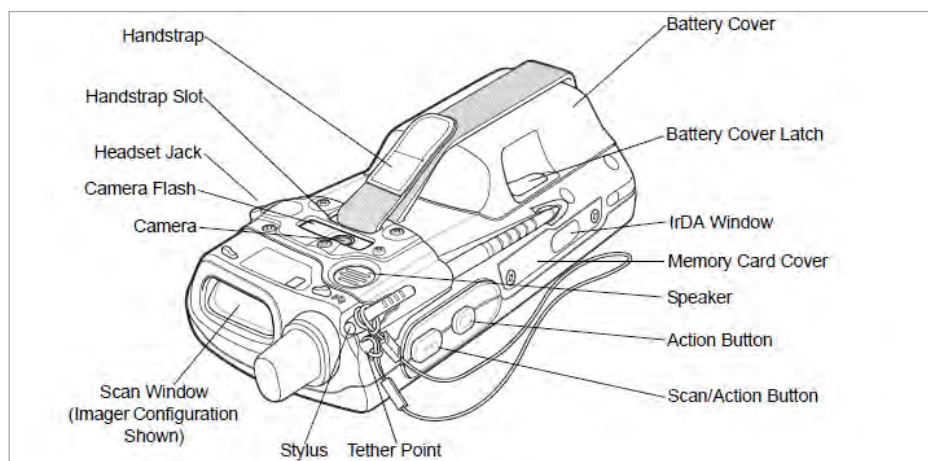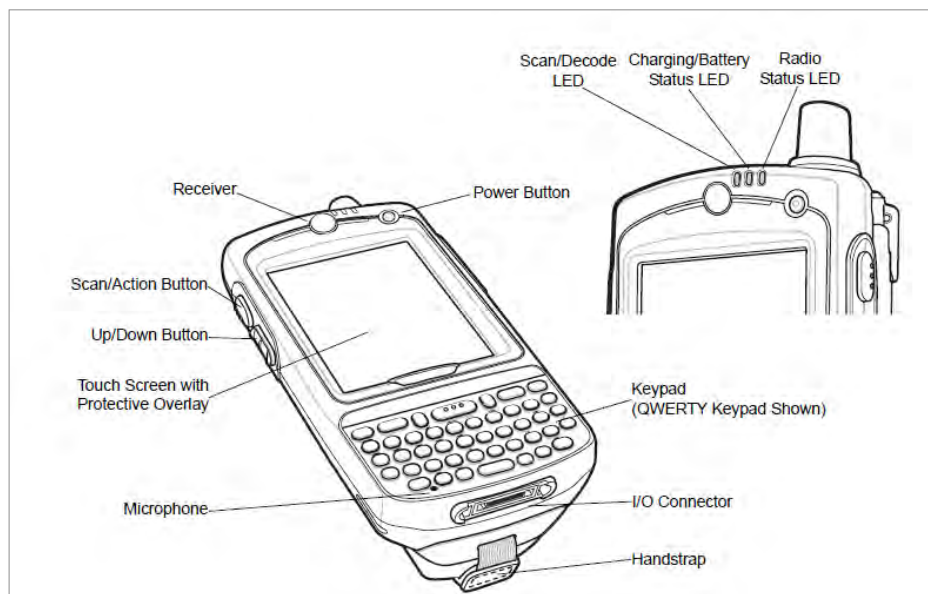
5.2   First steps

➡   Unpack the Mobile Computer.

➡   Insert the battery into the Mobile Computer.

➡   Charge the battery on the cradle.

➡   Switch on the Mobile Computer.

Optional:

➡   Charge the battery in a charger.

➡   Insert a Micro SD card.

➡   Insert a SIM card (only possible with MC 75A6^{ex}-NI).

➡   Insert a SAM card (only possible with MC75A6^{ex} HF-NI).

The individual steps are explained on the following pages.

5.3   Structure

5.4   Handling accessories

⚠ DANGER

Non-certified accessories endanger explosion protection.
Risk of fatal injury in an explosive atmosphere!

▶   Only use original accessories from BARTEC / ZEBRA.

Only permitted outside the potentially explosive atmosphere:

▶   Charge battery.

▶   Insert/replace SIM card (MC75A6ex-NI only).

▶   Insert/replace Micro SD card.

▶   Insert/replace SAM card (MC75Axex HF-NI only).

▶   Remove/replace screen protector.

ⓘ   Further information is also provided by the ZEBRA documentation.
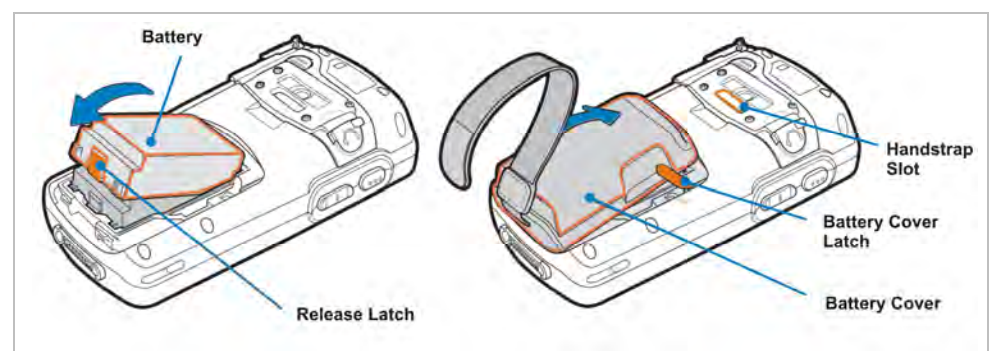
5.4.1 Insert battery

Depending on configuration, the MC 75Ax^{ex}-NI is supplied with a 3600 mAh or 4800 mAh battery.

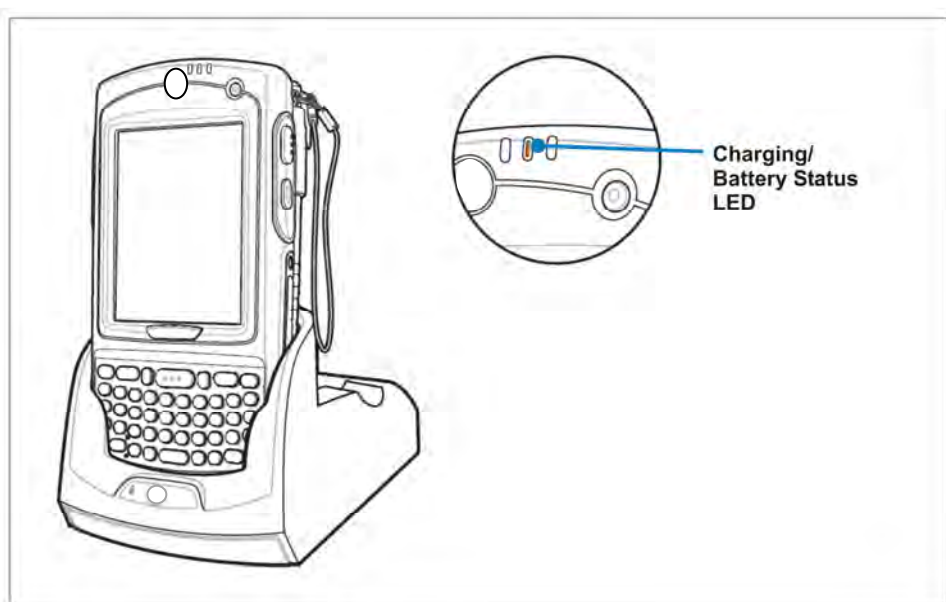| Type	Order number	Charge time
Battery 1.5x Lithium-ion battery 3.7 V /3800 mAh Accompanying battery cover: ATEX UL	B7-A2Z0-0007 03-9860-0082 03-9860-0072	Less than 8 hours
Battery 2.5x Lithium-ion battery 3.7 V /4800 mAh Accompanying battery cover: ATEX UL	B7-A2Z0-0008 03-9860-0083 03-9860-0081	Less than 8 hours

Work steps:

1. Only charge, install or replace the battery outside the potentially explosive atmosphere.
2. Use batteries exclusively which have been tested or certified by BARTEC for this purpose.
3. Insert the battery, top first, into the battery compartment on the rear side of the Mobile Computers MC 75Ax^{ex}-NI.
4. Ensure that the charge contacts of the battery agree with the charge contacts in the battery compartment.
5. Press the battery down into the battery compartment until the battery release latch snaps into place.
6. With the battery cover latches open, insert the cover, bottom first, then press down on the top of the cover.
7. Close the battery cover latches on either side of the battery cover.
8. Feed the handstrap through the slot provided for it and pull the handstrap fastener downwards.
9. Secure the handstrap.

5.4.2   Charge battery

1. Place the Mobile Computer with battery inserted into the cradle.
2. Connect the charge cable of the cradle with a suitable power ssource.
3. The charge process starts automatically and is shown by an orange flashing light at the LED. The battery charges completely in less than 8 hours.
4. The charge process of the battery is completed once the LED permanently lights up orange.

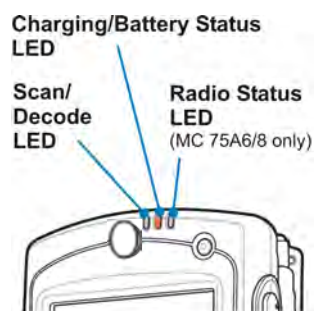|	
Single Slot USB Cradle Set (without USB cable and appliance coupler)	03-9015-0015
4-slot cradle set (without applicance coupler)	03-9015-0014

The charge process of MC 75Ax^ex-NI is activated and deactivated at short time intervals to keep battery temperature within the admissible range.

The MC 75Ax^ex-NI shows by LED when the charge process has been deactivated due to high temperature.

Further information is provided by the ZEBRA documentation.

Charging/Battery Status
LED

Scan/
Decode
LED

Radio Status
LED
(MC 75A6/8 only)

LED charge status	Meaning
Slow orange flashing light (1 flash signal every 2 sec.)	The MC 75Ax^ex^-NI is being charged.
Orange coloured permanent light	The charge process has been completed. <u>N.B.:</u> When the battery is inserted into the MC 75Ax^ex^-NI for the first time, the yellow LED display lights up once if the charge status of the battery is too low or the battery is not inserted correctly.
Fast orange flashing light (2 flash signals every sec.)	Charge error! <u>Possible causes:</u> – The temperature is too high or too low. – The charge process takes too long without having been completed (usually 8 hours).
Off	No charge process – The MC 75Ax^ex^-NI is not charging. – The MC 75Ax^ex^-NI is not inserted correctly in the cradle. – The MC 75Ax^ex^-NI is not connected with any power source. – The charger/cradle is not powered.
Individual orange flash signal (if power button has been pressed)	The battery is discharged.
Orange flashing light (if power button has been pressed)	The battery is overheated.

ⓘ   The MC 75Ax^ex^-NI is equipped with a backup battery which is automatically charged if the main battery is completely charged.

When the MC 75Ax^ex^-NI is put into operation for the first time, the backup battery needs approximately 36 hours to be fully charged. This is also the case even if the main battery has been removed for several hours, causing the backup battery to discharge.

The backup battery ensures that the data in the main memory are maintained for at least 15 minutes after the main battery of the MC 75Ax^ex^-NI has been removed. When the MC 75Ax^ex^-NI reaches a low state of charge, the data are maintained in the main memory for at least 48 hours as a result of the combination of main battery and backup battery.
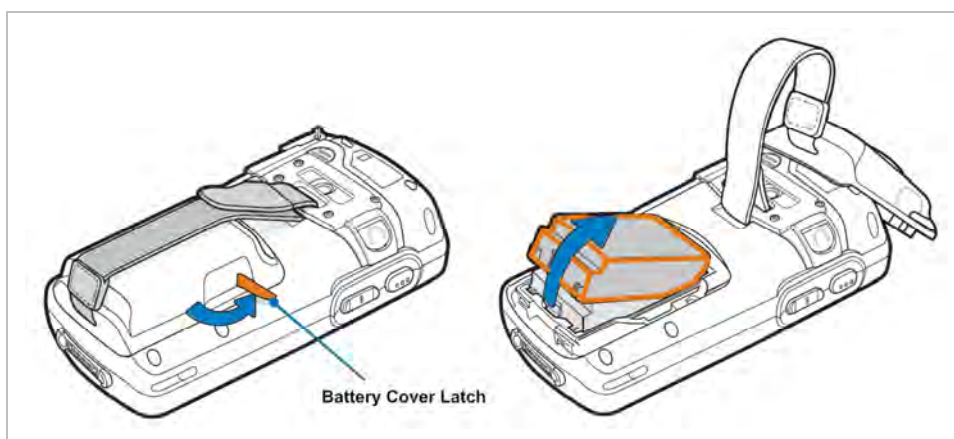
ⓘ   Further information is provided in the ZEBRA documentation.

5.4.3   Remove battery
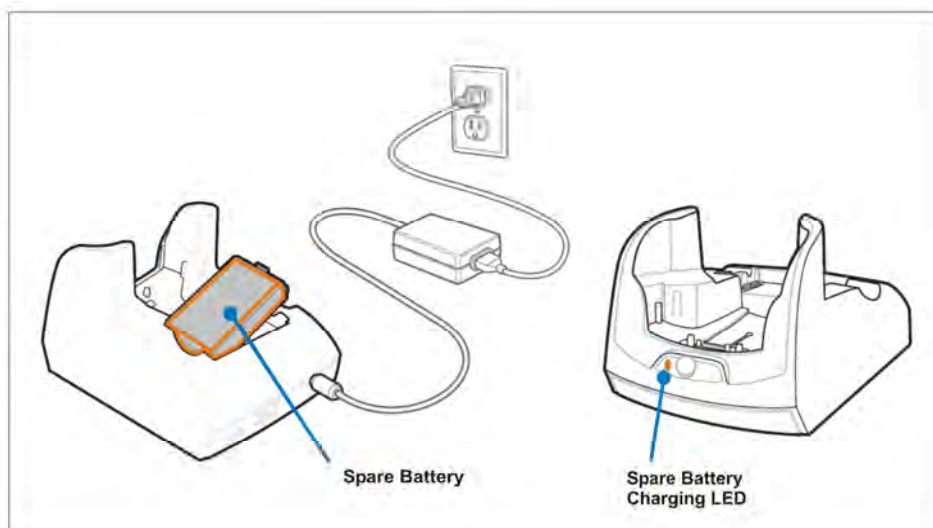
Work steps

1.   Only remove the battery outside the potentially explosive atmosphere .
2.   Press the red "ON/OFF" button to switch off the Mobile Computer.
3.   Wait until the red status LED lights up and goes out again.
4.   Press the battery release latch on the buttom of the battery to unlook.
5.   Lift the top of the battery cover and remove the cover.
6.   Press the battery down into the battery compartment until the battery release latch snaps into place.
7.   Remove the battery.

Battery Cover Latch

5.4.4   Charge the battery in charger

Work steps

1.   Only charge the battery outside the potentially explosive atmosphere.
2.   Insert the battery into the single slot cradle.
3.   Charging starts automatically when connected to a power source.
4.   The battery is usually completely charged in less than 8 hours.
5.   Charging for battery is completed when the LED lights up permanently.

Spare Battery

Spare Battery
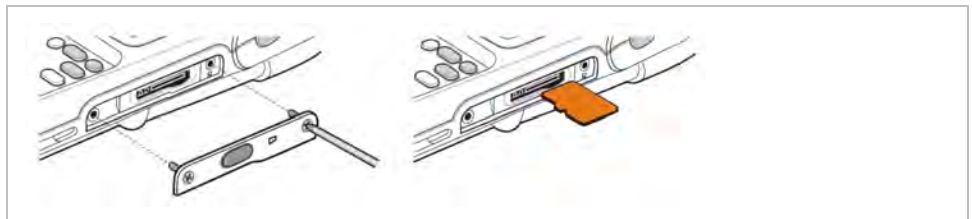Charging LED

5.4.5 Insert Micro SD card

ATTENTION
Damage to the SD card through electrostatic discharges!
▶   Use an antistatic base.
▶   Ensure that the operator is correctly earthed.

Work steps

1. Only install or replace the Micro SD card outside the potentially explosive atmosphere.
2. Only use Micro SD cards which have been tested and certified by BARTEC for this purpose.
3. Press the red "ON/OFF" button to switch off the Mobile Computer.
4. Unlook the two screws of the side memory card cover.
5. Ensure that the card contacts are facing up.
6. Insert the Micro SD card until you feel a click.
7. Tigthen both screws of the memory card cover.
8. Press the red "ON/OFF" button on the Mobile Computer.
9. In the File Explorer or settings of the memory, check that the Micro SD card has been recognised.
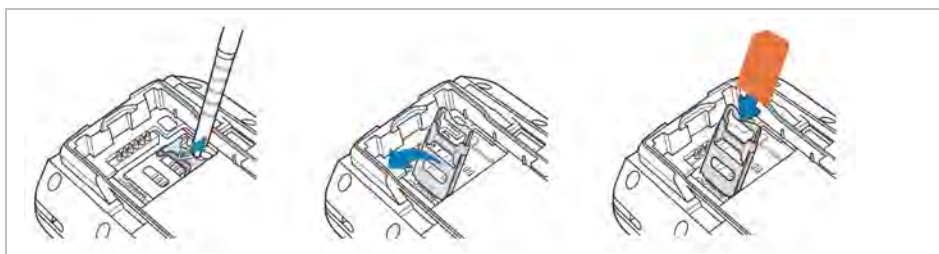
5.4.6 Insert SIM card (MC 75A6^ex-NI only)

ⓘ The use of SIM cards can result in additional costs, which must be borne by the purchaser (customer) of the devices. The seller will not cover any additional costs incurred when these devices are used. Nor will the seller pay any other costs incurred when this device is used in one of the customer´s applications.

Work steps

ⓘ The slot for the SIM card is located beneath the battery.

1. Only install or replace the SIM card outside the potentially explosive atmosphere.
2. Press the red "ON/OFF" button to switch off the Mobile Computer.
3. Remove the battery.
4. Slide the SIM card cover to the left to unlook.
5. Lift the SIM card cover using the stylus tip.
6. Insert the SIM card with the cut edge of the card facing out and the contacts facing down.
7. Lower the SIM card cover and using the stylus tip, slide in place.
8. Insert the battery.
9. Close the battery cover.

After installing the MC 75Ax^ex-NI for the first time or after replacing the SIM card:

1. ress the red "ON/OFF" button to switch off the Mobile Computer.
2. On the Today screen, tap the Antenna icon.
3. Select **Wireless Manager** in the dialog box and check that the **phone** function is activated.
4. Press the red "ON/OFF" button on the MC 75Ax^ex-NI to set the MC 75Ax^ex-NI to standby mode.
5. Perform a warm boot.
6. Make a call to verify cellular connection.

ⓘ The ZEBRA User Manual on the Integration of the Mobile Computers of MC 75Ax (MC75A User Guide) contains detailed information on WWAN activation and the settings.

5.4.7 Remove/replace screen protector

The screen protector protects the touchscreen and improves the user friendliness of the device. With its relatively hard surface, the screen protector offers a mechanical protection against scratches for example and reduces disturbing light reflections.
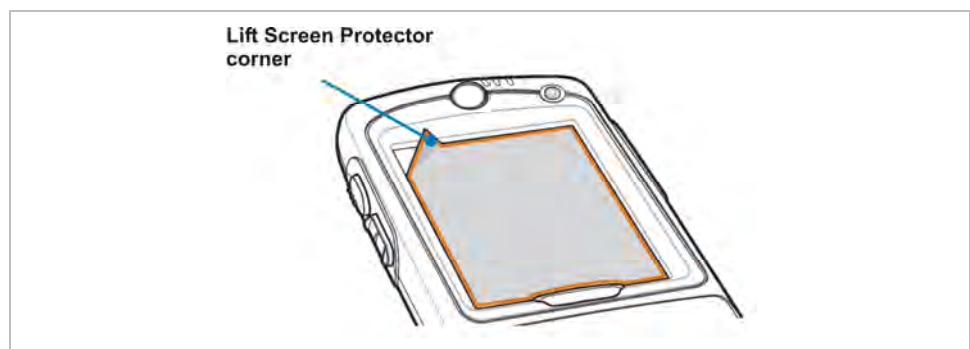
ATTENTION
Incorrect handling may cause damage to property!
▶ Use a screen protector so as not to impair the device warranty.
▶ Only use screen protector (Type B7-A2Z0-0016) from BARTEC.
▶ Observe the installation instructions for the screen protector.
▶ Do not use any sharp objects to remove the screen protector!

Work steps

1. Only remove or replace the screen protector outside the potentially explosive atmosphere.
2. Lift a corner of the screen protector and remove it from the display.
3. Attach the screen protector in accordance with the "Screen protector installation instructions".

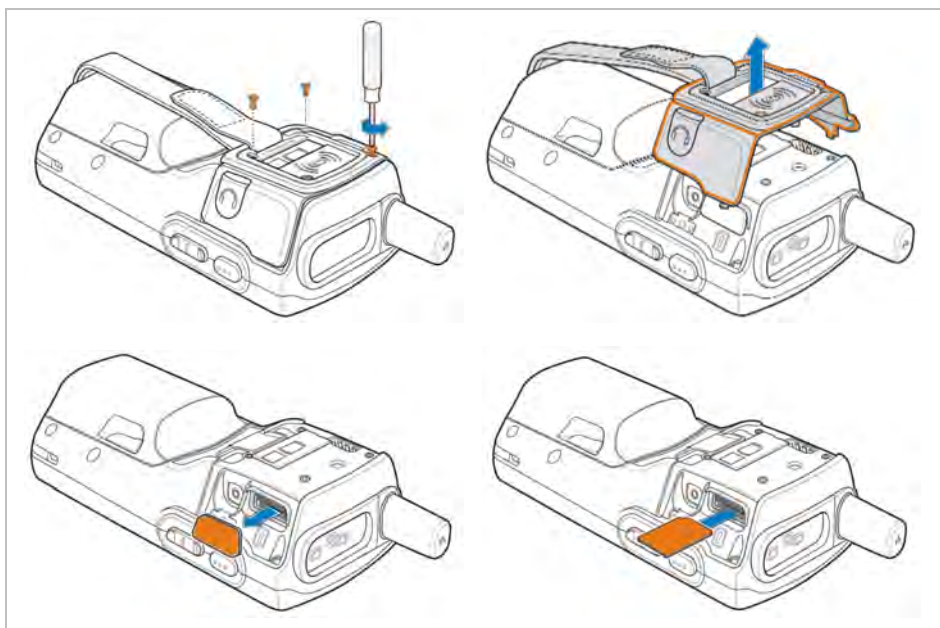### 5.4.8   Insert SAM card (MC 75A6^ex HF-NI only)

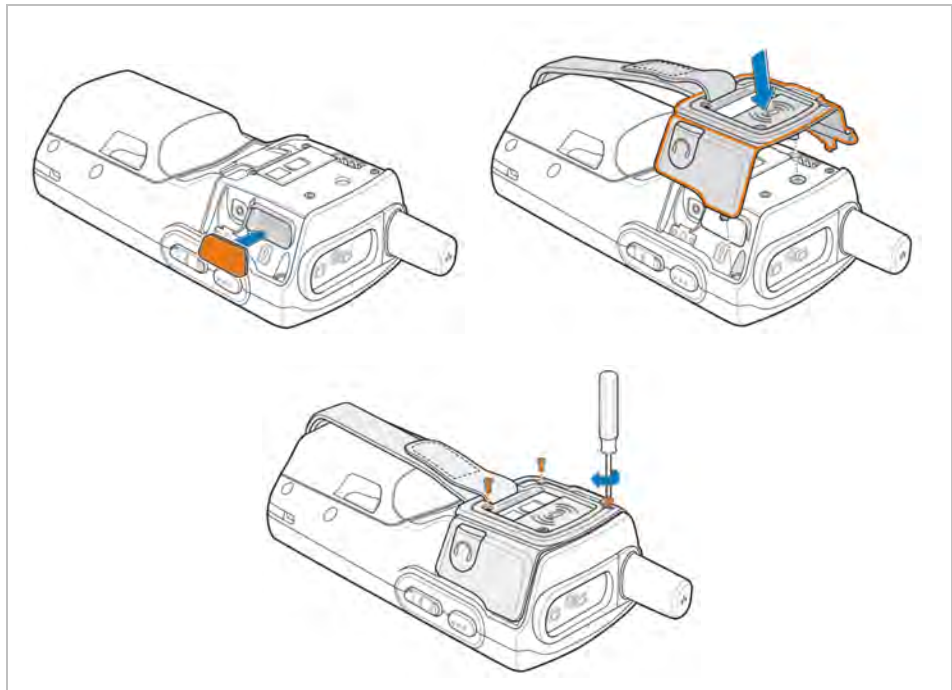> ℹ   The provider's documentation has further information on SAM cards.

ATTENTION

Damage to the SD card through electrostatic discharges!

▶   Use an antistatic base.

▶   Ensure that the operator is correctly earthed.

Work steps

1.   Only insert the SAM card outside the potentially explosive atmosphere.
2.   Only use SAM cards which have been specified by ZEBRA for this purpose.
3.   Press the red "ON/OFF" button to switch off the Mobile Computer.
4.   Remove the four screws of the cover plate/RFID antenna antenna using a torx (T5) screwdriver.
5.   Lift RFID anmtenna from the reverse side of the enclosure and remove.
6.   Open the cover of the SAM card.
7.   Insert the SAM card into the opening with the contacts facing down.
8.   Close the cover of the SAM card.
9.   Click-in the RFID antenna on the reverse side of the enclosure.
10.   Tighten the four screws using a torx (T5) screwdriver.
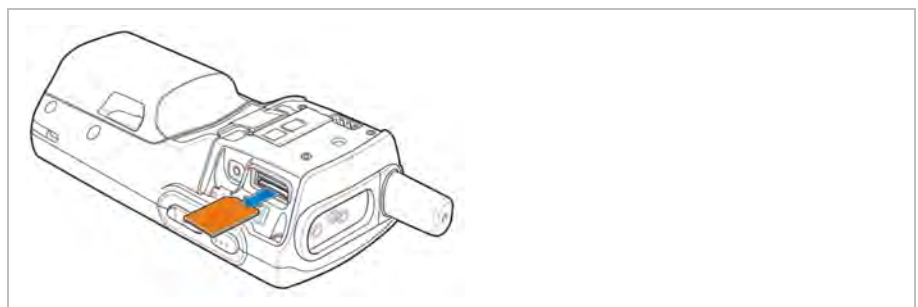11.   Perform a warm boot.

5.4.9 Remove SAM card (MC 75A6^ex^HF-NI only)

Work steps

1. Only remove the SAM card outside the potentially explosive atmosphere.
2. Press the red "ON/OFF" button to switch off the Mobile Computer.
3. Remove the four screws of the cover plate/RFID antenna using a torx (T5) screwdriver.
4. Lift RFID antenna from the reverse side of the enclosure and remove.
5. Open the cover of the SAM card and remove the SAM card.
6. Close the cover of the SAM card.
7. Click-in the RFID antenna on the reverse side of the enclosure.
8. Tighten the four screws using a torx (T5) screwdriver.
9. Perform warm boot.

5.5 Connection to a PC

The MC 75Ax^ex-NI series is supplied with the Microsoft WM 6.5 or higher operating system. Microsoft provides software free of charge for connection to a PC for synchronisation, installation and data exchange.

5.5.1 Active Sync

It is recommended to install ActiveSync (Version 4.5 or higher) on the host computer for communication with different computers installed under Windows XP or earlier operating systems.

ActiveSync synchronises the information from the Mobile Computer with the host computer. Changes made on the Mobile Computer or the host computer exist on both devices after synchronisation.

ActiveSync is available for download as freeware at **www.microsoft.com**.

Supporting operating system: Windows XP or earlier operating systems

More information on ActiveSync is available in the ZEBRA Integration Manual or on the Microsoft website.

5.5.2 Windows Mobile Device Center

It is recommended to install the Windows Mobile Device Center on the host computer for the communication with different host computers installed under Windows Vista, Windows 7 or Windows 8.

The Windows Mobile Device Center synchronises the data from the Mobile Computer with the host computer. Changes made on the Mobile Computer or the host computer exist on both devices after synchronisation.

The Windows Mobile Device Center is available for download as freeware at **www.microsoft.com**.

Supporting operating systems: Windows Vista, Windows 7 or Windows 8

More information on Windows Mobile Device Center is available in the ZEBRA Integration Manual or on the Microsoft website.

6. Operation

The operator using an electric system in a potentially explosive environment must keep the accompanying operation equipment in a good condition, operate and monitor it correctly and conduct the requisite services and repairs. Before commissioning the devices, it must be checked that all components and documents are available.

6.1 Final inspection

The following aspects must be checked before putting the device into operation:

▶ Is there any damage to the display, scanner window or enclosure?

▶ Is the battery used certified?

▶ Is the battery compartment cover closed?

▶ Does the screen protector (if used) have the requisite certification?

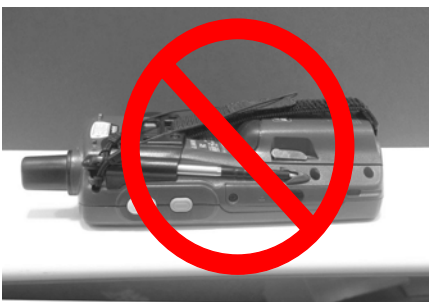▶ Is the Micro SD card specified for the MC 75Ax^ex^-NI?

6.2 Handling

Optimum standby position

Right:

The Mobile Computer is protected from damage.

Wrong:

The Mobile Computer can be damaged by objects on the surface or may fall down.

6.3 Care and cleaning

We recommend that the devices be cleaned regularly depending on use and also treated with care to ensure smooth and trouble-free operation.

6.3.1 Care

	Recommendation
Display	– Only use with supplied stylus for the touchscreen
	– Use screen protector
	– Use a soft cloth to clean and do not use aggressive cleaners
Enclosure	– Protect device from impacts
	– Do not expose to extreme load, e.g. strong knocks and falling from great heights
Environment	– Do not expose to extreme temperatures and
	– Do not leave in dirty, moist or wet environment
Battery	– Change regularly
	– Discharge and charge regularly (every 3 months)

6.3.2 Cleaning

⚠ **DANGER**

Risk of fatal injury in an explosive atmosphere!

▶ Only clean the devices and the accessories outside the potentially explosive atmosphere.

ATTENTION

Devices and accessories can be destroyed if handled incorrectly.

The following precautionary measures should be taken for your own safety and to ensure the operational safety of the device:

▶ Generally separate the charger from the power supply.

▶ Only clean the cradle contacts if the battery has been removed.

▶ There should be no residue, e.g. fluff on the contacts.

▶ There should be no moisture residue on the contacts.

▶ Heed the safety precautions when drying with compressed air.

6.3.3 Suitable materials

- Alcohol cleaning cloths
- Lens cleaning cloths
- Cotton swabs
- Isopropanol
- Compressed air spray with tube

	Suitable cleaning agent
Enclosure	- With alcohol cleaning cloths
Keys and intermediate spaces	- With alcohol cleaning cloths
Screen	- With alcohol cleaning cloths Avoid collections of fluid and rub with smooth cloths
Scanner window	- Cleaning agent for optical devices
Battery contacts	Remove the battery from the device to clean. - Soak the cotton swabs in an alcohol solution to remove all grease and dirt deposits on the contacts. - Repeat cleaning several times Before replacing the battery, the contacts must be completely dry and no fluff should remain.
Cradle contacts	To clean the cradle contacts, remove the battery from the device and close the battery compartment. - Soak the cotton swabs in an alcohol solution to remove all grease and dirt deposits on the contacts. - Repeat cleaning several times Before the device is replaced in the cradle, the cradle contacts must be completely dry and no fluff should remain.
Charger plug-in connector	Separate the charger from the power supply to clean the charger contacts. - Soak the Q-Tips in an alcohol solution to remove all grease and dirt deposits on the contacts. - Repeat cleaning several times Before the charger is reconnected to the power supply, the contacts must be completely dry and no fluff should remain.

6.4 Operation recommendations and requirements

6.4.1 Basic safety and health protection requirements

Consult your local health and safety officer to ensure that you are acquainted with the safety regulations in your company which serve to protect employees at the work place.

6.4.1.1 Ergonomic recommendation

The following recommendations should be considered for everyday work at the workplace:

– Avoid one-sided, constantly repetitive movements.

– Body posture should be as neutral as possible.

– Avoid exercising great force.

– Keep objects which are used frequently within a functional distance.

– Adjust the working height to the body height and type of work.

– Erect objects without vibration.

– Avoid the exercise of direct pressure.

– Ensure that tables and chairs are adjustable.

– There must be sufficient room for body movements.

– Ensure that the working environment is suitable.

– Optimise workflows.

– Alternate between the left and right hand as frequently as possible when conducting repetitive tasks.

6.4.1.2 Vehicle installation

RF signals may impair incorrectly installed or inadequately shielded electronic systems in vehicles (including safety systems). If you have any questions on your vehicle, get in touch with the manufacturer or a sales person. You can also learn from the manufacturer whether additional equipment has been fitted to the vehicle. An airbag has a strong impact. Do NOT place objects, such as installed or portable radio equipment, in the area above the airbag or in the area of deployment of the airbag. If the radio equipment was not correctly installed in the vehicle, severe injuries may result if the airbag is triggered. Position the device within good range. Ensure that you have access to the device without having to take your eye off the road.

ⓘ It is not permitted to connect a warning device which leads to horn sounds or light signals when receiving a call in road traffic.

Road traffic safety

Do not take any notes and do not use the device when driving. Making a list of to-do's or browsing through the address book when driving has a negative influence on safe driving. When driving on the roads, you must primarily think of your safety and that of the other road users. You should therefore concentrate completely on the road. Check the legal provisions on the use of wireless devices in road traffic of the respective region. Always observe these. If you use a wireless device during driving, rely on your good judgment and remember the following:

1. Become acquainted with the wireless device and its functions such as the shortcut dialing or dial repetition. These functions may prove to be useful if you would like to make a call without taking your eye off the road.
2. Where possible, use hands-free equipment.
3. Let your dialogue partner know that you are behind the steering wheel. Where necessary, discontinue the call in dense traffic or poor weather conditions. Rain, sleet, snow, ice and even very dense traffic represent dangers.
4. Dial the required numbers carefully and estimate the traffic situation. Make your calls when you have brought your car to a stop or before you leave. Plan your calls such that they can be made when the car is parked. If you really must make a call during the trip, only dial a part of the number, check the road and look in the rear view mirror and then dial the rest of the number.
5. Do not surccumb to stressful and emotional telephone conversations which could take your attention from the road. Let your dialogue partner know that you are in a car and refrain from conversations which could take your attention away from the road.
6. Call for help using your mobile device if necessary. Dial the emergency services (911 in the USA and 112 in Europe) or other local emergency service numbers in the event of fire, accidents or medical emergences. Remember that these calls are free of charge on the wireless device! The call can be made independently of security code or networks with or without the SIM card.
7. Help your fellow humans in emergency situations with your mobile device. If you witness a serious accident, crime or other emergency, call the emergency service (911 in the USA and 112 in Europe) or another local emergency service number because you could be the one who needs help next time.
8. Call the breakdown service or a special mobile radio number for support if you encounter problems on the road. If you pass a car with a breakdown, which does not represent a serious impediment to traffic, pass traffic lights which do not function, a traffic accident with slight damage and without injured people or a possibly stolen car, please get in touch with the road police or another special mobile radio number for support.
9. "The mobile communication industry requests you to give safety priority when using your device/telephone."

6.4.1.3 Information for the use of wireless devices

Heed all warnings referring to the use of wireless devices.

6.4.1.4 Safety in aircraft

Switch off the wireless device when asked to do so by the ground staff and by employees of the airline. If your device has a flight mode or a similar function, find out about its correct use from the aircraft staff.

6.4.1.5 Safety in hospitals

Wireless devices emit radio frequencies and can cause disturbances to medical technical electrical devices. Wireless devices should be switched off on request when you are in hospitals, clinics or health establishments. This is intended to avoid any possible interference with sensitive medical equipment.

6.4.1.6 Heart pacemakers

Manufacturers recommend that a minimum distance of 15 cm be observed between a wireless handheld device and a pacemaker to avoid potential interference. This guideline is in line with independent research results and recommendations of Wireless Technology Research.

– Wearers of heart pacemakers

– Persons with heart pacemakers should ALWAYS keep at least 15 cm away from the activated device.

– The device may not be worn by these persons in the breast pocket.

– The device should be held to the ear which is furthest away from the heart pacemaker.

– If you have reason to assume that interference has arisen, you should SWITCH OFF the device immediately.

6.4.1.7 Hearing aids

The wireless device may cause disturbances to hearing devices. Get in contact with the manufacturer of your hearing device in the case of disturbances to ask about possible solutions.

– The device may not be worn in the breast pocket of these persons.

– The device should be held to the ear which is furthest away from the heart pacemaker.

– If you have reason to assume that interference has arisen, you should SWITCH OFF the device immediately.

6.4.1.8 Other medical equipment

Ask your doctor or the manufacturer of the medical device to determine whether putting the wireless product into operation impairs the medical device.

6.4.2 Equipment of the laser devices

Devices from BARTEC/ZEBRA equipped with lasers comply with the Guidelines 21CFR1040.10 and 1040.11. (with the exception of the deviations set out in the Laser Notice No. 50 dated 24 June 2007) and EN 60825-1:2007 and IEC 60825-1 (Ed. 2)

The classification of the laser device is stated on a plate attached to the device.

Laser devices of Class 2 work with a visible low volt light emitting diode. As for every bright light source, for example the sun, you should not look directly into the light beam. There is no information about the hazards of being briefly exposed to the laser light of a laser scanner of Class 2.

The use of control elements, adjustments or the application of procedures which do not comply with the instructions described here may lead to hazardous exposure to beams.

6.4.3 Restrictions to wireless devices

The use of wireless devices is possibly forbidden or restricted. This applies primarily on board aircraft, in hospitals, in the vicinity of explosive substances or under other hazardous conditions. If you are not sure which regulations apply to the use of the device, ask permission before switching it on.

Country-specific roaming

This device has the International Roaming function (IEEE802.11d) which ensures that the device is used on the channels prescribed for the respective country.

Ad-hoc operation

The ad-hoc operation is restricted to the channels 36–48 (5150–5250 MHz). The use of this bandwidth is restricted to indoor areas; use outdoors is not permitted.

FCC requirements to protect against high-frequency interference

This device has been tested and satisfies the limit values for a digital device of Class B according to Part 15 of the FCC Guideline. These limit values were stipulated to guarantee appropriate protection against disturbances if the device is used in residential areas. The device generates and uses radio frequency energy and may emit this energy. This can have a disturbing effect on other radio frequencies if the device is not connected and used in accordance with the operating instructions. A guarantee that no interference will arise for a certain installation cannot be given. If the device causes interference to the radio or TV reception which can be recognised by switching the device on and off, the interference should be eliminated by one or several of the following measures:

– Re-alignment or moving of the receiving antenna

– Enlarging the distance between device and receiver

– Connecting the device to a different socket than the one to which the receiver is connected

– Advice from the dealer or a radio/television technician

Radio transmission devices (Part 15)

This device satisfies the requirements of Part 15 of the FCC Guidelines. The operation of the device is based on the following two conditions:

– The device may not cause any damaging interference

– The device must absorb all receiving interference including interference which may lead to undesirable operation.

Requirements placed on the protection from high frequency interference - Canada

This digital device of Class B satisfies the Guidelines of the Canadian standard ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

Radio transmission devices

This device corresponds to RSS 210 (Industry & Science Canada). The operation of the device is based on the following two conditions:

– The device may not cause any damaging interference

– The device must absorb all receiving interference including interference which may lead to undesirable operation.

Label symbol: "IC:" before the radio certification means that the technical data of Industry Canada have been satisfied.

Country approvals

Test symbols are attached to the device which show that the radio modules are approved for use in the following countries: USA, Canada and Europe.

Detailed information on the test symbol for other countries is provided in the EC declaration of conformity.

- **N.B. 1:** For 2.4-GHz-products: Europe covers Belgium, Bulgaria, Denmark, Germany, Estonia, Finland, France, Greece, Great Britain, Ireland, Iceland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Netherlands, Norway, Austria, Poland, Portugal, Romania, Sweden, Switzerland, Slovakia, Slovenia, Spain, Czech Republic, Hungary and Cyprus.

European Economic Area

The operation of RLAN device (2.4 GHz) is subject to the following restrictions in the European Economic Area (EEA):

- The 2.4 GHz devices may not ex,ced a radiation of 100 mW EIRP and must be within the frequency range of 2.400 and 2.4835 GHz.
- In France, devices used outdoors must be between 2.4 and 2.454 GHz.
- In Italy, a user licence is necessary for use outdoors.

The use of Bluetooth® Wireless Technology is subject to the following restrictions in the European Economic Area (EEA):

- The 2.4-GHz devices may not exceed a radiation of 100 mW EIRP and must be within the frequency range of 2.400 and 2.4835 GHz.
- In France, the devices used outdoors are restricted to 10mW EIRP.
- In Italy, a user licence is necessary for use outdoors.

Other countries:

- Mexico: Devices must be within the frequency range of 2.450 and 2.4835 GHz.
- Sri Lanka: Devices must be within the frequency range of 2.400 and 2.430 GHz.

Radio transmitters for RLAN devices

The operation of RLAN devices (5 GHz) is subject to the following restrictions in Canada:

- Frequency range restricted to 5.60 GHz to 5.65 GHz
- This device corresponds to the radio standard RSS 210 of the Industry & Science Canada.

The following two conditions apply to operation:

- The device may not cause any damaging interference.
- The device must absorb all received interference, also interference which can lead to undesired functions.

Labelling: the abbreviation "IC:" in front of the radio certification merely states that the technical requirements of Industry Canada have been satisfied.

6.5 Electromagnetic fields

6.5.1 International

The device satisfies internationally recognised standards for the exposure of humans to electromagnetic fields of radio devices.

Reduction in high frequency energy – intended use

Only use device in compliance with the supplied instructions and the normal operating position.

6.5.2 Portable devices

This device has been specially tested for operation in direct body proximity. Use exclusively belt clips, holsters and similar accessories which have been tested and approved by BARTEC to ensure compliance with the FCC regulations. Belt clips, holsters and similar accessories of third manufacturers may not satisfy the FCC requirements for the recommended maximum values for electromagnetic fields and should not therefore be used.

> ⓘ   The MC 75A^{ex}-NI should only be worn on the body when switched off.

6.5.3 Handheld devices

To comply with the FCC guidelines for high frequency devices, the antenna of the transmitter should be used in the direct vicinity of, or in an operation unit with, other transmitters/antennas with the exception of those approved in this document.

SIM card

GSM telephone services require a SIM card (Subscriber Identification Module) or chip card. A variety of service providers offer these cards. The card is used in the MC 75A^{ex}-NI and can contain the following information:

– Mobile telephone account details of the service provider.

– Information on the service settings and access to the services.

– Contact information which can be moved to the **Contacts** area on the MC 75A^{ex}-NI.

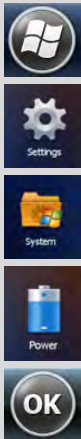– Any additional services which you have subscribed to.

Micro SD card

The Micro SD card slot provides a secondary, non-volatile memory. The slot is located at the side of the MC 75A^{ex}-NI (see figure). Further information is provided in the documentation supplied with the card. Observe the manufacturer's recommendations on use.

6.6 Optimise operating times/change energy settings

Factory settings of the MC 75Ax^{ex}-NI for the WWAN and WLAN radio devices: ON.
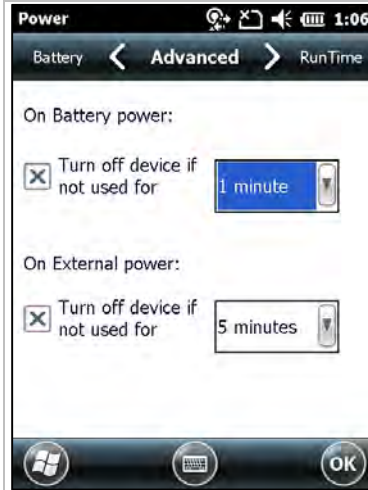
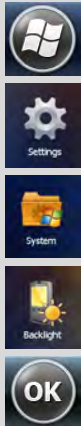### 6.6.1 Automatic shutdown in the case of lengthy standby periods

Symbols

In the start menu under:

> **Settings** symbol

> **System** symbol

> **Power** symbol

> **Advanced** tab

> Activate "**Turn off device if not used for**" box and select a value from the dropdown list.

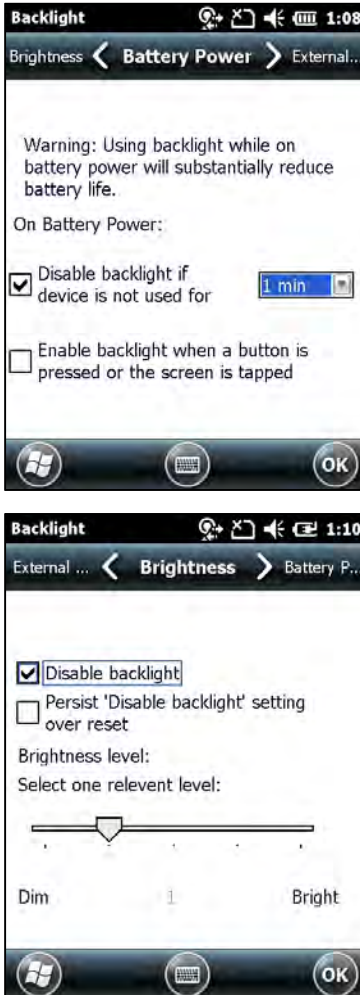> Confirm selection with "**OK**".

6.6.2 Change display backlight (increases the operating time of the battery)

Symbols

In the start menu under:

> **Settings** symbol

> **System** symbol

> **Backlight** symbol

> **Battery Power** tab

> Activate "**Disable backlight if device is not used for**" box and select a value from the dropdown list.

> **Brightness** tab

> Select **Disable backlight** option. The brightness of the backlight can be regulated with a controller.

> Confirm selection with "**OK**".

6.6.3 **Change keypad background lighting** (increases the operating time of the battery)
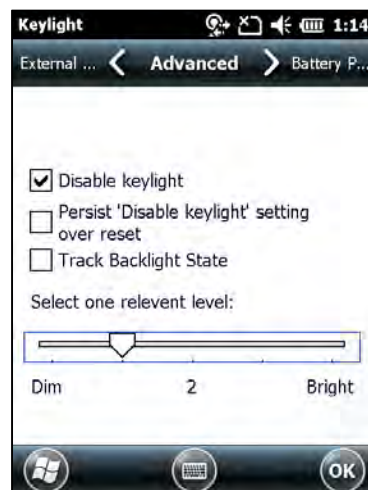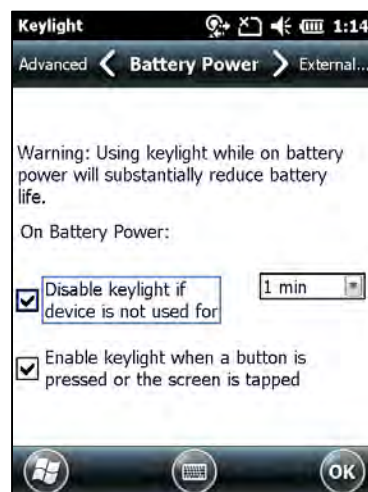
Symbols

In the start menu under:

> **Settings** symbol

> **System** symbol

> Keyl**ight s**ymbol

> **Battery Power** tab

Activate **"Disable keylight if device if not used for"** option and select a value from the dropdown list.

> **Advanced** tab

Select "**Disable keylight"** option. The brightness of the backlight can be regulated with a controller or switched off.

> Confirm selection with "**OK**".

6.6.4 Switch off radio connections

ⓘ Products with Bluetooth® Wireless technology:

This device is an approved Bluetooth® product. Further information is available at **http://www.bluetooth.org/tpg/listings.cfm** Manufacturer: ZEBRA

Symbols

Windows Mobile 6 devices have a simple and central possibility in the form of the **Wireless Manager** to deactivate and configure all wireless functions of the device.

In the start menu under:

> **Settings** symbol

> **System** symbol

> **Connections** symbol

> **Wireless Manager** symbol

Activate/deactivate wireless connection:

> activate respective button.

> **All** button

ⓘ Wireless connections depend on the configuration.

6.7 Software versions

Existing software versions and operating systems in the MC 75Ax^{ex}-NI:

ⓘ The software is not relevant to the explosion protection of the device.
See the ZEBRA documentation for further information.
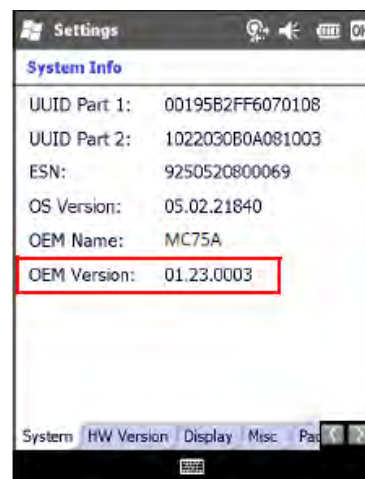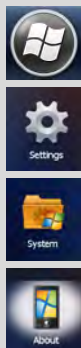
6.7.1 OEM

Symbols

In the start menu under:

> **Settings** symbol

> **System** symbol

> **System Info** symbol

> **System** tab

OS Version:	05.02.21840
OEM Name:	MC75A
OEM Version:	01.23.0003

6.7.2 Storage battery

Symbols

In the start menu under:

> **Settings** symbol

> **System** symbol

> **About** symbol

> **Version** tab

Windows Mobile® 6.5 Professional

CE OS 5.2.23137 (Build 23137.5.3.9)
© 2009 Microsoft Corporation.
All rights reserved.

The last part of the build number contains s**torage battery number.**

6.7.3 Bluetooth

Symbols

In the start menu under:

> **BT Information** symbol

Local Device Information
BD Address : 4083DE1BD811
HCI Version : 2.1
HCI Revision : 21538(0x5422)
LMP Version : 2.1
Stack Type : Microsoft
Manufacturer : Broadcom Corporation
Patch Version : 1056.1058
Radio State : Leave Radio On

ⓘ The "BTExplorer" application is only available if the "StoneStreet One Bluetooth Stack" function is activated. Further information is provided in the ZEBRA "User Manual on Integration" (MC75A User Guide).

6.7.4 "Fusion"software

Symbols

In the start menu under:

> **Wireless Companion** symbol

> **Wireless Status** symbol

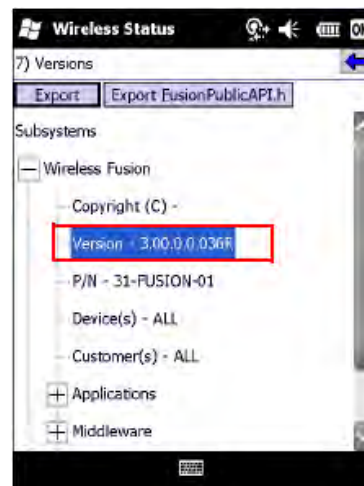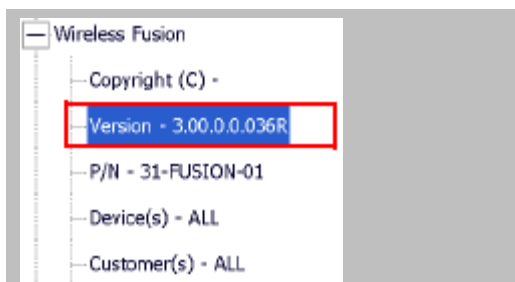> Point 7 **"Versions"**

6.7.5 "Phone" software

ⓘ Is only possible with inserted SIM card.

Symbols

In the start menu under:

> **Phone** symbol

> **Menu** > **Options**

> **Phone Info** tab

7.   Faults and Troubleshooting

⚠ **DANGER**

Risk of fatal injury in an explosive atmosphere!

▶   Examine defective devices and any accessories only outside the potentially explosive atmosphere.

ⓘ   Information on fault rectification is provided in the User Manual or the Integration Manual from ZEBRA.

https://www.zebra.com

ZEBRA website for the MC 75Ax manuals for the non-Ex protected version

–   SUPPORT & DOWNLOADS

–   Support Portal

–   Select your product to find manuals, software, and FAQ.

7.1   Resetting the Mobile Computer MC 75Ax^ex-NI

7.1.1   Windows Mobile 6.x devices

It is recommended to restart the Mobile Computer MC 75Ax^ex-NI if the applications do not function in operation.

There are two restart functions: warm boot and cold start. If this does not function, the MC 75Ax^ex-NI can be reset to the factory settings using the Clean Boot.

7.1.2   Perform a warm boot

ⓘ   Data in flash memory or on a memory card are not lost.

The MC 75Ax^ex-NI is restarted through a warm boot. The data records and entries stored remain intact. If the MC 75Ax^ex-NI does still not react following a warm boot, perform a cold start.

The MC 75Ax^ex-NI is restarted and all active programs shut down.

Works steps:

− Keep the **ON/OFF** button pressed for approx. 5 seconds.

− Release the **ON/OFF** once the warm boot commences.

7.1.3 Perform a cold start

ⓘ Only perform a cold start if no improvement has been achieved with the warm boot.

The MC 75Ax^ex-NI is restarted and all active programs are closed. The real-time clock (RTC) is reset.

Work step:

− Keep the **ON/OFF** button and buttons 1 and 9 pressed simultaneously for 1 second.

The MC 75Ax^ex-NI is initialised.

Further information is provided in the MC75A User Guide from ZEBRA.

7.1.4   Clean boot

ATTENTION

Incorrect handling may cause damage to property!

▶   The Clean Boot must be conducted by an authorised systems administrator.

▶   During the complete clean boot the MC 75Ax^{ex}-NI must be provided with an external voltage supply (e.g. cradle or charging cable) also.

ⓘ   A Clean Boot resets the MC 75Ax^{ex}-NI to the factory settings.

Work steps:

1.   Download the "Clean Boot Package" file from the ZEBRA SUPPORT website (http://www.zebra.com/support) and install on the MC 75Ax^{ex}-NI.
2.   Copy the files in the download file according to the instructions to the Micro SD card or the MC 75Ax^{ex}-NI.
3.   Press the **ON/OFF** button and the buttons 1 and 9 together.
4.   Before the device restarts (before the Splashscreen appears), press the left scan button.
5.   Insert the MC 75Ax^{ex}-NI into a cradle, which must be connected to an external voltage supply. The MC 75Ax^{ex}-NI starts to upload and reboot.
6.   Recalibrate the touchscreen so that the MC 75Ax^{ex}-NI is in the Todayscreen.

ⓘ   Further information is provided in the MC75A Integrator Guide from ZEBRA.

8. Service, Inspection, Repair

Commissioning and service of Mobile Computers may be conducted exclusively by trained and qualified staff! The staff is familiar with the installation, assembly, commissioning and operation of the Mobile Computers, has been informed about the risks and has the qualifications necessary for this work.

8.1 Service intervals

The mechanical state of the device should be regularly checked. The service intervals will depend on the ambient conditions. We recommend that a service be conducted at least once a year. Regular servicing is not necessary if the device is correctly operated in accordance with the installation instructions and under appropriate consideration of the ambient conditions.

⚠ DANGER

Prevent electrostatic charging in potentially explosive atmospheres.
Risk of fatal injury in an explosive atmosphere!

▶ Do not dry wipe or clean devices.

8.2 Inspection

According to EN 60079-17 and EN 60079-19, the owner/operator of electrical plants in potentially explosive atmospheres is obliged to have these plants checked by an electrician to ensure that they are in a correct condition.

8.3 Service and repair work

In addition to Directive 99/92/EC, the standards EN 60079-17 and EN 60079-19 also apply to the servicing and repair as well as the testing of accompanying operating devices.

Work connected with assembly/dismantling, operation and servicing may only be conducted by qualified staff. All statutory requirements and other binding guidelines on occupational health and safety, accident prevention and environmental protection must be observed.

8.3.1 Information on sending in for repairs

The following information is required for the repair.

– Series number of the device (see manufacturer's label)

– Model number or product name (see manufacturer's label)

– Software type and version number (see Chapter 6.7)

Manufacturer's label

Only ZEBRA may repair the devices!

Information on the Returns centres can be found on the

ZEBRA Homepage via

https://www.zebra.com

– SUPPORT & DOWNLOADS

– Support Portal

– Request a Repair

which contains the following information broken down by region:

Australia, China, Hong Kong, India, Indonesia, Japan, Korea South, Malaysia, New Zealand, Philippines, Singapore, Taiwan and Thailand.

Central and South America

Argentina, Chile, Colombia, Ecuador, Mexico, Peru and Venezuela.

Europe, Middle East and Africa (EMEA)

Austria, Belgium, Croatia, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Netherlands, Norway, Poland, Portugal, Romania, Russia, Slovak Republic, South Africa, Spain, Sweden, Turkey and the United Kingdom.

United States & Canada

US and Canada.

9.   Disposal

The Mobile Computers contain metallic and plastic parts and electronic components.

ⓘ   The statutory requirements for electrical scrap must be observed for disposal, e.g. disposal by an authorised disposal company.

10.   Dispatch and Packaging Information

ATTENTION
Sensitive devices! Damage may be caused by incorrect packaging!
▶   Use original packaging for transport.

11.   Accessories
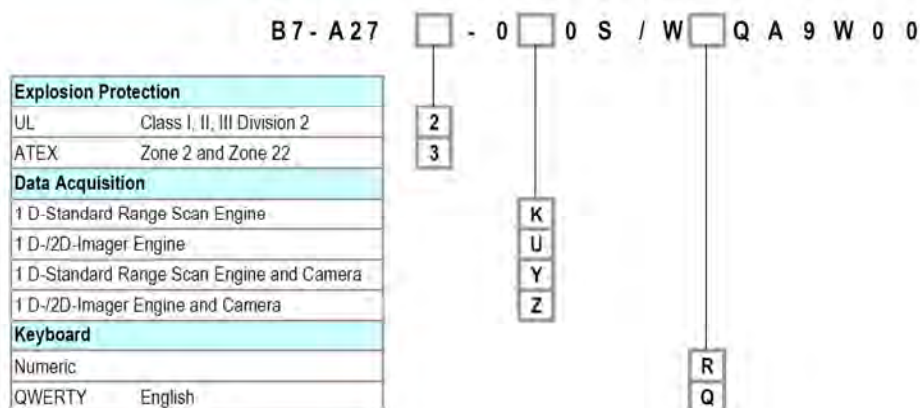
Accessories for use in the Ex area

Designation		BARTEC Order no.
Battery		
Spare battery for MC 75A^{ex} NI	Lithium Ionen 3,7 V / 3600 mAh	B7-A2Z0-0007
Spare battery for MC 75A^{ex} NI	Lithium Ionen 3,7 V / 4800 mAh	B7-A2Z0-0008
Battery cover		
Battery cover 1.5x	ATEX Zone 2 and 22	03-9860-0082
Battery cover 2.5x	ATEX Zone 2 and 22	03-9860-0083
Battery cover 1.5x	Class I, II III Division 2	03-9860-0072
Battery cover 2.5x	Class I, II III Division 2	03-9860-0081
SD card		
Micro SD cards	1 GB	17-C1Z0-0007
Micro SD cards	2 GB	17-C1Z0-0008
Micro SD cards	4 GB	17-28BE-F006/000A
Micro SD cards	8 GB	17-28BE-F006/000B
Protective display foil		
5 pieces	per package	B7-A2Z0-0016
Spare overlay for keypad (green) for		
Numeric		03-9829-0041
QWERTY		03-9829-0042

Accessories for use in the non-Ex area

Designation		ZEBRA Order no.	BARTEC Order no.
Single Slot USB Cradle			
Single slot USB cradle		CRD7X00-1000R	03-9915-0007
without power pack and cables			
Single slot USB cradle KIT		CRD7X00-101RR	03-9915-0015
Consists of:	- Single slot USB cradle		
	- Power pack		
4-slot Charging Station for Spare Battery			
4-slot charging station		CRD7X00-4000CR	03-9915-0013
without power pack and cables			
4-slot charging station KIT		CRD7X00-401CR	03-9915-0014
Consists of:	- Single slot USB cradle		
	- Power pack		
	- DC line cord		
Power Packs for			
Single slot USB cradle and charging station	AC 100-240 V, DC 12 V, 3.33 A	KT-14000-148R	03-9911-0015
Quadruple charging station	AC 100-240 V, DC 12 V, 9.0 A	50-14000-241R	03-9911-0021
Cables			
Micro USB Active Sync cable	for single slot USB cradle	25-68596-01R	03-9919-0014
Micro RS232 cable	for single slot USB cradle	25-63852-01R	03-9919-0004
Line cord (EU)			03-9609-0011
Line cord (US)		23844-00-00R	03-9609-0021
Further Accessories			
Torx Screwdriver (T10)	only for ATEX Zone 2 and 22		03-5520-0034
Spare pens set	3 pieces per set	STYLUS-00002-03R	03-9849-0061
User manual			B1-A275-7D0002

12. Order Numbers

Mobile Computer MC 75A0ᵉˣ-NI without WWAN option

B 7 - A 2 7 ☐ - 0 ☐ 0 S / W ☐ Q A 9 W 0 0

Explosion Protection		
UL	Class I, II, III Division 2	2
ATEX	Zone 2 and Zone 22	3
Data Acquisition		
1 D-Standard Range Scan Engine		K
1 D-/2D-Imager Engine		U
1 D-Standard Range Scan Engine and Camera		Y
1 D-/2D-Imager Engine and Camera		Z
Keyboard		
Numeric		R
QWERTY	English	Q

Mobile Computer MC 75A6ᵉˣ-NI with GSM HSDPA (WWAN) option

B 7 - A 2 7 ☐ - 6 ☐ C S / W ☐ R A 9 W 0 0

Explosion Protection		
UL	Class I, II, III Division 2	2
ATEX	Zone 2 and Zone 22	3
Data Acquisition		
1 D-Standard Range Scan Engine		K
1 D-/2D-Imager Engine		U
1 D-Standard Range Scan Engine and Camera		Y
1 D-/2D-Imager Engine and Camera		Z
Keyboard		
Numeric		R
QWERTY	English	Q

Mobile Computer MC 75A6ᵉˣ-NI with EVDO (Verizon) option

B 7 - A 2 7 ☐ - 8 ☐ F S / W ☐ R A 9 W 0 0

Explosion Protection		
UL	Class I, II, III Division 2	2
ATEX	Zone 2 and Zone 22	3
Data Acquisition		
1 D-Standard Range Scan Engine		K
1 D-/2D-Imager Engine		U
1 D-Standard Range Scan Engine and Camera		Y
1 D-/2D-Imager Engine and Camera		Z
Keyboard		
Numeric		R
QWERTY	English	Q

13. Additional Information

13.1 Links

http://www.bartec-group.com   BARTEC website

https://www.zebra.com   ZEBRA Homepage

The ZEBRA page for the MC75Ax User Manuals and software of the non-explosion protected version

➡ SUPPORT & DOWNLOADS

➡ Support Portal
   Select your product to find manuals, software, and FAQ

The ZEBRA product information page for the SCAN Engine, which is used in the explosion protected version of the MC75A6^{ex}HF-NI.

➡ PRODUCTS

➡ OEM

➡ OEM SCAN ENGINES

➡ OEM ARRAY IMAGER

➡ OEM ARRAY IMAGER SCAN ENGINES

➡ SE4500 OEM ARRAY IMAGER SCAN ENGINE

or

➡ PRODUCTS

➡ OEM

➡ OEM SCAN ENGINES

➡ OEM LASER SCAN ENGINES

➡ SE95x OEM LASER SCAN ENGINE

http://www.microsoft.com

Microsoft page for Active Sync or
Windows Mobile Device Center

Erklärung der Konformität
Declaration of Conformity
Attestation de conformité

BARTEC

BARTEC GmbH
Max-Eyth-Straße 16
97980 Bad Mergentheim
Germany

N° B1-A273-7C0001_A

CE

Wir	We	Nous
BARTEC GmbH,		
erklären in alleiniger Ve-rantwortung, dass das Produkt	declare under our sole responsibility that the product	attestons sous notre seule responsabilité que le pro-duit

MC75Ax ex-NI
MC75Ax ex HF-NI
    MC75Ax ex-NI
    MC75Ax ex HF-NI
    MC75Ax ex-NI
    MC75Ax ex HF-NI

Typenbezeichnung : B7-A273-***S/W*******

auf das sich diese Erklärung bezieht den Anforderungen der folgenden **Richtlinien (RL)** entspricht	to which this declaration relates is in accordance with the provision of the following **directives (D)**	se référant à cette attesta-tion correspond aux dispo-sitions des **directives (D)** suivantes
ATEX-Richtlinie 94/9/EG	**ATEX-Directive 94/9/EC**	**ATEX-Directive 94/9/CE**
EMV-Richtlinie 2004/108/EG	**EMC-Directive 2004/108/EC**	**CEM-Directive 2004/108/CE**
R&TTE-Richtlinie 1999/5/EG	**R&TTE-Directive 1999/5/EC**	**R&TTE-Directive 1999/5/CE**
RoHS-Richtlinie 2002/95/EG	**RoHS Directive 2002/95/EC**	**Directive Européenne de RoHS 2002/95/CE**
und mit folgenden Normen oder normativen Dokumen-ten übereinstimmt	and is in conformity with the following standards or other normative docu-ments	et est conforme aux normes ou documents normatifs ci-dessous

EN 60079-0:2012	EN 60079-11:2012
EN 60950-1:2006 +A11:2009	IEC 60950-1:2005 Ed. 2.0
EN 55022:2006 +A1:2007 (ClassB)	EN 61000-3-2:2006 (ClassA)
EN 61000-3-3:2008	47 CFR Part 15, Subpart B, Class B
ICES 003 Issue4, Class B	EN 301 511: V9.0.2
EN 301 908-1 V3.2.1	EN 301 908-2 V3.2.1
3GPP TS 34.121	3GPP TS 34.123
EN 300 328 V1.7.1	EN 301 893 V1.5.1
EN 300 440-2 V1.3.1	EN 50371:2002
EN 62311:2008	FCC 47CFR Part2; OET Bulletin 65c
RSS 102 Issue 3	IEC Class2 Laser Product

Erklärung der Konformität
Declaration of Conformity
Attestation de conformité

BARTEC

BARTEC GmbH
Max-Eyth-Straße 16
97980 Bad Mergentheim
Germany

N⁰ B1-A273-7C0001_A

EN 60825-1:2007	IEC 60825-1:2007

21CFR1040.10 Class IIa or II

EN 301 489-1 V1.8.1, EN 301 489-7 V1.3.1

EN 301 489-1 V1.8.1, EN 301 489-17 V2.1.1

EN 301 489-1 V1.8.1, EN 301 489-24 V1.4.1

EN 301 489-1 V1.8.1, EN 301 489-3 V1.4.1

3GPP TS 51.010-1 v.4.9.0 (GSM 11.10-1)

EN 50360:2001 (Max average 10g SAR 0.992 W/Kg)

Kennzeichnung	Marking	Marquage

⟨Ex⟩ II 3G Ex ic IIC T6 Gc
⟨Ex⟩ II 3D Ex ic IIIC T80°C Dc
-10°C ≤ Ta ≤ +50°C

Verfahren der internen Fertigungs-kontrolle	Procedure of internal control of Production	Procédure de contrôle interne de fabrication

EPS 12 ATEX 1 481 X
CE

Bad Mergentheim, den 18.04.2013

ppa. Ewald Warmuth
Geschäftsleitung / General Manager

Certificate of Compliance

Certificate Number   20110321-E321557
Report Reference   E321557,2010 December 01
Issue Date   2011 March 21

Page **1** of **3**

(UL) **Underwriters Laboratories**

Issued to: **BARTEC GMBH**
MAX-EYTH-STRASSE 16
97980 BAD MERGENTHEIM GERMANY

This is to certify that representative samples of

INFORMATION TECHNOLOGY EQUIPMENT FOR USE IN HAZARDOUS LOCATIONS

See Addendum Page. 1

Have been investigated by Underwriters Laboratories Inc.® (UL) or any authorized licensee of UL in accordance with the Standard(s) indicated on this Certificate.

Standard(s) for Safety: See Addendum Page. 2

Additional Information: See UL On-Line Certification Directory at www.UL.com for additional information.

Only those products bearing the UL Listing Mark for the US and Canada should be considered as being covered by UL's Listing and Follow-Up Service meeting the appropriate requirements for US and Canada.

The UL Listing Mark for the US and Canada generally includes: the UL in a circle symbol with "C" and "US" identifiers:

c(UL)us the word "LISTED"; a control number (may be alphanumeric) assigned by UL; and the product category name (product identifier) as indicated in the appropriate UL Directory.

Look for the UL Listing Mark on the product

Certificate of Compliance

Certificate Number   20110321-E321557
Report Reference   E321557,2010 December 01
Issue Date   2011 March 21

UL Underwriters Laboratories

This is to verify that representative samples of the product as specified on this certificate were tested according to the current UL requirements.

Product covered :

Class I, Division 2, Groups A, B, C, and D Hazardous Locations

> Handheld Mobile Computer Model MC75Aex-NI-B7-A271,
> followed by 0, 6 or 8, followed by U, Y, 3 or 4,
> followed by O, C, E, or F, followed by S, followed by W,
> followed by R, Q, Y, Z or D, followed by any letter,
> followed by any letter, followed by 9 or A, followed by W,
> followed by any number 0-9 or A-Z, followed by any number

Class I, Division 2, Groups A, B, C, and D; Class II, Division 2, Groups F and G; Class III Hazardous Locations

> Handheld Mobile Computer Model MC75Aex-NI-B7-A272,
> followed by 0, 6 or 8, followed by U, Y, 3 or 4,
> followed by O, C, E, or F, followed by S, followed by W,
> followed by R, Q, Y, Z or D, followed by any letter,
> followed by any letter, followed by 9 or A, followed by W,
> followed by any number 0-9 or A-Z, followed by any number

William R. Carney
Director, North American Certification Programs
Underwriters Laboratories Inc.

Certificate of Compliance

Certificate Number 20110321-E321557
Report Reference E321557,2010 December 01
Issue Date 2011 March 21

Page **3** of **3**

(UL) **Underwriters Laboratories**

This is to verify that representative samples of the product as specified on this certificate were tested according to the current UL requirements.

Nonincendive Electrical Equipment for Use in Class I and II, Division 2 and Class III, Divisions 1 and 2 Hazardous (Classified) Locations,ANSI/ISA 12.12.01, 2007,Edition 1.

Intrinsically Safe and Non-incendive Equipment for Use in Hazardous Locations,CAN/CSA C22.2 NO. 157-92,Edition 1.

William R. Carney
Director, North American Certification Programs
Underwriters Laboratories Inc.

BARTEC protects

p e o p l e   a n d

the environment

b y   t h e   s a f e t y

of components,

s y s t e m s

a n d   p l a n t s .