BARTEC

Touch Computer TC77^{ex}-NI

Quick Start Guide

BARTEC

Quick Start Guide - Translation

TC77ex-NI

Touch Computer

Type B7-A26*-***3/********

ATEX / IECEx / UKEX Zone 2 / 22

Class I, II, III Division 2

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Proviso: Subject to technical changes. Changes, mistakes and printing errors do not substantiate any claim to damages.

Content	Pages
English	1-44

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

Fon: +49 7931 597-0
Fax: +49 7931 597-119

Support: em-support@bartec.com
Download: http://automation.bartec.de
Internet: www.bartec.com

1 Basic safety information

1.1 Information on this Quick Start Guide

Read carefully before putting the devices into operation.

The Quick Start Guide is a fixed part of the product. It must be kept in the direct vicinity of the device and the installation, operating and service staff must have access to it at all times.

The Quick Start Guide contains important information, safety instructions and test certificates which are necessary for the perfect function of the device in operation.

The Quick Start Guide is directed at all individuals concerned with the commissioning, handling and servicing of the product. The applicable guidelines and standards for areas with gas and dust atmosphere (EN/IEC 60079-17, EN/IEC 60079-19) must be observed when conducting this work.

Knowledge of the safety and warning information in this Quick Start Guide and the strict compliance with it is essential for safe installation and commissioning. Accidents, injuries and material damage can be avoided by circumspect handling and systematically following the instructions.

The examples, tables, and figures provided in this Quick Start Guide are for illustration purposes. Due to the different requirements of the respective application, the BARTEC company cannot assume responsibility or liability for actual use based on the examples and figures.

The BARTEC company reserves the right to carry out technical changes at any time.

In no event will BARTEC company be responsible or liable for indirect or consequential damages resulting from the use or application of this Quick Start Guide.

Safety and warning information is particularly emphasised in this Quick Start Guide and marked by symbols.

DANGER

DANGER describes a directly imminent danger. If not avoided, death or severe injury will be the consequence.

WARNING

WARNING describes a possibly imminent danger. If not avoided, death or severe injury may be the consequence.

CAUTION

CAUTION describes a possibly imminent danger. If not avoided, mild or slight injury may be the consequence.

ATTENTION

ATTENTION describes a possibly damaging situation. If not avoided, the plant or objects in its vicinity may be damaged.

Important information on effective, economical & environmentally compliant handling.

1.1.1 Languages

The original Quick Start Guide with safety information is written in German. All other available languages are translations of the original Quick Start Guide.

The Quick Start Guide is available in German and English. If further languages are required, these must be requested from BARTEC or stated on placing an order.

1.1.2 Changes in the document

BARTEC reserves the right to change the content of this document without notification. No warranty is assumed for the correctness of the information. In cases of doubt, the German safety instructions apply because it is not possible to rule out errors of translation or printing. In the case of legal disputes, the “General Terms and Conditions of Business” of the BARTEC Group also apply.

The current versions of the datasheets, user manual, certificates and declarations of conformity can be downloaded from www.bartec.com or may be requested directly from BARTEC GmbH.

1.1.3 Registered trademarks

Bluetooth®	is a registered trademark of Bluetooth Special Interest Group
Android	The "Android" name, the Android logo, the Google Play trademark and other Google trademarks are the property of Google LLC.
WiFi	is a registered trademark of Wi-Fi-Alliance, an association of manufacturers founded in 1999.

1.2 Handling the product

The product described in this Quick Start Guide left the factory in a perfect and tested state in terms of safety. To maintain this state and to achieve a perfect and safe operation of this product, it may only be operated in the manner described by the manufacturer. In addition, the perfect and safe operation of this product requires correct transportation, proper storage and careful operation.

The safe and perfect handling of the Touch Computer is a prerequisite for its perfect and correct functioning.

1.3 Intended use

1.3.1 Exclusive purpose

The Touch Computer series is a handheld piece of electrical equipment. It serves the purpose of the mobile recording, processing and/or 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.

1.3.2 Unintended use

Any other use is unintended and may lead to damage and accidents. The manufacturer shall not be liable for any use extending beyond the exclusive purpose.

1.4 Duties of the operator

The operator undertakes to only permit persons to work with the Touch Computer who

are acquainted with the basic regulations on safety and accident prevention, and who have been inducted in the use of the Touch Computer,

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

The operator checks that the safety and accident prevention regulations applicable to the respective case of use have been observed.

1.5 Safety information

Do not dry wipe or clean devices in potentially explosive atmospheres!

Do not open devices in potentially explosive atmospheres.

Do not replace or charge battery in potentially explosive atmospheres.

General statutory provisions or guidelines on occupational health and safety, accident prevention provisions and environmental protection laws must be heeded, e.g. Operational Safety Ordinance (BetrSichV) and nationally applicable ordinances.

Use suitable clothing and shoes with respect to the danger of hazardous electrostatic charges.

Avoid heat influences outside the specified temperature range.

Protect device from external influences! Do not expose device to caustic/aggressive liquids, vapours or spray. In the case of malfunction or damaged enclosure, remove the device immediately from the potentially explosive atmosphere and bring it to a safe place.

1.6 Maintenance

The pertinent erection and operating provisions for electrical systems must be observed! (e.g. Directive 2014/34/EU, BetrSichV and nationally applicable ordinances EN/IEC 60079-14 and the series DIN VDE 0100)!

Observe the national waste disposal regulations when disposing of the devices.

1.6.1 Servicing

No constant servicing will be necessary if operated correctly under consideration of the assembly instructions and environmental conditions. See Chapter “Service, inspection, repair” in this respect.

1.6.2 Inspection

According to EN/IEC 60079-17 and EN/IEC 60079-19 the operator of electrical systems in potentially explosive atmospheres is obliged to have these inspected by an electrician to ensure correct condition.

1.6.3 Repairs

Repairs to explosion-protected devices may only be performed by authorised personnel with original spare parts and according to the state of the art.

Therfore all repairs to the Touch Computer have to conducted by BARTEC.

Contact information and instructions for repair requests and processing can be found at:

https://www.bartec.de/en/products/automation-enterprise-mobility/

- Procedure guide
- RMA Form

1.6.4 Commissioning

It must be checked that all components and documents are available before commissioning.

1.7 Labelling, test certificate, and standards

Labels on explosion protection and the test certificate are attached to the Touch Computer. Labelling see Chapter 3: Technical data.

The guidelines and standards applicable to the Touch Computer for devices and protected systems for intended use in potentially explosive atmospheres are provided in Chapter: Declaration of Confomity.

1.8 Warranty

WARNING

No changes or retrofits may be made without the written consent of the manufacturer.

If non-specified components are used, the explosion protection will no longer be guaranteed. In the case of externally procured parts, it is not guaranteed that these have been designed and manufactured in accordance with their load and requisite safety.

▶ Contact the manufacturer before any changes or retrofits to receive a release. Only use original spare and wearing parts.

The manufacturer shall exclusively assume the complete warranty only for spare parts ordered from him.

Our “General Terms and Conditions of Sale and Delivery” shall apply in principle. These shall be made available to the operator on signing of contract at the latest. Warranty and liability claims in the case of injury and damage to property shall be excluded if they are attributable to one or several of the following causes:

- Unintended use of the Touch Computer.
- Incorrect handling
- Failure to observe the information in the Quick Start Guide and the user manual with respect to transport, storage, 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 Touch Computer (exception: battery 6 months). The warranty period for accessories is one year starting from the date of delivery from the Bad Mergentheim factory. 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 using an RMA form. There shall be no claim to repair at the sight of erection.

The information contained herein refers to the explosion-protected version of the Touch Computer TC77ex-NI.

This Quick Start Guide contains all important information on the subject of explosion protection.

Further product information on handling and commissioning can be found on the BARTEC support page: https://automation.bartec.de/indexE.htm

1.9 Co-applicable documents

All documents are available online from the following websites:

BARTEC: www.bartec.com or http://automation.bartec.de/indexE.htm

ZEBRA: www.zebra.com

In the event of an overlaps with Zebra, the instructions of BARTEC apply.

Document BARTEC	Explanation
Quick Start Guide Touch Computer TC77ex-NI	This Quick Start Guide describes the safety-related information, first use and further data of the Touch Computer TC77ex-NI.
Data sheet Touch Computer TC77ex-NI	This technical data sheet contains the most important explosion-relevant technical data as well as general technical data.
Document ZEBRA	**Explanation**
For TC77 ▪ **TC77 Touch Computer Quick Start Guide** ▪ **TC77 Touch Computer Integrator Guide** ▪ **TC77 Touch Computer User Guide**	Instructions for commissioning, operating, configuring, programming and maintaining of the Touch Computer.

1.10 Definition of terms

A few abbreviations are used in the documentation.

NI = Non Incendive
is used as generic term for Zone 2 and Division 2 version

TC = Touch Computer
stands for the entire product series

1.11 Configuration

The devices are only supplied with preinstalled operating system.
Customer software or further applications are not contained in the delivery.

This Quick Start Guide refers to the following configurations:

Configuration	Version
Processor	Qualcomm Snapdragon 660 Octa-Core, 2.2 GHz
Display	4.7“Color Display with 1280 x 720 Pixel resolution
Memory	4 GB
Mass storage	32 GB
Operating system	The TC77ex-NI is delivered by BARTEC according to the currently available Android version. (Details see data sheet)
WAN	LTE FDD/LTE TDD/UMTS/HSPA/HSPA+/GSM/GPRS/EDGE
WLAN	IEEE 802.11 a/b/g/n/ac/d/h/i/r/k/v/w
Bluetooth	Class 2, v5.0, Low Energy (BLE)
NFC	ISO 14443 type A and B; F FeliCa and ISO 15693 cards P2P mode and card emulation via host
GPS	Integrated autonomous assisted GPS (A-GPS)
Scanner	SE4770-SR: 1D/2D standard range omnidirectional imager

2 Product description

2.1 TC77ex-NI

The TC77ex-NI is a tough Touch Computer with 4.7" color display, which has been designed for use in the industrial environments and especially developed by BARTEC in close cooperation with ZEBRA for use in potentially explosive atmospheres.

2.2 Purpose of use

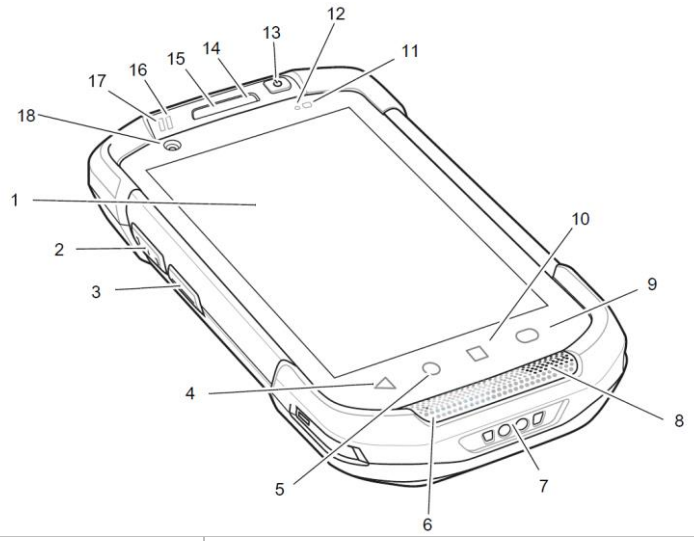
The Touch Computer TC77ex-NI are handheld electrical devices. They serve the purpose of entry, processing and (radio) transmission of data within potentially explosive atmospheres.

The Touch Computer TC77ex-NI are used exclusively in combination with devices which comply with the requirements placed on the overvoltage category I.

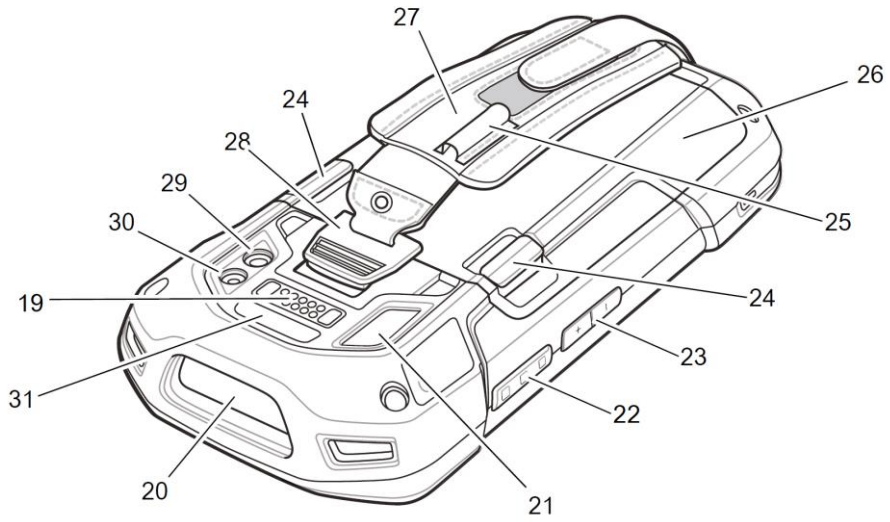
The **Touch Computer TC77ex-NI, Type B7-A26*-***3/********** have been modified for use in the following potentially explosive atmospheres:

- ATEX / IECEx / UKEX Zone 2 and Zone 22
- Class I, II, II Div. 2, Groups A, B, C, D, F, G; T4

3 Structure



1	**Touch Screen**	Displays all information needed to operate the device.
2	**Scan Button**	Initiates data capture (programmable).
3	**PTT Button**	Initiates push-to-talk communications (programmable).
4	**Back Button**	Displays the previous screen.
5	**Home Button**	Displays the Home screen with a single press. On device with GMS, opens the Google Now screen when held for a short period of time.
6	**Microphone**	Use for communications in Handset mode.
7	**Charging Contacts**	Provides power to the device from cables and cradles.
8	**Speaker**	Provides audio output for video and music playback. Provides audio in speakerphone mode.
9	**Search Button**	Opens the Recent App screen.
10	**Menu Button**	Opens a menu with items that affect the current screen or app.
11	**Light Sensor**	Determines ambient light for controlling display backlight intensity.
12	**Proximity Sensor**	Determines proximity for turning off display when in handset mode.
13	**Power Button**	Turns the display on and off. Press and hold to reset the device, power off or swap battery. Press quickly twice when the screen is locked to open the camera app.
14	**Microphone**	Use for communications in Speakerphone mode.
15	**Receiver**	Use for audio playback in Handset mode.
16	**Charging/Notification LED**	Indicates battery charging status while charging and app generated notifications.
17	**Data Capture LED**	Indicates data capture status.
18	**Front Facing Camera**	Use to take photos and videos.



19	**Interface Connector**	Provides USB host and client communications, audio and device charging via cables and accessories.
20	**Exit Window**	Provides data capture using the imager.
21	**Microphone**	Use during video recording and for noise cancellation.
22	**Scan Button**	Initiates data capture (programmable).
23	**Volume Up/Down Button**	Increase and decrease audio volume (programmable).
24	**Battery Release Latches**	Press to remove the battery.
25	**Elastic Sleeve**	Use to hold optional stylus.
26	**Battery**	Provides power to the device.
27	**Hand strap**	Use to securely hold the device in your hand.
28	**Hand strap Mounting Point**	Provides latching point for the hand strap.
29	**Camera**	Takes photos and videos.
30	**Camera Flash**	Provides illumination for the camera.
31	**NFC/HF Reader**	Antenna area

4 Technical data

4.1 Explosion protection

ATEX Zone 2 / Zone 22		
Type	B7-A26*-***3/********	TC77ex-NI
Labelling		Ex II 3G Ex ic op is IIC T5 Gc Ex II 3D Ex ic op is IIIB T100 °C Dc -20 °C ≤ Ta ≤ +50 °C
Test certificate		EPS 17 ATEX 1 028 X
Standards		See chapter: EU Declaration of Conformity
IECEx Zone 2 / Zone 22		
Type	B7-A26*-***3/********	TC77ex-NI
Labelling		Ex ic op is IIC T5 Gc Ex ic op is IIIB T100 °C Dc IP 64 -20 °C ≤ Ta ≤ +50 °C
Test certificate		IECEx EPS 17.0012X
Standards		See chapter: EU Declaration of Conformity
UKEX Zone 2 / Zone 22		
Type	B7-A26*-***3/********	TC77ex-NI
Labelling		Ex II 3G Ex ic op is IIC T5 Gc Ex II 3D Ex ic op is IIIB T100 °C Dc -20 °C ≤ Ta ≤ +50 °C
Test certificate		CML 21 UKEX2341X
Standards		See chapter: UK Declaration of Conformity
Class I, II, III, Division 2		
Type	B7-A26*-***3/********	TC77ex-NI
Labelling		Class I,II,III Div 2 Class I Div 2 Groups A,B,C,D Class II Div 2 Group F,G Class III
Test certificate USA and Canada		5012876
Standards		UL 60950-1:2007 Ed.2+R:14Oct2014 CSA C22.2#60950-1:2007 Ed.2+A1;A2 UL 121201:2017 Ed.9 CSA C22.2#213:2017 Ed.3

X - labelling (special conditions of use for secure operation within the potentially explosive atmosphere)
Only use battery type B7-A2Z0-0072.
The battery shall only be charged and changed in an area known to be non-hazardous.
USB port shall not be used in hazardous area.
Only the screen protector type B7-A2Z0-0051 may be used.
The device must be protected from impacts with high impact energy, against excessive UV light emission and high electrostatic charge processes.

4.2 Features

4.2.1 Performance features

CPU	Qualcomm Snapdragon 660 Octa-core, 2.2 GHz
Operating system	The TC77ex-NI is delivered by BARTEC according to the currently available Android version. (Details see data sheet)
Android Enterprise Recommended (AER)	Certified AER by Zebra Google
Memory	4 GB RAM; 32 GB Flash
Extension slot	MicroSD card slot up to 32 GB SDHC and up to 256 GB SDXC Optional MicroSD card from BARTEC: 32 GB Order number 17-A1Z0-0010
SIM card slot	2x Nano-SIM

4.2.2 Physical features

Dimensions: **(Length x Width x Height)**	161 x 84 x 28 mm (6.3 x 3.3 x 1.1 inch)
Weight **(including battery)**	approx. 376 g (approx. 13.3 oz)
Display	4.7" Colour display 1280 x 720 pixel
Touchscreen	Dual mode capacity touch Touch function with stylus, finger or glove depending on the mode selected
Background lighting	LED technology
Network connections	WWAN (cellular, WLAN (WiFi), WPAN (Bluetooth); USB 2.0 High Speed (host and client)
Interactive sensor technology	▪ Light Sensor: Automatically adjusts display backlight brightness ▪ Motion Sensor: eCompass, 3-axis Gyro, 3-axis accelerometer ▪ Atmospheric Pressure Sensor

4.2.3 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 % to 90 % (non-condensing)
Class of protection (IEC 60529)	IP 65 and IP 68

4.2.4 Voice and data transmission WiFi

Radio standard	IEEE 802.11 a/b/g/n/ac/d/h/i/k/mc/r/v/w; Wi-Fi™ certified; IPv4, IPv6, 2x2 MU-MIMO
Data Rates	5 GHz: 802.11a/n/ac — up to 866.7 Mbps 2.4 GHz: 802.11b/g/n — up to 300 Mbps
Operating Channels	Channel 1-13 (2412-2472 MHz); Channel 36-165 (5180-5825 MHz) Channel Bandwidth: 20, 40, 80 Actual operating channels/ frequencies and bandwidths depend on regulatory rules and certification agency.
Security and Encryption	WPA3-Personal (SAE); WPA3-Enterprise; Enhanced Open - Based on opportunistic wireless encryption (OWE)*; WEP (40 or 104 bit); WPA/WPA2 Personal (TKIP, and AES); WPA/WPA2 Enterprise (TKIP and AES) — EAP-TTLS (PAP, MSCHAP, MSCHAPv2), EAP-TLS, PEAPv0-MSCHAPv2, PEAPv1-EAP-GTC and LEAP.EAP-PWD * Note that OWE is a separate Wi-Fi Alliance certification program and not WPA3

RESTRICTIONS

The use of 5 GHz RLAN throughout the EEA has the following restrictions:
5.15 - 5.35 GHz is restricted to indoor use only

4.2.5 Voice and data transmission WAN

The available radio frequency bands depend on the device configuration.

Radio frequency band	Support of VoLTE, network operator aggregation up to 3DL CA AT&T FirstNet Ready certification Verizon PNTM Certification **LTE FDD:** 700/800/850/900/1800/1900/ AWS/2100/2600 28,13,14,12,17/19,20/5,26/8/ 3/2.25/4.66/1/7) **LTE TDD:** 1900/2300/2500 (39/40/41.38) **UMTS/HSPA/HSPA+:** 850/900/AWS/1900/2100 (5/8/4/2/1) **GSM/GPRS/EDGE:** 850/900/1800/1900

4.2.6 Voice and data transmission Bluetooth

Bluetooth	Bluetooth 5.0, Class 2, Bluetooth Low Energy (BLE)

4.2.7 Global Positioning System (GPS)

GPS	Autonom, Assisted-GPS (A-GPS), Navstar, GLONASS, Gallileo, BeiDou

4.2.8 NFC/HF RFID Reader

NFC/HF RFID is a short-range wireless connectivity technology standard that enables secure transaction between a reader and a contactless smartcard. The technology is based on ISO/IEC 14443 type A and B (proximity) and ISO/IEC 15693 (vicinity) standards, using the HF 13.56 MHz unlicensed band.

NFC/HF	ISO 14443 type A and B; F FeliCa and ISO 15693 cards P2P mode and card emulation via host The device supports the following operating modes: ▪ Reader mode ▪ Peer-to-Peer communication ▪ Card Emulation mode

The read/write range of the RFID reader depends on various environmental influences:

- Transponder (tag), size of the installed antenna
- Mounting location (metal or other underground)
- Magnetic influences from outside
- Ambient conditions (e.g. Temperatur, huminity, …)

Further detailed information on the used RFID Reader can be found in the “TC77XX Touch Computer Integrator Guide (EN)” from ZEBRA

4.2.9 Barcode capture

1D-/2D Barcodes	
SE4770-SR	1D-/2D Omni-Direktional Imager Engine

The scanning range of the scanner depends on the used barcode type, the print quality and the module width (in mil).
See the data sheet for the list of supported barcodes/symbologies.

The scanner used comply with laser class CDRH Class II / IEC 825 Class 2.

Further detailed information on the used scanner can be found in the “TC77XX Touch Computer Integrator Guide (EN)” from ZEBRA.

4.3 Battery

The life of the battery will depend on different use factors and the device settings, e.g.:

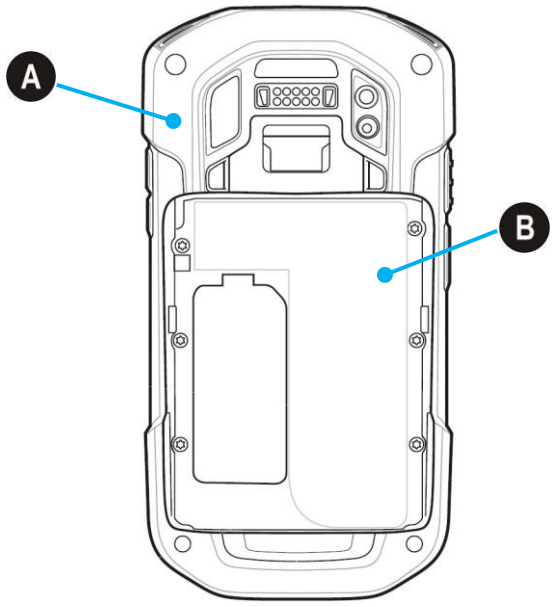
- Use and setting of WLAN/Bluetooth
- Background lighting/screensaver
- The settings in power management
- Use and setting of scanner

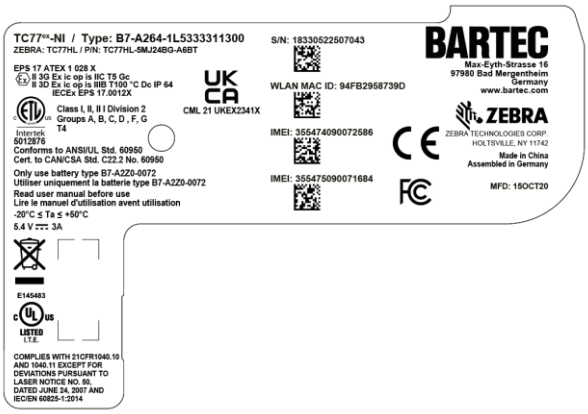
Battery **Type B7-A2Z0-0072**	(only change and charge in the safe area) Lithium ion battery 3.7 V/4620 mAh (17.1 Wh)
Operating temperature	
▪ During charging	0 °C to +40 °C (+32 °F to 104 °F)
▪ During discharging	-20 °C to +50 °C (-4 °F to 122 °F)
Storage temperature	-20 °C to +50 °C (-4 °F to 122 °F)
Relative humidity	20 % to 95 % (non condensing)
Charging times	less than 5 hours
UN38.3 compliant	Yes

Charge the batteries at temperatures from 0°C to 40°C (32°F to 104°F). The device or charging station always performs the battery charging in a safe and intelligent way. At higher temperatures, such as about +37°C (+98°F), the device or charging station can alternately activate and deactivate battery charging for a short time to keep the battery at acceptable temperatures. The device and the charging station indicate via their LED when charging is disabled due to abnormal temperatures.

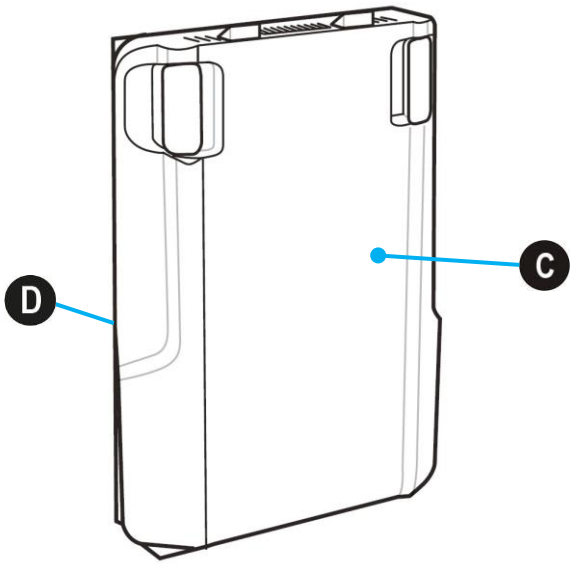
4.4 Product labelling

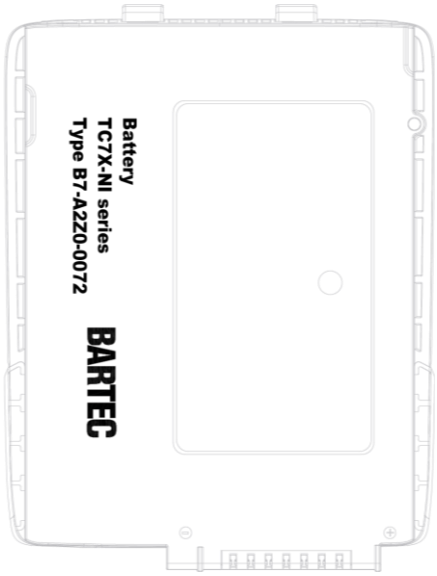
4.4.1 Touch Computer



A	Laser warning	
B	Type label	

4.4.2 Battery



C	Battery marking	
D		

5 Transport and storage

5.1 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.

Battery is UN38.3 conform.

Due to the transport guidelines for air freight, all batteries are delivered ex works charged to max. 30 %.

Further information, like MSDS, can be found at

http://automation.bartec.de/indexE.htm

- Touch Computer TC77ex-NI
- Tab „General“

5.2 Storage

ATTENTION

Property damage through incorrect storage!

- ▶ Observe storage temperatures.
- ▶ Keep humidity away from the Touch Computer.

Additional information on the batteries

The batteries of BARTEC (Type B7-A2Z0-0072) 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 the metallic and the escape of electrolyte.

Batteries kept for a duration of six months or longer should be charged and discharged again at least every three 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 six months, whereby it is irrelevant whether the battery was acquired separately or was contained in the scope of the delivery of the Touch Computer.

6 Commissioning

DANGER

Avoid electrostatic charging in potentially explosive atmosphere.
Danger to life in 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.
Danger to life in explosive atmosphere!

- ▶ Do not make any changes to the Touch Computer.
- ▶ In the case of function 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.

6.1 Requirements in potentially explosive atmosphere

Touch Computer

- The Touch Computer may not be opened.
- Do not use, swap or replace any non-specified components.
- Do not retrofit any components to the internal plugs or slots.
  Exception is the slot for the microSD-card and the nano SIM cards.
- Protect the Touch Computer from impact!
- Do not expose the Touch Computer to caustic/aggressive liquids, vapours, mists!
- Avoid the impact of moisture outside the specifications.
- Avoid thermal impact outside the specified temperature range.
- Use the 9-pole data interface only outside the potentially explosive atmosphere and exclusively with the devices specified by the manufacturer!

Battery

- The battery may not be opened.
- Only charge the battery (Type B7-A2Z0-0072) outside the potentially explosive atmosphere.
- Only charge the battery (Type B7-A2Z0-0072) with the chargers specified by BARTEC.
- Only use the battery for the purpose listed in this Quick Start Guide. Is only suitable for the Touch Computer series Type B7-A26*-****/********.
- There is a danger of burning if used incorrectly. Do not expose the battery to temperatures of more than +50 °C (+122 °F).
- Defective batteries must be disposed of immediately, whereby the provisions on battery disposal applicable in the respective region must be observed.
- The battery may explode if it catches fire!
- Do not short circuit the battery!

Accessories

- Only install or replace accessories outside the potentially explosive atmosphere.
- User accessories exclusively which have been tested or certified by BARTEC for this purpose.
- The end user can replace the Battery, MicroSD card, Nano SIM cards, Scan handle, Screen protector, Leather holster, Leather carry case and Handstrap himself.
- The end user is free to choose which MicroSD card or Nano SIM card to use, as these components are not specified in the certificate.
- The touch display can be touched with the fingers, gloves or with the optionally available capacitive stylus (type B7-A2Z0-0062).

6.2 First steps

- ▶ Unpack the Touch Computer.
- ▶ Insert and charge the battery into the Touch Computer.

  or

  charge the battery and then insert it into the Touch Computer.

  Use one of the following accessories to charge:

Description	Charging process	
	Battery (in Touch Computer)	Spare battery
Base station Type: G7-A0Z0-0022	Yes	Yes
Charging station Type: G7-A0Z0-0048	Yes	Yes
4-slot battery charging station Type: G7-A0Z0-0020	No	Yes

- ▶ Switch on the Touch Computer.

Optional:

- ▶ Insert the nano SIM cards.
- ▶ Insert a MicroSD card.
- ▶ Attach/remove/replace screen protector.
- ▶ Mount the scanner handle.
- ▶ Use the leather holster and leather carry case.
- ▶ Attach hand strap.

7 Operation

7.1 Handling accessories

DANGER

Non certified accessories endanger explosion protection.
Danger to life exists in potentially explosive atmospheres!

- ▶ Only use original accessories from BARTEC.

Only permitted outside the potentially explosive atmosphere:

- ▶ Insert/replace nano SIM cards.
- ▶ Insert/replace microSD card.
- ▶ Insert/charge battery.
- ▶ Attach/remove accessories such as scan handle, screen protector, leather holster, leather carry case and handstrap.

7.1.1 Insert Nano SIM card

ATTENTION

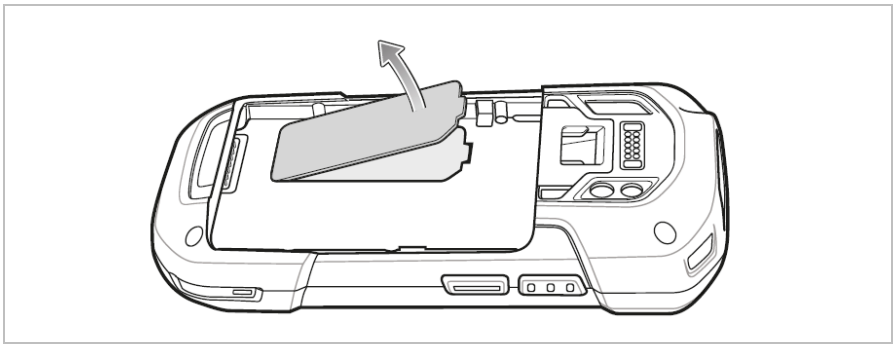
Damage to the Nano SIM card through electrostatic discharges!

- ▶ Use an antistatic base.
- ▶ Ensure that the operator is correctly earthed.

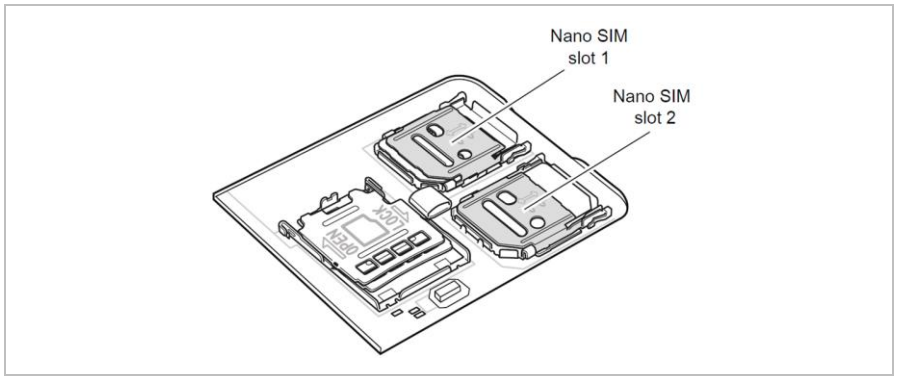
The end user is free to choose which Nano SIM card to use, as these components are not specified in the certificate.

Work steps:

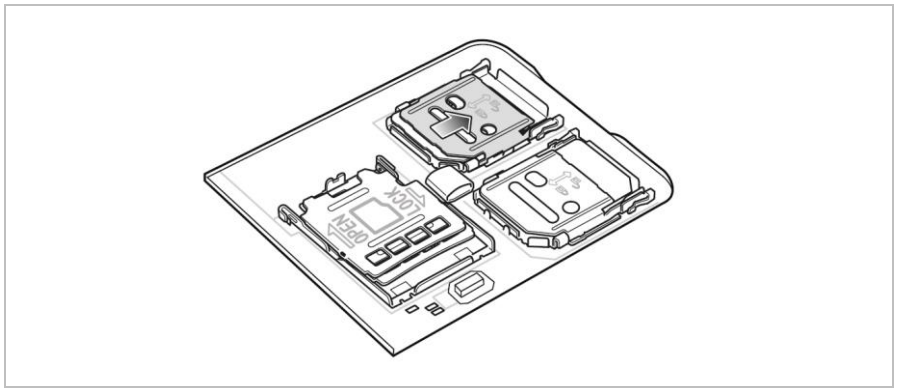
1. Only install or replace the Nano SIM card outside the potentially explosive atmosphere.
2. Remove the hand strap, if installed.
3. Lift the access door.



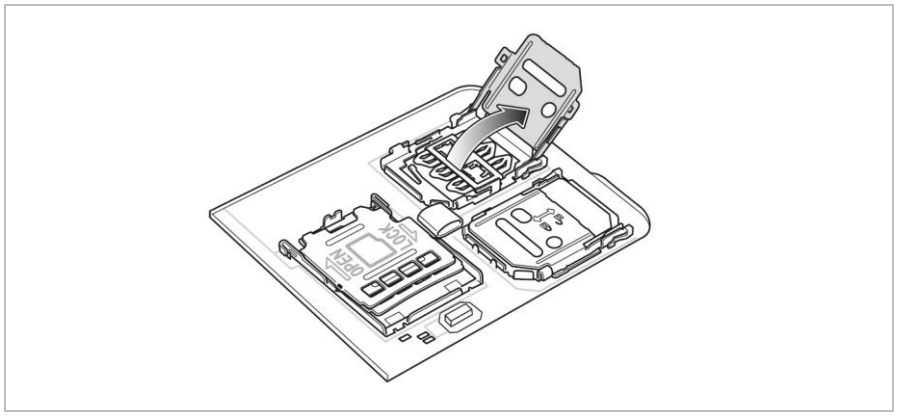
4. Position of the SIM slots in the TC77ex-NI.



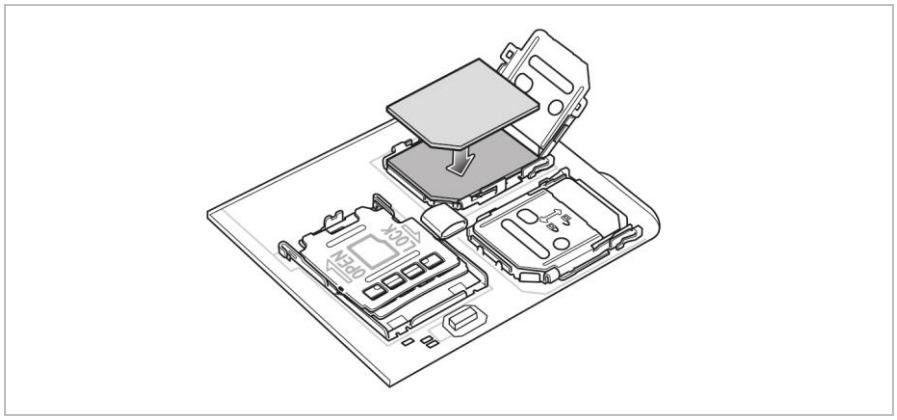
5. Slide the SIM card holder to the unlock position.



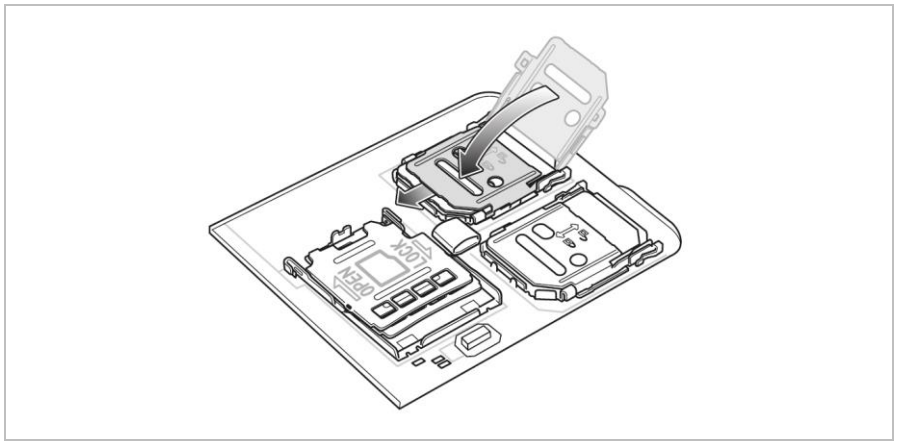
6. Lift the SIM card holder door.



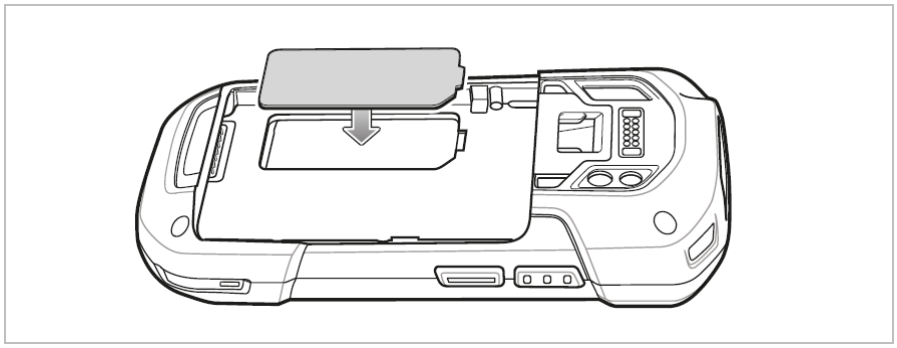
7. Place the Nano SIM card into the card holder with contacts facing down.



8. Close the SIM card holder door and slide to the lock position.



9. Replace the access door.



10. Access door must be replaced and securely seated to ensure proper device sealing.

7.1.2 Insert MicroSD card

ATTENTION

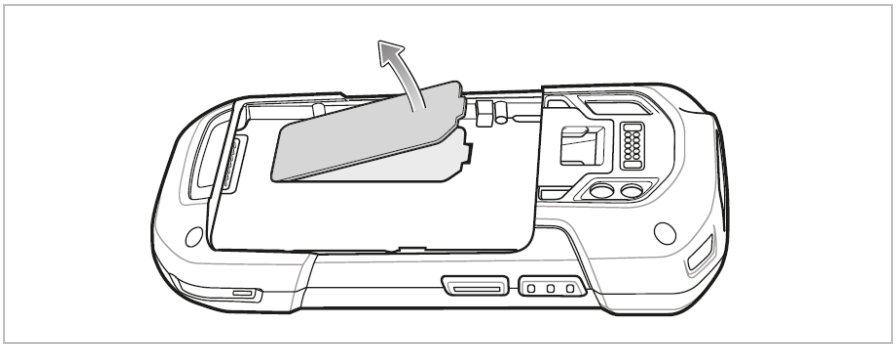
Damage to the MicroSD card through electrostatic discharges!

- ▶ Use an antistatic base.
- ▶ Ensure that the operator is correctly earthed.

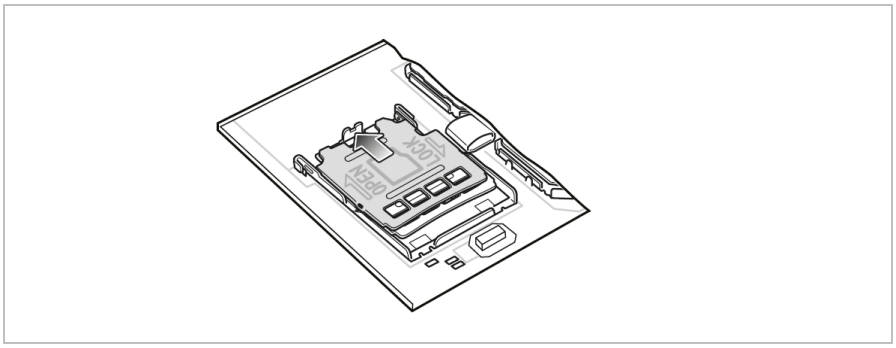
The end user is free to choose which Micro SD card to use, as these components are not specified in the certificate.

Work steps:

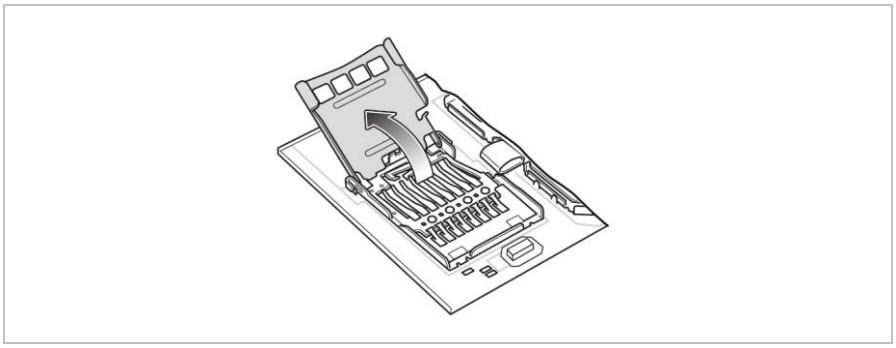
1. Only install or replace the MicroSD card outside the potentially explosive atmosphere.
2. Remove the hand strap, if installed.
3. Lift the access door.



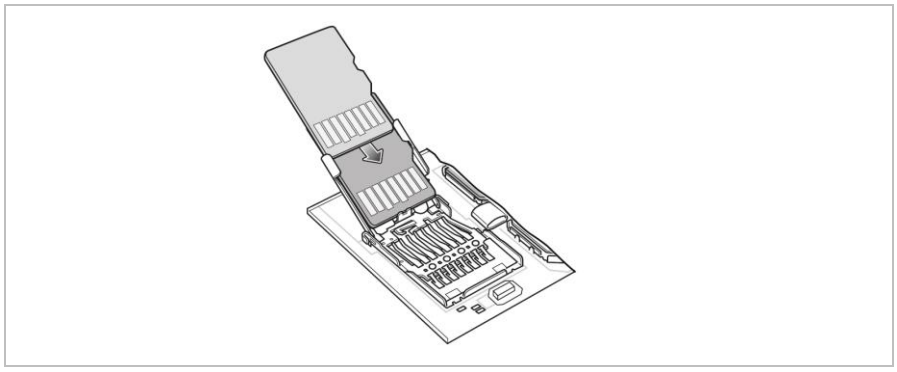
4. Slide the MicroSD card holder to the Open position.



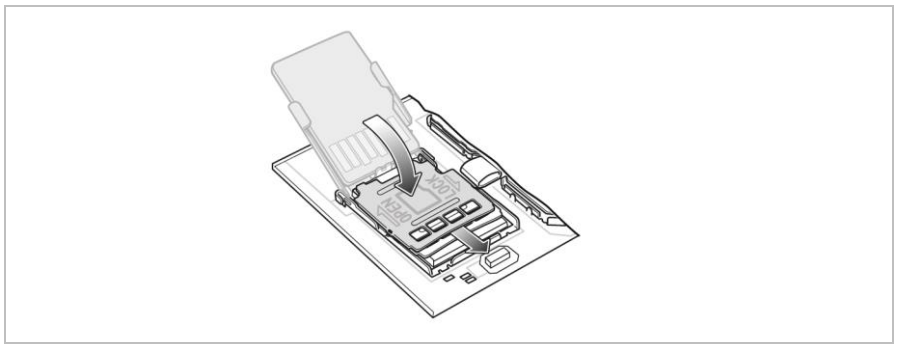
5. Lift the MicroSD card holder.



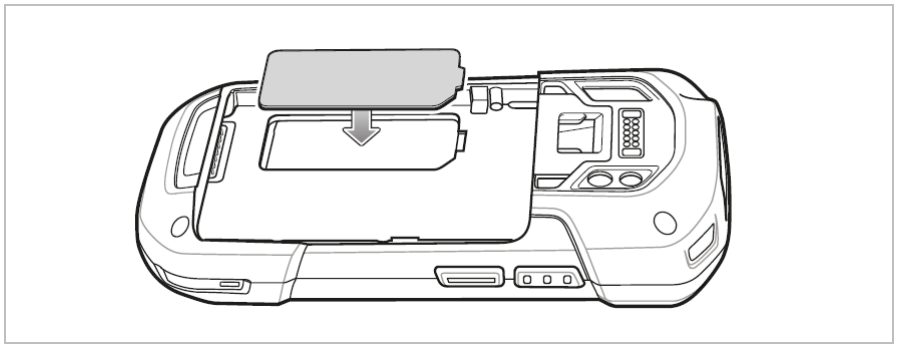
6. Insert the MicroSD card into the card holder door ensuring that the card slides into the holding tabs on each side of the door.



7. Close the MicroSD card holder door and slide the door to the Lock position.



8. Replace the access door.



9. Access door must be replaced and securely seated to ensure proper device sealing.

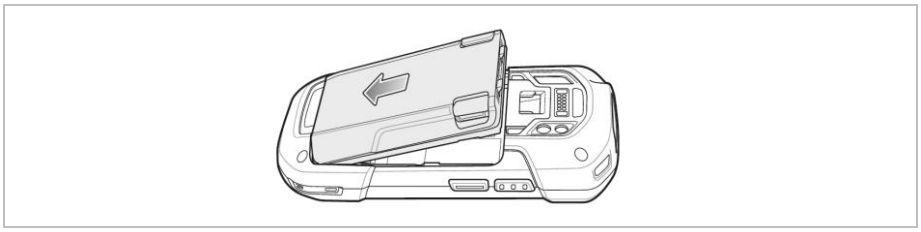
7.1.3 Insert/change battery

The TC77ex–NI is supplied with a battery:

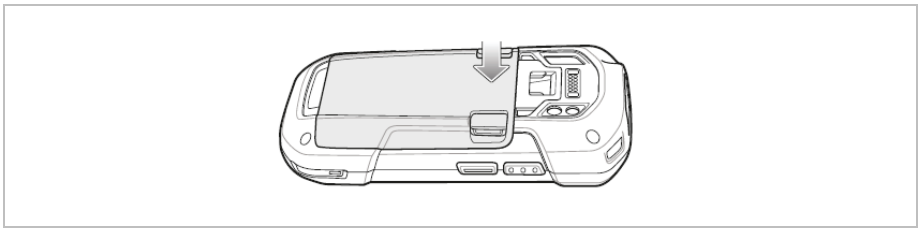
Type	Order number
Lithium-ion battery 3.7 V/4620 mAh	B7-A2Z0-0072

Insert battery - work steps:

1. Charge the battery only outside hazardous areas.
2. The battery (Type B7-A2Z0-0072) may only be inserted/changed outside the hazardous area.
3. Use only batteries which have been tested or certified by BARTEC for this purpose.
4. Insert the battery, bottom first, into the battery compartment in the back of the device.



5. Press the battery down into the battery compartment until the battery release latches snap into place.



Change battery - work steps:

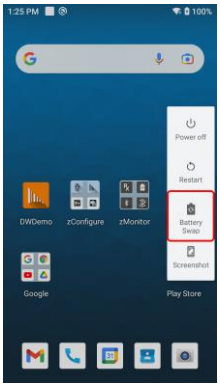
The device provides a Hot Swap mode where you can replace the battery without powering off the device. Replace the battery within two minutes. After two minutes the device reboots and data may be lost.

ATTENTION

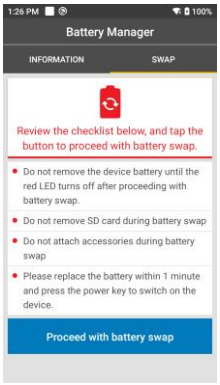
Incorrect handling may cause damage to property!

- ▶ Use only batteries which have been tested or certified by BARTEC for this purpose.
- ▶ If the battery change takes longer than 2 minutes, switch off the TC77ex-NI with function "Power Off" before removing the battery. Mistakes when removing the battery can cause data loss.
- ▶ After replacing the battery, wait 15 minutes before using Battery Swap again.

1. Remove any accessory attached to the device.
2. Press the Power button until the menu appears.
3. Touch **Battery Swap**.

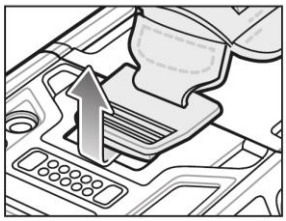


4. Follow the on-screen instructions.



5. Wait for the LED to turn off.

6. If hand strap is attached, slide the hand strap clip up toward the top of the device and then lift.



7. Press the two battery latches in.

8. Lift the battery from the device.

9. Insert the replacement battery, bottom first, into the battery compartment in the back of the device.
10. Press the battery down until the battery release latch snaps into place.
11. Replace the hand strap, if required.
12. Press and hold the Power button to turn on the device.

7.1.4 Charging the Main battery

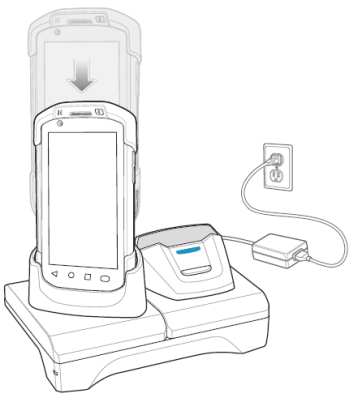
7.1.4.1 In Base station

1. Charge the battery only outside hazardous areas.
2. Connect the base station to a power source.
3. Place the bottom of the device into the base station.
4. Rotate the top of the device until the connector on the back of the device mates with the connector on the cradle.
5. Ensure the device is connected properly. The charging Charging/Notification LED on the device begins blinking amber indicating that the device is charging.

Charging the Touch Computer with the mounted Scan handle is not possible in the Base station.

7.1.4.2 In Charging station

1. Charge the battery only outside hazardous areas.
2. Connect the charging station to a power source.
3. Place the device into the charging station.
4. Ensure the device is connected properly. The charging Charging/Notification LED on the device begins blinking amber indicating that the device is charging.



Charging the Touch Computer with the mounted Scan handle is possible in the Charging station.

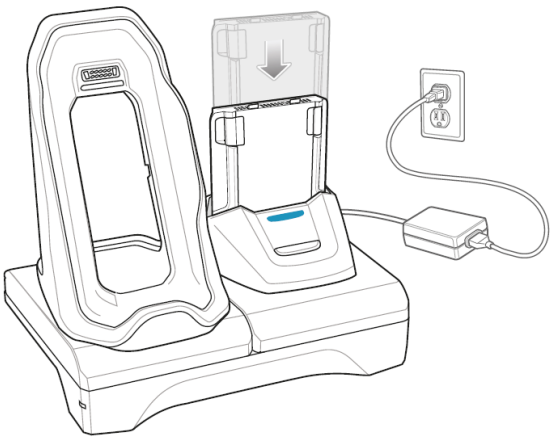
7.1.4.3 Charge LED Indicator

Status	Indications
Off	• The battery is not charging. • The device is not inserted correctly in the base station or connected to a power source. • Base station is not powered.
Slow Blinking Amber Every 4 seconds	• Battery is charging, but the battery is fully depleted and does not yet have sufficient charge to power the device.
Solid Green	Battery charging is complete.
Fast Blinking Amber (2 blinks/second)	Charging error. • Temperature is too low or too high. • Charging has gone on too long without completion (typically eight hours).
Slow Blinking Red Every 4 seconds	The device is charging but the battery is at end of useful life.
Solid Red	Charging complete but the battery is at end of useful life.
Fast Blinking Red 2 blinks/second	Charging error but the battery is at end of useful life., • Temperature is too low or too high. • Charging has gone on too long without completion (typically eight hours).

7.1.5 Charging the spare battery

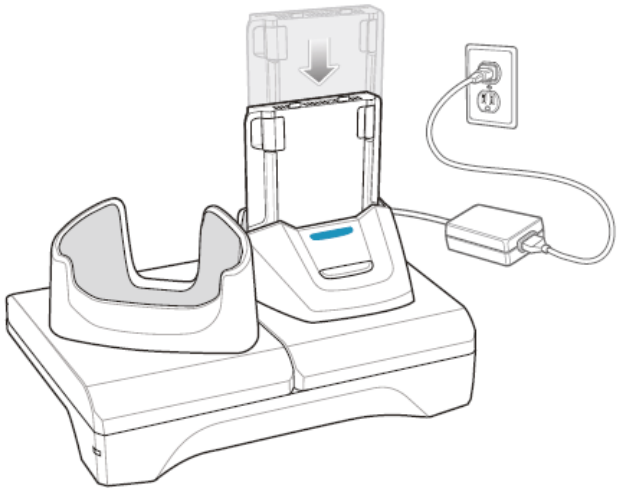
7.1.5.1 In Base station

1. Charge the battery only outside hazardous areas.
2. Connect the base station to a power source.
3. Insert the battery into the right slot to begin charging.
4. Ensure the battery is seated properly.



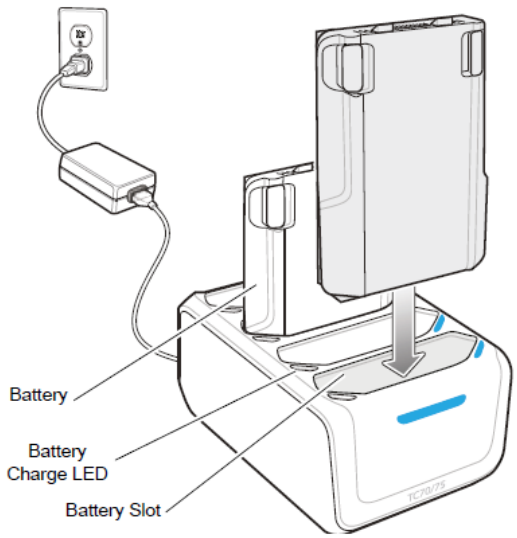
7.1.5.2 In Charging station

1. Charge the battery only outside hazardous areas.
2. Connect the charging station to a power source.
3. Insert the battery into the right slot to begin charging.
4. Ensure the battery is seated properly.



7.1.5.3 In 4-slot battery charging station

1. Charge the battery only outside hazardous areas.
2. Connect the battery charging station to a power source.
3. Insert the battery into a battery charging well and gently press down on the battery to ensure proper contact.



7.1.5.4 Charge LED Indicator

Status	Indications
Off	• The battery is not charging. • The battery is not inserted correctly in the base station/battery charging station. • Base station/battery charging station is not powered.
Slow Blinking Amber	Battery is charging.
Solid Green	Charging complete.
Fast Blinking Amber	Charging error. • Check placement of spare battery
Slow Blinking Red	Spare battery is charging and battery is at the end of useful life.
Fast Blinking Red	Charging error. • Check placement of spare battery • Check if battery is at the end of useful life.
Solid Red	Charging complete and battery is at the end of useful life.

7.2 Using the touch screen

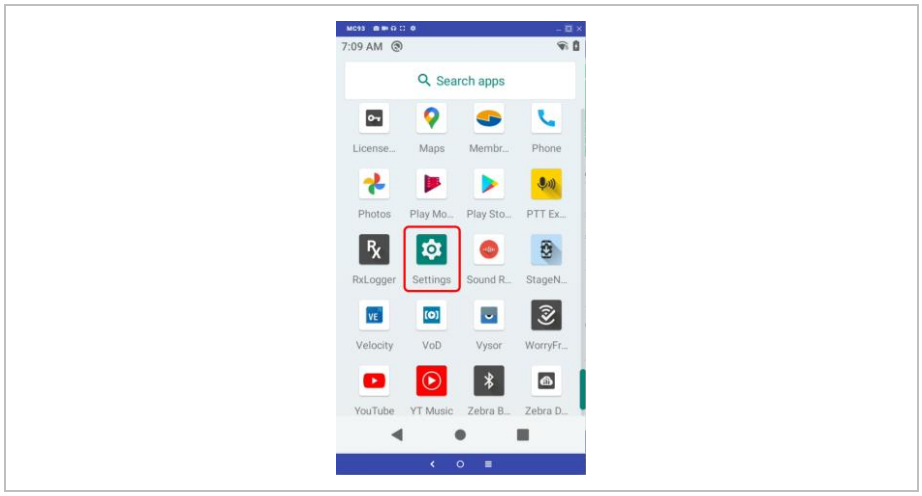
Der Touch Bildschirm kann mit folgenden Methoden bedient werden.

- Finger
- Gloves
- Capacitive stylus (Type B7-A2Z0-0062)

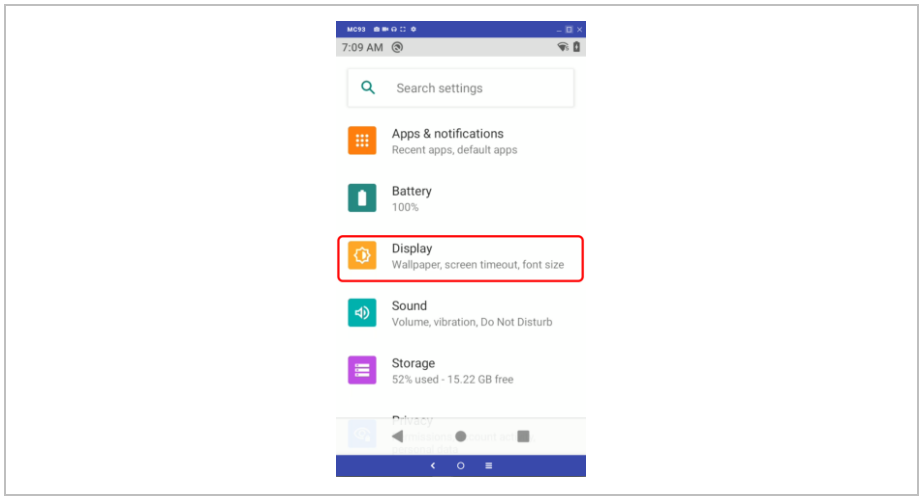
It should be noted that the touch mode must be adjusted depending on the method used

Work steps:

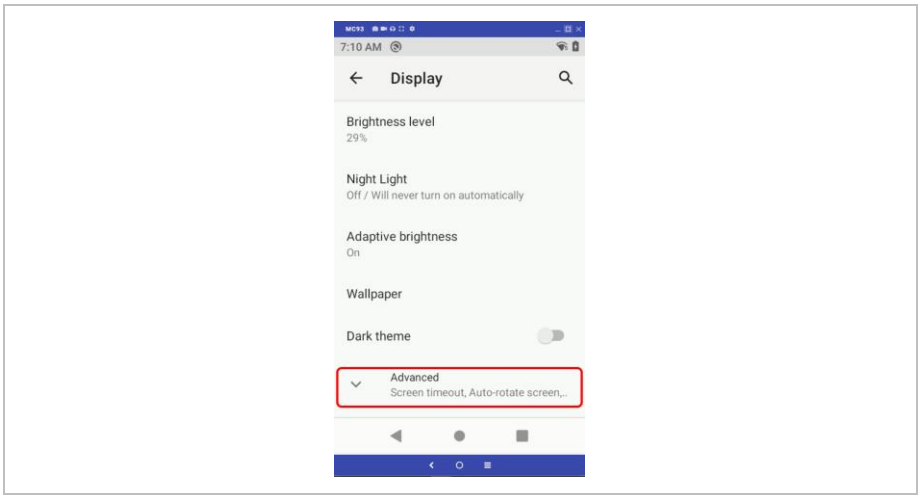
1. Go to the **Settings**.



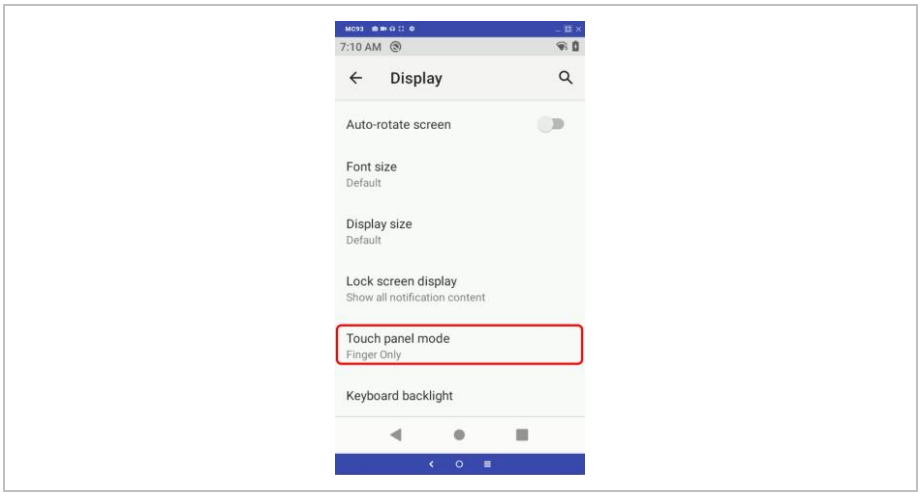
2. Scroll down and select the "**Display**" menu.



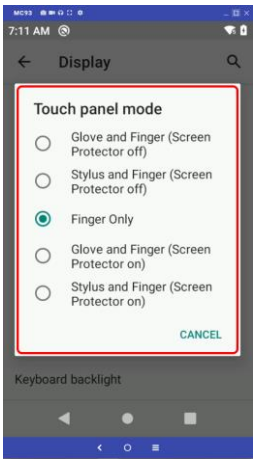
3. Select “**Advanced**“ in the menu.



4. Select “**Touch panel mode**“ in the menu.



5. Set the “**Touch Mode**“ for your input method.



- Glove and Finger (Screen protector off), for touching the screen with fingers or glove.
- Stylus and Finger (Screen protector off), for touching the screen with fingers or stylus.
- Finger only, for touching the screen only with fingers.
- Glove and Finger (Screen protector on), for touching the screen with fingers or glove.
- Stylus and Finger (Screen protector on), for touching the screen with fingers or stylus.

6. Ext the menu by clicking on “**Home Screen**“.

For further instructions on how to operate the touch screen, refer to the "TC77 Touch Computer User Manual (DE)" or the "TC77 Touch Computer Integration Manual (EN)" from ZEBRA.

7.3 Scanning

1. Ensure that an application is open on the device and a text field is in focus (text cursor in text field).
2. Point the top of the device at a barcode.
3. Press and hold the Scan button or trigger.
   The red laser aiming pattern turns on to assist in aiming.
4. Ensure the barcode is within the area formed by the cross-hairs in the aiming pattern.
   The aiming dot is used for increased visibility in bright lighting conditions.
   The Scan LEDs light green and a beep sounds, by default, to indicate the barcode was decoded successfully.

The Zebra DataWedge application is pre-installed on the touch computer.

This freeware application allows for custom setup of the scanner and handles scanner data in the background like a keyboard input in the currently active application.

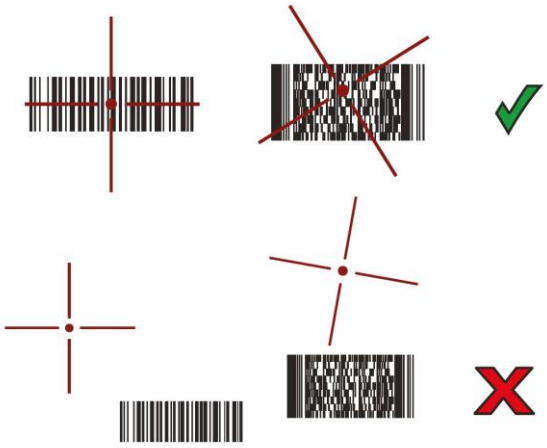
For more information on DataWedge, please visit:

https://www.zebra.com/us/en/products/software/mobile-computers/datawedge.html

Instructions for DataWedge:

https://techdocs.zebra.com/

Aiming Pattern



Pick List Mode with Multiple Barcodes

8 Disposal

Touch Computer and accessories contains metallic and plastic parts and electronic components.

WEEE registration number of the BARTEC GmbH:
DE 95940350

TAs professional electrical devices, our devices are intended exclusively for commercial use, so-called B2B devices, in accordance with the WEEE Directive. The WEEE Directive provides the framework for the treatment of old electrical equipment throughout Europe. This means that you may not dispose of these devices in usual household waste but must dispose of them separately in an environmentally compatible manner and can also bring them to the collection points of public disposal companies. All products purchased from us can be returned to us by our customers for disposal. We will ensure disposal in accordance with the applicable laws. The sender shall bear the costs of postage and packaging.

9 Declaration of Conformity

9.1 EU Declaration of Conformity

EU Konformitätserklärung
EU Declaration of Conformity
Déclaration UE de conformité

№ B1-A260-7C0002_A

BARTEC

Wir	We	Nous
	BARTEC GmbH Max-Eyth-Straße 16 97980 Bad Mergentheim Germany	
erklären in alleiniger Verantwortung, dass das Produkt **TC77ex-NI**	declare under our sole responsibility that the product **TC77ex-NI**	attestons sous notre seule responsabilité que le produit **TC77ex-NI**
	Typ B7-A26*-*3/**********	
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 attestation correspond aux dispositions des **directives (D)** suivantes
ATEX-Richtlinie 2014/34/EU	**ATEX-Directive 2014/34/EU**	**Directive ATEX 2014/34/UE**
RED-Richtlinie 2014/53/EU	**RED-Directive 2014/53/EU**	**Directive RED 2014/53/UE**
RoHS-Richtlinie 2011/65/EU	**RoHS-Directive 2011/65/EU**	**Directive RoHS 2011/65/UE**
WEEE-Richtlinie 2012/19/EU	**WEEE-Directive 2012/19/EU**	**Directive WEEE 2012/19/UE**
und mit folgenden Normen oder normativen Dokumenten übereinstimmt	and is in conformity with the following standards or other normative documents	et est conforme aux normes ou documents normatifs ci-dessous
EN IEC 60079-0: 2018 **EN 60079-11: 2012** **EN 60079-28: 2015** **EN 301 511 V12.5.1** **EN 301 908-1 V13.1.1** **EN 301 908-2 V13.1.1** **EN 301 908-13 V11.1.2** **EN 300 328 V2.2.2** **EN 301 893 V2.1.1** **EN 300 330 V2.1.1** **EN 303 413 V1.1.1** **EN 50581:2012** **EN IEC 63000:2018**	**EN 301 489-1 V2.2.3,** **Draft EN 301 489-52 V1.1.0** **EN 301 489-1 V2.2.3,** **EN 301-489-17 V3.2.4** **EN 301 489-1 V2.2.3,** **Final Draft EN 301 489-3 V2.1.1** **EN 301 489-1 V2.2.3,** **Draft EN 301 489-19 V2.1.0** **EN 55032:2015/A11:2020 (Class B)** **EN 55035:2017** **EN 61000-3-2:2014 (Class A)** **EN 61000-3-3:2013** **EN 60601-1-2:2015**	**EN 62368-1:2014/AC:2015** **EN 62368-1:2014/A11:2017** **EN 50360:2017** **EN 50566:2017** **EN 50364:2018** **EN 50663:2017** **EN 62479:2010** **EN 50665:2017** **EN 62311:2008** **EN 62311 :2020** **EN 60825-1:2014 (Laser)** **EN 62471:2008 (LED)** **EN 50121-3-2:2016** **EN 50121-4:2016**
Verfahren der internen Fertigungskontrolle	**Procedure of internal control of production**	**Procédure de contrôle interne de fabrication**

EPS 17 ATEX 1 028 X

2004, Bureau Veritas CPS Germany GmbH, Businesspark A96, 86842 Türkheim

CE

Bad Mergentheim,27.07.2021

Osman Amith
Osman Amith
Authorized representative of
BARTEC GmbH,
At Bartec Pixavi AS
Vestre Svanholmen 24
4313 Sandnes, Norway

i.V. Michael Krüger
VP Quality & Certification

FB-0172d

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EU Konformitätserklärung
EU Declaration of Conformity
Déclaration UE de conformité

№ B1-A2Z0-7C0008

BARTEC

Wir	We	Nous
	BARTEC GmbH Max-Eyth-Straße 16 97980 Bad Mergentheim Germany	
erklären in alleiniger Verantwortung, dass das Produkt	declare under our sole responsibility that the product	attestons sous notre seule responsabilité que le produit
TC7X-NI Batterie	**TC7X-NI Battery**	**TC7X-NI Batterie**
	Type B7-A2Z0-0072	
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 attestation correspond aux dispositions des **directives (D)** suivantes
ATEX-Richtlinie 2014/34/EU	**ATEX-Directive 2014/34/EU**	**Directive ATEX 2014/34/UE**
RoHS-Richtlinie 2011/65/EU	**RoHS-Directive 2011/65/EU**	**Directive RoHS 2011/65/UE**
WEEE-Richtlinie 2012/19/EU	**WEEE-Directive 2012/19/EU**	**Directive WEEE 2012/19/UE**
und mit folgenden Normen oder normativen Dokumenten übereinstimmt	and is in conformity with the following standards or other normative documents	et est conforme aux normes ou documents normatifs ci-dessous
	EN IEC 60079-0:2018 **EN 60079-11:2012** **EN 62133:2013**	
Verfahren der internen Fertigungskontrolle	**Procedure of internal control of production**	**Procédure de contrôle interne de fabrication**
	EPS 17 ATEX 1 028 X **2004, Bureau Veritas CPS Germany GmbH, Businesspark A96, 86842 Türkheim**	

CE

Bad Mergentheim, 16.12.2020

i.V. Michael Krüger
VP Quality & Control

i.V. Cristian Olareanu
Team Leader Certification Center

FB-0172d

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9.2 UK Declaration of Conformity

UK Declaration of Conformity

BARTEC

Nº B1-A260-7C0003

We

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

declare under our sole responsibility that the product

TC77ex-NI

Type B7-A26*-*3/********

to which this declaration relates is in accordance with the provision of the following directives

Statutory Instrument 2016 No. 1107 - The Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres Regulations 2016
Statutory Instrument 2017 No. 1206 - The Radio Equipment Regulations 2017
Statutory Instrument 2012 No. 3032 - The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012

and is in conformity with the following standards or other normative documents

EN IEC 60079-0: 2018
EN 60079-11: 2012
EN 60079-28: 2015
EN 301 511 V12.5.1
EN 301 908-1 V13.1.1
EN 301 908-2 V13.1.1
EN 301 908-13 V11.1.2
EN 300 328 V2.2.2
EN 301 893 V2.1.1
EN 300 330 V2.1.1
EN 303 413 V1.1.1
EN 50581:2012
EN IEC 63000:2018
EN 301 489-1 V2.2.3, Draft EN 301 489-52 V1.1.0
EN 301 489-1 V2.2.3, EN 301-489-17 V3.2.4
EN 301 489-1 V2.2.3, Final Draft EN 301 489-3 V2.1.1
EN 301 489-1 V2.2.3, Draft EN 301 489-19 V2.1.0
EN 55032:2015/A11:2020 (Class B)
EN 55035:2017
EN 61000-3-2:2014 (Class A)
EN 61000-3-3:2013
EN 60601-1-2:2015
EN 62368-1:2014/AC:2015
EN 62368-1:2014/A11:2017
EN 50360:2017
EN 50566:2017
EN 50364:2018
EN 50663:2017
EN 62479:2010
EN 50665:2017
EN 62311:2008
EN 62311:2020
EN 60825-1:2014 (Laser)
EN 62471:2008 (LED)
EN 50121-3-2:2016
EN 50121-4:2016

Procedure of internal control of production

CML 21UKEX2341X
2503, Eurofins E&E CML Limited, Newport Business Park, CH65 4LZ

UK CA

Bad Mergentheim, 2021-07-27

Osman Amith
Osman Amith
Authorized representative of
BARTEC GmbH,
At Bartec Pixavi AS
Vestre Svanholmen 24
4313 Sandnes, Norway

i.V. Michael Krüger
VP Quality & Certification

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UK Declaration of Conformity

BARTEC

№ B1-A2Z0-7C0009

We

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

declare under our sole responsibility that the product

TC7X-NI Battery

Type B7-A2Z0-0072

to which this declaration relates is in accordance with the provision of the following **directives**

Statutory Instrument 2016 No. 1107 - The Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres Regulations 2016
Statutory Instrument 2012 No. 3032 - The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012

and is in conformity with the following standards or other normative documents

EN IEC 60079-0:2018
EN 60079-11:2012
EN 62133:2013

Procedure of internal control of production

CML 21UKEX2341X
2503, Eurofins E&E CML Limited, Newport Business Park, CH65 4LZ

UK CA

Bad Mergentheim, 2021-07-27

Osman Amith
Osman Amith
Authorized representative of
BARTEC GmbH,
At Bartec Pixavi AS
Vestre Svanholmen 24
4313 Sandnes, Norway

i.V. Michael Krüger
VP Quality & Certification

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BARTEC

BARTEC GmbH
Max-Eyth-Str. 16
97980 Bad Mergentheim
Germany

Phone: +49 7931 597 0
info@bartec.com

bartec.com

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