BARTEC

Quick Start Guide - Translation

BARTEC SP9EX1 + BARTEC SP9EX2

Smartphone

BARTEC SC9EX1 + BARTEC SC9EX2

Smartscanner

Type 17-S19*-****/********

Type B7-S29*-****/********

ATEX / IECEx Zone 0 / 1 / 21

ATEX / IECEx Zone 2 / 22

Class I, II, III Division 1

Class I, II, III Division 2

Document No.: 11-S190-6E0001

Status: August 2024

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

Content	Pages
English	1-46

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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 careful 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*

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

DANGER *désigne un danger imminent. Si ce danger n'est pas évité, il peut entraîner la mort ou des blessures très graves.*

WARNING/*AVERTISSEMENT*

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

AVERTISSEMENT *désigne un danger potentiel. S'il n'est pas évité, il peut entraîner la mort ou des blessures très graves.*

CAUTION/*PRUDENCE*

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

PRUDENCE *désigne un danger potentiel. S'il n'est pas évité, il peut entraîner des blessures légères ou mineures.*

ATTENTION/*ATTENTION*

ATTENTION describes a possibly damaging situation. If not avoided, the plant or objects in its vicinity may be damaged.
ATTENTION *désigne une situation potentiellement dangereuse. Si elle n'est pas évitée, l'installation ou quelque chose dans son environnement peut être endommagé.*

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 our General Terms and Conditions for Deliveries and Services 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 Smartphone and Smartscanner is a prerequisite for its perfect and correct functioning.

1.3 Intended use

1.3.1 Exclusive purpose

Smartphone and Smartscanner are handheld pieces of electrical equipment. They serve the purpose of the mobile recording, processing and/or radio transmission of data within potentially explosive atmospheres.

They are 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 Smartphone and Smartscanner who are acquainted with the basic regulations on safety and accident prevention, and who have been inducted in the use of Smartphone and Smartscanner, 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.

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 Smartphone and Smartscanner have to conducted by BARTEC.

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

bartec.com/service-support/returns-repair

Select “Automation and 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 Smartphone and Smartscanner. Labelling see Chapter: Technical data.

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

1.8 Warranty

WARNING/*AVERTISSEMENT*

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.

Aucune modification ou transformation ne doit être effectuée sans l'autorisation écrite du fabricant.

En cas d'utilisation de pièces non spécifiées, la protection contre les explosions n'est plus garantie. Il n'est pas garanti que les pièces d'origine externe soient conçues et fabriquées conformément aux exigences et à la sécurité.

▶ *Avant toute modification ou transformation, veuillez contacter le fabricant et obtenir son autorisation. N'utiliser que des pièces de rechange et d'usure d'origine.*

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

BARTEC's General Terms and Conditions for Deliveries and Services shall apply in principle. 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 Smartphone and Smartscanner.
- Incorrect handling
- Failure to observe the information in the Quick Start Guide 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.

For Smartphone and Smartscanner, we offer a manufacturer warranty of two year starting from the date of transfer of risk, as defined in our general terms and conditions.

For batteries and accessories, the manufacturer warranty period is 6 months from the transfer of risk.

This warranty covers all parts of the delivery and shall be restricted to the free replacement or repair of the defective parts in our repair centers. 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.

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 can be found at
www.bartec.com

Document	Explanation
Data sheet **BARTEC SP9EX Smartphone** **BARTEC SC9EX Smartscanner**	This technical data sheet contains the most important explosion-relevant technical data as well as general technical data.

1.10 Definition of terms

A few abbreviations are used in the documentation.

SP	=	Smartphone
SC	=	Smartscanner
EX1	=	is used as generic term for Zone 0 / Zone 1 and Division 1 version
EX2	=	is used as generic term for Zone 2 and Division 2 version

2 Regulatory information

All BARTEC devices are designed to be compliant with the rules and regulations in locations they are sold and will be labeled as required.

Any changes or modifications to BARTEC equipment, not expressly approved by BARTEC, could void the user's authority to operate the equipment.

CAUTION/*PRUDENCE*

Only use BARTEC approved accessories, batteries and charging stations.

DO NOT charge Smartphone/Smartscanner or batteries when they are damp or wet. All components must be dry before connecting to an external power source.

N'utiliser que des accessoires, des batteries et et des stations de charge approuvés par BARTEC.

Ne chargez PAS le smartphone/smartscanner ou les batteries s'ils sont humides ou mouillés. Tous les composants doivent être secs avant d'être connectés à une source d'alimentation externe.

2.1 Health and Safety Recommendations

2.1.1 Ergonomic Recommendations

In order to avoid or minimize the potential risk of ergonomic injury, always follow good ergonomic workplace practices. Consult with your local Health and Safety Manager to ensure that you are adhering to your company's safety programs to prevent employee injury.

2.1.2 Vehicle Installation

RF signals may affect improperly installed or inadequately shielded electronic systems in motor vehicles (including safety systems). Check with the manufacturer or its representative regarding your vehicle. Ensure the equipment is installed to avoid driver distractions. You should also consult the manufacturer about any equipment that has been added to your vehicle.

Position the device within easy reach. User should be able to access the device without removing their eyes from the road.

Before installing or using, check national and local laws regarding distracted driving.

Safety on the Road

Give your full attention to driving. Obey the laws and regulations on the use of wireless devices in the areas where you drive.

The wireless industry reminds you to use your device / phone safely when driving.

2.1.3 Restricted Use Locations

Remember to observe restrictions and obey all signs and instructions on the use of electronic devices in restricted use locations.

2.1.4 Safety in Hospitals and Aircraft

Wireless devices transmit radio frequency energy that may affect medical electrical equipment and aircraft's operation. Wireless devices should be switched off wherever you are requested to do so in hospitals, clinics, healthcare facilities or by airline staff. These requests are designed to prevent possible interference with sensitive equipments.

2.1.5 Medical Devices

It is recommended that a minimum separation distance of 20 cm (8 inches) be maintained between a wireless device and a medical devices such as pacemakers, defibrillator, or other implantable devices to avoid potential interference with the medical device. Pacemaker users should keep the device at the opposite side of the pacemaker or turn OFF the device if suspected of interference.

Please consult your physician or the manufacturer of the medical device to determine if the operation of your wireless product may interfere with the medical device.

2.1.6 Using the speakers

	To prevent possible hearing damage, do not listen at high volume levels for long periods

2.2 RF Exposure Guidelines

SAFETY INFORMATION/*INFORMATIONS DE SÉCURITÉ*

Reducing RF Exposure – Use Properly

The device complies with internationally recognized standards covering human exposure to electromagnetic fields.

Use only BARTEC tested and approved accessories to ensure RF exposure compliance.

To satisfy RF exposure requirements, this device must operate with a minimum separation distance of 0.5 cm or more from a user's body and nearby persons.

Réduire l'exposition aux radiofréquences - Utiliser correctement

Réduction de l'exposition aux radiofréquences - Utilisation appropriée

L'appareil est conforme aux normes internationales reconnues en matière d'exposition des personnes aux champs électromagnétiques.

N'utilisez que des accessoires testés et approuvés par BARTEC pour garantir la conformité de l'exposition aux radiofréquences.

Pour satisfaire aux exigences en matière d'exposition aux radiofréquences, cet appareil doit fonctionner à une distance minimale de 0,5 cm ou plus du corps de l'utilisateur et des personnes se trouvant à proximité.

2.3 SAR

The BARTEC SP9EX Smartphone and BARTEC SC9EX Smartscanner are radio transmitters and receivers. They are designed and manufactured not to exceed the emission limits for exposure to radio frequency (RF) energy set by the Federal Communications Commission (FCC) of the U.S. Government, Industry Canada of the Canadian Government (IC), and recommended by the Council of the European Union. The exposure standard for wireless devices employs a unit of measurement known as the Specific Absorption Rate, or SAR.

The SAR limit set by the FCC/IC is 1.6W/kg averaged over 1 gram of actual tissue and 4.0W/kg averaged over 10 gram of actual tissue for Extremity.

The SAR limit recommended by The Council of the European Union (CE) is 2.0W/kg averaged over 10 g of actual tissue.

The SAR value measured for BARTEC SP9EX Smartphone and BARTEC SC9EX Smartscanner:

	Highest Reported Head SAR 1 g	Highest Reported Body-worn SAR 1 g (1.0 cm Gap)	Highest Reported Hotspot SAR 1 g (1.0 cm Gap)	Highest Reported Extremity SAR 10 g (0 cm Gap)
FCC	0.76 W/kg	0.67 W/kg	1.29 W/kg	1.98 W/kg
	Highest Simultaneous Transmission SAR			
	Head	Body-worn	Hotspot	Extremity
	1.43 W/kg	1.38 W/kg	1.48 W/kg	2.03 W/kg

IC	Highest Reported Head SAR 1 g	Highest Reported Body-worn SAR 1 g (1.0 cm Gap)	Highest Reported Hotspot SAR 1 g (1.0 cm Gap)	Highest Reported Extremity SAR 10 g (0 cm Gap)
	0.78 W/kg	0.71 W/kg	1.29 W/kg	1.98 W/kg
	Highest Simultaneous Transmission SAR			
	Head	Body-worn	Hotspot	Extremity
	1.44 W/kg	1.38 W/kg	1.52 W/kg	2.03 W/kg
CE	Highest Head SAR 10 g		Highest Body SAR 10 g (0.5 cm Gap)	
	0.776 W/kg		1.366 W/kg	
	Highest Simultaneous Transmission SAR			
	Head SAR 10g		Body SAR 10g	
	1.171 W/kg		1.980 W/kg	

2.4 Optical devices

2.4.1 Laser

Class 2 laser scanners use a low power, visible light diode. As with any very bright light source such as the sun, the user should avoid staring directly into the light beam. Momentary exposure to a Class 2 laser is not known to be harmful.

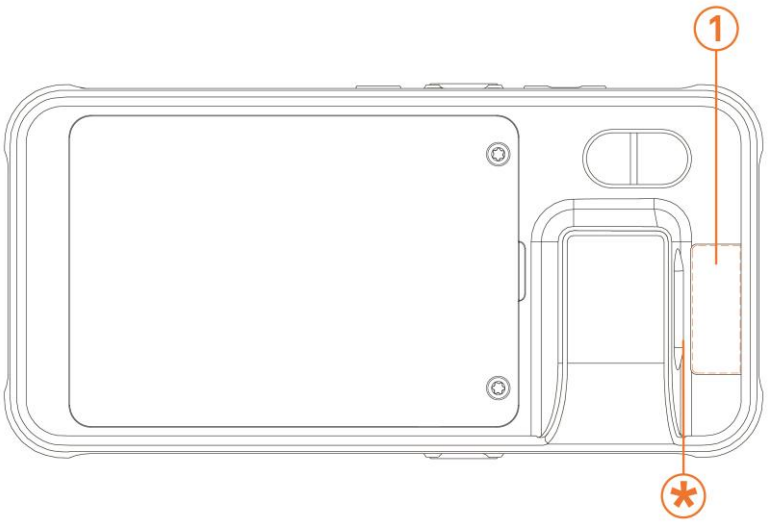
CAUTION/*PRUDENCE*

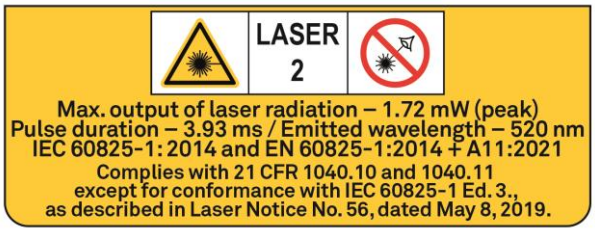
Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

L'utilisation de commandes, de réglages ou l'exécution de procédures non spécifiés dans la documentation du produit fournie peut entraîner une exposition dangereuse à la lumière laser.

SE55	Wavelength – 520nm Beam divergence Pulse pattern (pulse duration, repetition rate, …) – 3.93ms ON time, 60.17Hz Maximum power or energy output – 1.72mW (peak)

2.4.2 Scanner Labeling



1	
*	CAUTION: Laser light emitted from this aperture.

2.4.3 LED

Risk Group classified according to IEC 62471:2006 and EN 62471:2008.

SE55	Pulse Duration: Continuous wave (CW) Moderate Group (RG2)

2.5 Batteries and Power Packs

2.5.1 Battery information

CAUTION/*PRUDENCE*

Risk of explosion if battery is replaced by an incorrect type.

Dispose of batteries according to instructions.

Use only BARTEC approved batteries. Accessories which have battery charging capability are approved for use with the following battery models:

Standard battery – Type 17-S1Z0-0020/**** (3.68 V / 4300 mAh)

Le remplacement de la batterie par une batterie de type incorrect présente un risque d'explosion. Éliminez les batteries conformément aux directives en vigueur.

N'utilisez que des batteries autorisés par BARTEC.

Les accessoires qui ont la capacité de charger la batterie sont autorisés pour une utilisation avec les modèles de batterie suivants :

*Batterie standard - Type 17-S1Z0-0020/**** (3.68 V / 4300 mAh)*

2.5.2 Battery Safety Guidelines

IMPORTANT – SAFETY INSTRUCTIONS – SAVE THESE INSTRUCTIONS

- To charge the mobile device battery, the battery and charger temperatures must be between 0°C and 45°C (32°F and 113°F).
- Do not use incompatible batteries and charging stations. Use of an incompatible battery or charging station may present a risk of fire, explosion, leakage, or other hazard.
- Do not disassemble or open, crush, bend or deform, puncture, or shred. Damaged or modified batteries may exhibit unpredictable behavior resulting in fire, explosion, or risk of injury.
- Severe impact from dropping any battery-operated device on a hard surface could cause the battery to overheat.
- Do not short circuit a battery or allow metallic or conductive objects to contact the battery terminals.
- Do not modify, disassemble, or remanufacture, attempt to insert foreign objects into the battery, immerse or expose to water, rain, snow or other liquids, or expose to fire, explosion, or other hazard.
- Do not leave or store the equipment in or near areas that might get very hot, such as in a parked vehicle or near a radiator or other heat source. Do not place battery into a microwave oven or dryer.
- To reduce the risk of injury, close supervision is necessary when used near children.

- Please follow local regulations to promptly dispose of used re-chargeable batteries.
- Do not dispose of batteries in fire. Exposure to temperatures over 1125°C (257°F) may cause explosion.
- Seek medical advice immediately if a battery has been swallowed.
- In the event of a battery leak, do not allow the liquid to come in contact with the skin or eyes. If contact has been made, wash the affected area with large amounts of water and seek medical advice.

2.6 United States and Canada Regulatory

2.6.1 FCC Statement

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this euipment does cause harmful interference to radio or television reception, which can be determined by tuning the equipment off and on, the user is encouraged to try to correct the interfference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

2.6.2 IC (Industry Canada) Statement

Innovation, Science and Economics Development Canada ICES-003 Compliance Label: CAN ICES-003 ([B])/NMB-003([B])

This device complies with Innovation, Science and Economic Development Canada's licence-exempt RSSs. Operation is subject to the following two conditions: (1) This device may not cause interference; and (2) This device must accept any interference, including interference that may cause undesied operation of the device.

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes: (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit acceptur tout brouillage radio électrique subi même si le brouillage est susceptible d'en compromettre le fonctionnement.

This device is restricted to indoor use when operating in the 5150 to 5350 MHz frequency range.

Lorsqu'il fonctiomnne dans la plage de fréquences 5150-5350MHz, cet appareil doit être utilisé exclusivement en extérieur.

2.6.3 RF Exposure Requirements – FCC and ISED

The FCC has granted an Equipment Authorization for this device with all reported SAR levels evaluated in compliance with the FCC RF emission guidelines. SAR information on this device is on file with the FCC and can be found under the Display Grant section of fcc.gov/oet/ea/ffcid.

To satisfy RF exposure requirements, this device must be operate with a minimum separation distance of 1.5 cm or more from a user's body and nearby persons.

Pour satisfaire aux exigences d'exposition aux radio fréquences, cet appareil doit fonctionner avec une distance de séparation minimale de 1.5 cm ou plus de corps d'une personne.

Hotspot Mode

To satisfy RF exposure requirements in hotspot mode, this device must operate with a minimum separation distance of 1.0 cm or more from a user's body and nearby persons.

Pour satisfaire aux exigences d'exposition RF en mode hotspot, cet appareil doit fonctionner avec une distance de séparation minimale de 1,0 cm ou plus du corps de l'utilisateur et des personnes à proximité.

Co-located Statement

To comply with FCC RF exposure compliance requirement, the antenna used for this transmitter must not be co-located (within 20 cm) or operating in conjunction with any other transmitter/antenna except those already approved in this filling.

Hotspot ISED Notice

When operating in hotspot mode, this device is restricted to indoor use when operating in the 5150 - 5350 MHz frequency range.

En mode de connexion partagée (hotspot), l'utilisation de cet appareil doit se faire exclusivement en extérieur lorsqu'il fonctionne dans la plage de fréquences 5 150 - 5 350 MHz.

2.7 Brazil

This equipment is not entitled to protection against harmful interference and may not cause interference to duly authorised systems. For more information, see the ANATEL website: www.gov.br/anatel/pt-br

Este equipamento não tem direito à proteção contra interferência prejudicial e não pode causar interferência em sistemas devidamente autorizados. Para maiores informações, consulte o site da ANATEL: www.gov.br/anatel/pt-br

2.8 Regulatory labels

Currently available regulatory labels can be found in the Settings app under About Phone --> Regulatory labels

3 Product description

3.1 BARTEC SP9EX Smartphone

SP9EX is a tough Smartphone with 6.1" AMOLED display, which has been designed for use in the industrial environments and especially developed by BARTEC for use in potentially hazardous areas.

3.2 BARTEC SC9EX Smartscanner

SC9EX is a tough Smartphone with 6.1" AMOLED and scanner, which has been designed for use in the industrial environments and especially developed by BARTEC for use in potentially hazardous areas.

3.3 Purpose of use

BARTEC SP9EX Smartphone and BARTEC SC9EX Smartscanner are handheld electrical devices. They serve the purpose of entry, processing and (radio) transmission of data within potentially explosive atmospheres.

BARTEC SP9EX Smartphone and BARTEC SC9EX Smartscanner are used exclusively in combination with devices which comply with the requirements placed on the overvoltage category I.

BARTEC SP9EX1 Smartphone and BARTEC SC9EX1 Smartscanner,

Type 17-S19*-**/******** have been modified for use in the following potentially explosive atmospheres:

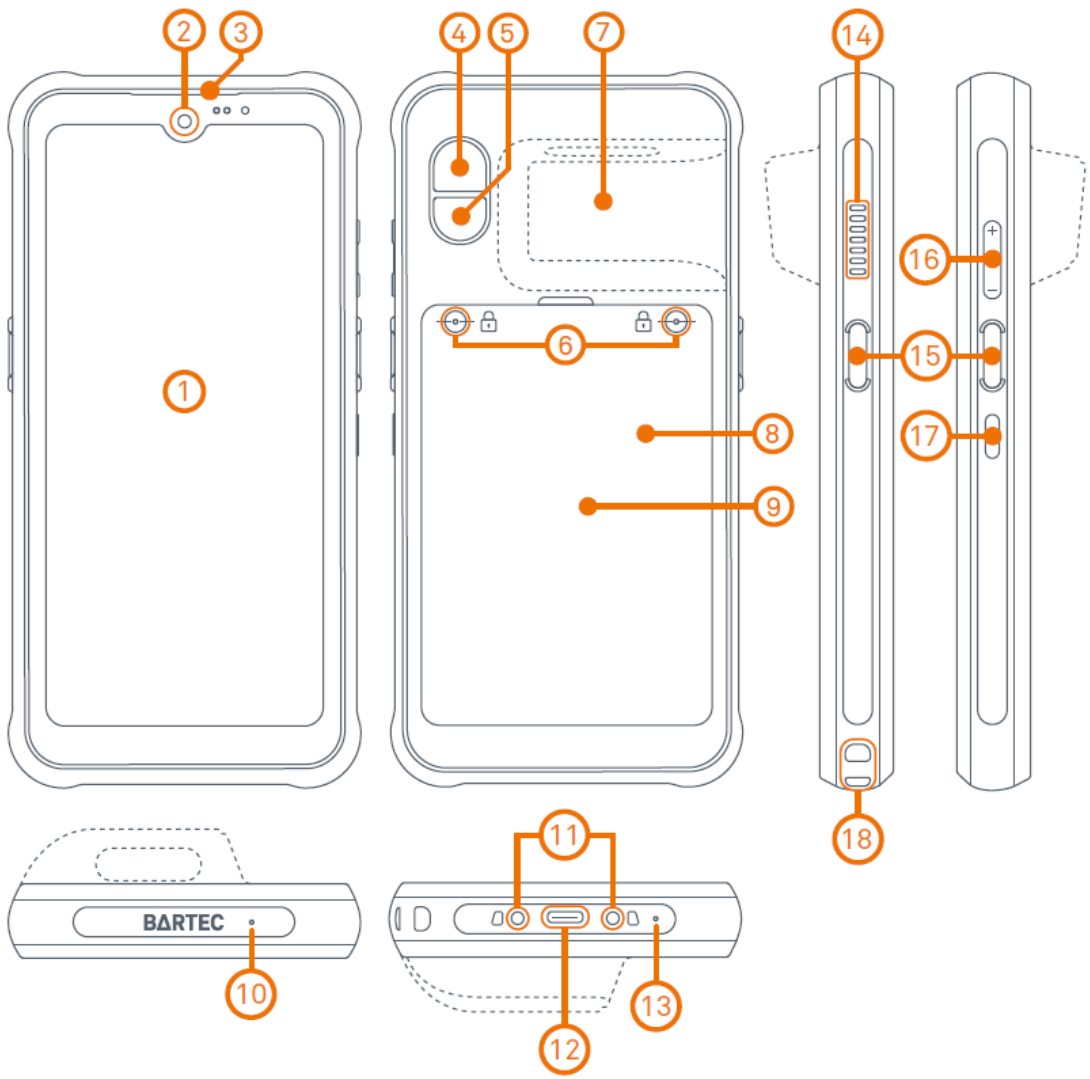
- ATEX / IECEx Zone 0 and Zone 21
- Class I, II, III Div. 1, Groups A, B, C, D, E, F, G; T4

BARTEC SP9EX2 Smartphone and BARTECSC9EX2 Smartscanner,

Type B7-S29*-**/******** have been modified for use in the following potentially explosive atmospheres:

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

4 Structure



1	6.11” OLED	**10**	Top Microphone
2	Front Camera	**11**	Charging Pads
3	Earpiece Speaker	**12**	USB C Port
4	Main Camera	**13**	Bottom Microphone
5	Flash	**14**	Loudspeaker
6	Battery Pack Lock	**15**	Programmable Button (2x)
7	Scan Engine (*)	**16**	Volume Button (-/+)
8	SIM Tray (below battery pack)	**17**	Power Button
9	NFC	**18**	Slot for Handstrap/Neckstrap

(*) Only available in BARTEC SP9EX1 Smartscanner

5 Technical data

5.1 Explosion protection Smartphone

5.1.1 BARTEC SP9EX1 Smartphone

ATEX Zone 0 / Zone 21		
Type	17-S19P-****/********	BARTEC SP9EX1 Smartphone
Labelling		II 1G Ex ia IIC T4 Ga II 2D Ex ia IIIC T135°C Db IP64 -20 °C ≤ Ta ≤ +55 °C
Test certificate		UL 24 ATEX 3153X
Standards		See chapter: EU Declaration of Conformity
IECEx Zone 0 / Zone 21		
Type	17-S19P-****/********	BARTEC SP9EX1 Smartphone
Labelling		Ex ia IIC T4 Ga Ex ia IIIC T135°C Db IP64 -20 °C ≤ Ta ≤ +55 °C
Test certificate		IECEx UL 24.0004X
Standards		See chapter: EU Declaration of Conformity
Class I, II, III, Division 1		
Type	17-S19P-****/********	BARTEC SP9EX1 Smartphone
Labelling		Class I, Div 1, Groups A, B, C and D; Class II, Div 1, Groups E, F and G; Class III, T4 Zone 0, AEx ia IIC T4 Ga Zone 21, AEx ia IIIC T135°C Db Ex ia IIC T4 Ga Ex ia IIIC T135°C Db
Test certificate USA and Canada		E321557
Standards		See Certificate

5.1.2 BARTEC SP9EX2 Smartphone

ATEX Zone 2 / Zone 22		
Type	B7-S29P-****/********	BARTEC SP9EX2 Smartphone
Labelling		Ⓔx II 3G Ex ic IIC T4 Gc Ⓔx II 3D Ex ic IIIC T135°C Dc IP64 -20 °C ≤ Ta ≤ +55 °C
Test certificate		*pending*
Standards		See chapter: EU Declaration of Conformity
IECEx Zone 2 / Zone 22		
Type	B7-S29P-****/********	BARTEC SP9EX2 Smartphone
Labelling		Ex ic IIC T4 Gc Ex ic IIIC T135°C Dc IP64 -20 °C ≤ Ta ≤ +55 °C
Test certificate		*pending*
Standards		See chapter: EU Declaration of Conformity
Class I, II, III, Division 2		
Type	B7-S29P-****/********	BARTEC SP9EX2 Smartphone
Labelling		Class I, Div 2, Groups A, B, C and D; Class II, Div 2, Groups E, F and G; Class III, T4 Zone 2, AEx ic IIC T4 Gc Zone 22, AEx ic IIIC T135°C Dc Ex ic IIC T4 Gc Ex ic IIIC T135°C Dc
Test certificate USA and Canada		*pending*
Standards		See Certificate

5.2 Explosion protection Smartscanner

5.2.1 BARTEC SC9EX1 Smartscanner

ATEX Zone 0 / Zone 21		
Type	17-S19C-****/********	BARTEC SC9EX1 Smartscanner
Labelling		Ⓔx II 1G Ex ia op is IIC T4 Ga Ⓔx II 2D Ex ia op is IIIC T135°C Db IP64 -20 °C ≤ Ta ≤ +55 °C
Test certificate		UL 24 ATEX 3153X
Standards		See chapter: EU Declaration of Conformity
IECEx Zone 0 / Zone 21		
Type	17-S19C-****/********	BARTEC SC9EX1 Smartscanner
Labelling		Ex ia op is IIC T4 Ga Ex ia op is IIIC T135°C Db IP64 -20 °C ≤ Ta ≤ +55 °C
Test certificate		IECEx UL 24.0004X
Standards		See chapter: EU Declaration of Conformity
Class I, II, III, Division 1		
Type	17-S19C-****/********	BARTEC SC9EX1 Smartscanner
Labelling		Class I, Div 1, Groups A, B, C and D; Class II, Div 1, Groups E, F and G; Class III, T4 Zone 0, AEx ia op is IIC T4 Ga Zone 21, AEx ia op is IIIC T135°C Db Ex ia op is IIC T4 Ga Ex ia op is IIIC T135°C Db
Test certificate USA and Canada		E321557
Standards		See Certificate

5.2.2 BARTEC SC9EX2 Smartscanner

ATEX Zone 2 / Zone 22		
Type	B7-S29C-****/********	BARTEC SC9EX2 Smartscanner
Labelling		Ⓔx II 3G Ex ic op is IIC T4 Gc Ⓔx II 3D Ex ic op is IIIC T135°C Dc IP64 -20 °C ≤ Ta ≤ +55 °C
Test certificate		*pending*
Standards		See chapter: EU Declaration of Conformity
IECEx Zone 2 / Zone 22		
Type	B7-S29C-****/********	BARTEC SC9EX2 Smartscanner
Labelling		Ex ic op is IIC T4 Gc Ex ic op is IIIC T135°C Dc IP64 -20 °C ≤ Ta ≤ +55 °C
Test certificate		*pending*
Standards		See chapter: EU Declaration of Conformity
Class I, II, III, Division 2		
Type	B7-S29C-****/********	BARTEC SC9EX2 Smartscanner
Labelling		Class I, Div 2, Groups A, B, C and D; Class II, Div 2, Groups E, F and G; Class III, T4 Zone 2, AEx ic op is IIC T4 Gc Zone 22, AEx ic op is IIIC T135°C Dc Ex ic op is IIC T4 Gc Ex ic op is IIIC T135°C Dc
Test certificate USA and Canada		*pending*
Standards		See Certificate

Special conditions of use
for secure operation within the hazardous area

(1) The device must be protected against impacts with high impact energy.

(2) The device must be protected against processes that generate a strong charge.

Further explanation to the specific conditions of use:

(1) The Device shall not been impacted with higher energy than 2 Joules for transparent parts (display, camera lenses etc.) and 4 Joules for non-transparent plastic parts over the operating temperature range of the Device

(2) The apparatus shall not be subjected to a prolific charge generating mechanism (such as might occur in pneumatic transfer of powders or charge spraying in a powder coating process)

5.3 Features

5.3.1 Performance features

CPU	Qualcomm® QCM6490 Octa Core 2,7 GHz
Operating system	SP9EX Smartphone and SP9EX Smartscanner are delivered by BARTEC according to the currently available Android™ version. (Details see data sheet) Android is a trademark of Google LLC.
Memory	8 GB RAM; 128 GB Flash
SIM card slot	1x Nano SIM and 1x eSIM

5.3.2 Physical features

Dimensions (Length x Width x Height)	SP9EX Smartphone 168.7 mm x 83.4 mm x 17.9 mm (6.6 inch x 3.3 inch x 0.7 inch) SC9EX Smartscanner 168.7 mm x 83.4 mm x 30.8 mm (6.7 inch x 3.3 inch x 1.2 inch)
Weight (including battery)	SP9EX Smartphone approx. 350 g (approx. 0.77 oz) SC9EX Smartscanner approx. 370 g (approx. 0.82 oz)
Display	6.1" FHD (Full High Definition+) color display; high resolution; 1080 x 2340pixel optically bonded to touch panel
Touchscreen	Dual mode capacity touch Touch function with stylus, finger or glove depending on the mode selected Corning® Gorilla® Glass water droplet rejection
Network connections	WWAN (cellular), WLAN (WiFi), WPAN (Bluetooth); USB-C
Interactive sensor technology	▪ Accelerometer/Gyroscope ▪ Magnetometer/Compass ▪ Pressure/Barometer ▪ Proximity ▪ Ambient light

5.3.3 User environment

Operating temperature	-20 °C to +55 °C (-4 °F to + 131 °F)
Charging temperature	0 °C to +45 °C (+32 °F to + 113 °F)
Storage temperature (without battery)	-30 °C to +60 °C (-22 °F to +140 °F)
Class of protection (IEC 60529)	IP 68

5.3.4 Voice and data transmission WiFi

Radio standard	Wi-Fi 6: IEEE 802.11a/b/g/n/ac/ax. 2x2 MU-MIMO. Simultaneous Dual Band Up to 2042 Mbps data rate and 160 MHz bandwidth
Maximum output power EU	**WIFI 2.4GHz** 19.99dBm **WIFI 5GHz** 17.53dBm

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 in all member states

BE	BG	CZ	DK	DE	EE	IE
EL	ES	FR	HR	IT	CY	LV
LT	LU	HU	MT	NL	AT	PL
PT	RO	SI	SK	FI	SE	UK

5.3.5 Voice and data transmission WAN

The available radio frequency bands depend on the device configuration.

Radio frequency band	**GSM Bands:** 850, 900, 1800, 1900 **UMTS Bands:** 1, 2, 4, 5, 8 **LTE Bands:** 1-5, 7, 8, 12, 13, 17, 20, 28, 38, 40, 41, 48, 66, 71 **5G NR Bands:** 1-3, 5, 7, 8, 20, 25, 28, 38, 40, 41, 48, 66, 71, 77, 78
Maximum output power EU	GSM 900: 31,79dBm GSM 1800: 28,80dBm WCDMA I: 22,82dBm WCDMA VIII: 23,17dBm LTE Band 1: 22,54dBm LTE Band 3: 22,32dBm LTE Band 7: 22,50dBm LTE Band 8: 22,80dBm LTE Band 20: 22,36dBm LTE Band 28: 22,43dBm LTE Band 38: 22,51dBm LTE Band 40: 22,69dBm NR N1: 23,70dBm NR N3: 23,14dBm NR N7: 23,19dBm NR N8: 23,15dBm NR N20: 22,92dBm NR N28: 23,28dBm NR N38: 24,08dBm NR N40: 23,37dBm NR N41: 22,95dBm NR N41 PC2: 25,82dBm NR N77: 22,83dBm NR N77 PC2: 25,07dBm NR N78: 22,73dBm NR N78 PC2: 25,57dBm

5.3.6 Voice and data transmission Bluetooth

Bluetooth	Bluetooth® 5.2 including Low Energy long range and multiple broadcasts
Maximum output power EU	2402~2480MHz 8.74dBm

5.3.7 Global Navigation Satellite System (GNSS)

GNSS	GPS, A-GPS, Glonass, Galileo and BeiDou

5.3.8 NFC/HF RFID Reader

NFC/HF	Read/write NFC tags (e.g. ISO 14443 Type A), contactless payments, and card emulation
Maximum Magnetic Field	13.56 Mhz -37.72 dBuA/m@10m

The read/write range of the RFID reader depends on a variety of factors, including RFID tag size, tag positioning, environmental conditions, and more.

5.3.9 Barcode capture

1D-/2D Barcodes	
SE55	1D/2D Advanced Range Scan Engine with IntelliFocus™ technology

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 laser/IEC 60825-1 Class 2 laser devices.

5.4 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 17-A1Z0-0020**	(only change and charge in the safe area) Lithium Ion battery 3.68 V/4300 mAh (15.8 Wh)
Operating temperature	
▪ During charging	0 °C to +45 °C (+32 °F to 113 °F)
▪ During discharging	-20 °C to +50 °C (-4 °F to 122 °F)
Storage temperature	-30 °C to +60 °C (-22 °F to 140 °F)
UN38.3 compliant	Yes

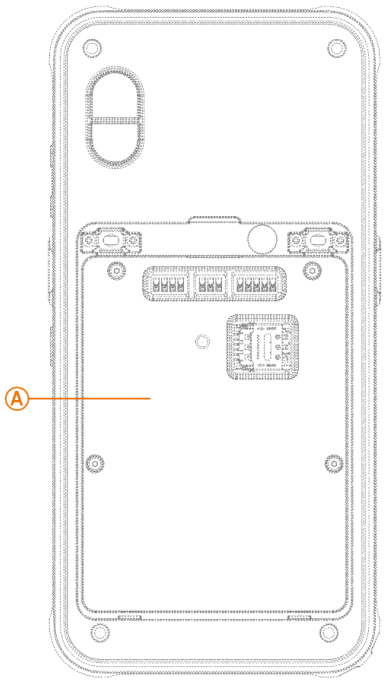
Follow the optimal temperature range in the table below when charging the battery.

The Device has battery charging controls to maintain the integrity of its instrinsically safe design.

10 °C to 35 °C (50°F to 95°F)	Optimal charging range
0 °C to 10 °C (32 °F to 50 °F) 35 °C to 45 °C (95 °Fto 113 °F)	Charging slows down
Below 0 °C (32 °F) and above 45 °C (113 °F)	Charging stops

5.5 Product labelling

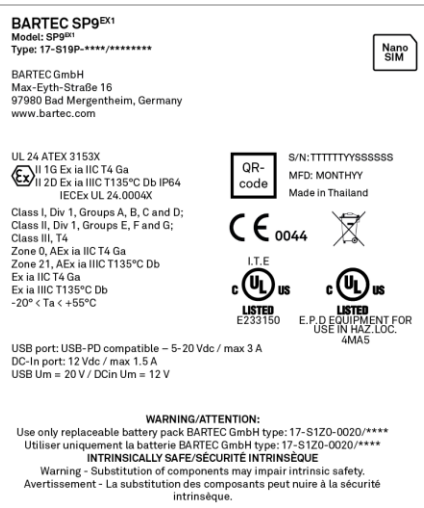
5.5.1 BARTEC SP9EX Smartphone



A

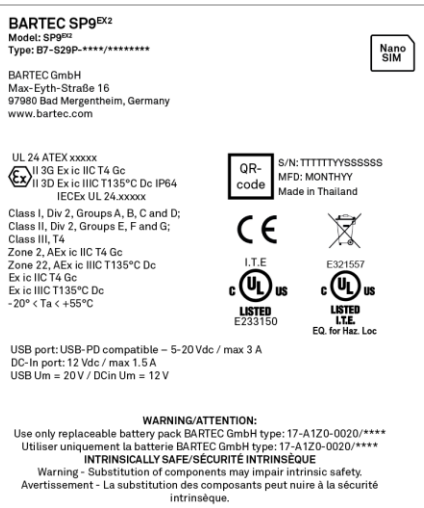
BARTEC SP9EX1 Smartphone

Marking

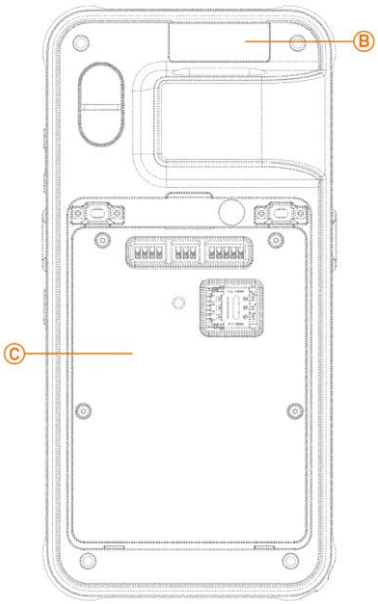


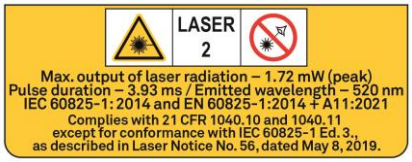
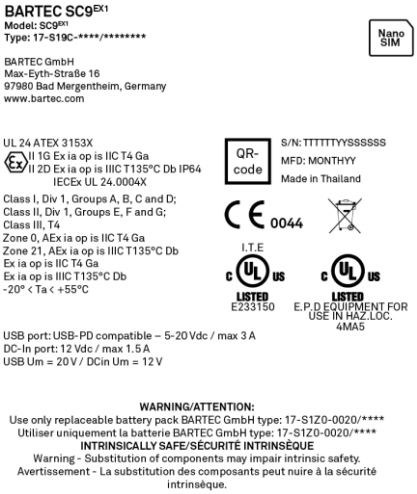
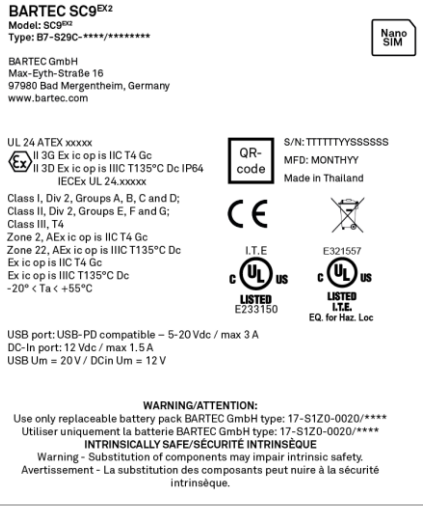
BARTEC SP9EX2 Smartphone

Marking

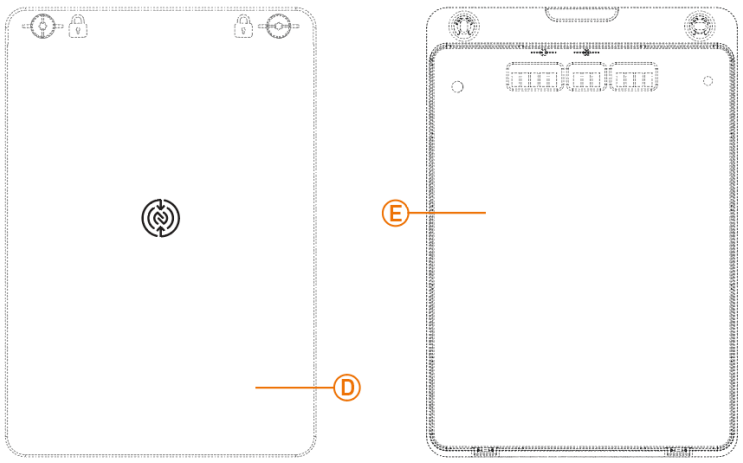


5.5.3 BARTEC SC9EX Smartscanner



B	**Laserwarning**	
C	**BARTEC SC9EX1 Smartscanner** **Marking**	
	BARTEC SC9EX2 Smartscanner **Marking**	

5.5.4 Battery



D	**Battery marking outside** **Type 17-S1Z0-0020**	**BARTEC** WARNING/ATTENTION Explosion hazard - Do not replace or charge battery pack or use USB port in hazardous locations! Read Quick Start Guide 11-S190-7E0001 before use! Risque d'explosion - Ne pas remplacer ou charger la batterie ou utiliser le port USB a l'intérieur d'une zone explosive Lire attentivement le manuel rapide 11-S190-7E0001 avant toute utilisation!
E	**Battery marking inside** **Type 17-S1Z0-0020**	**BARTEC BA9EX1** Rechargeable Li-ion Type: 17-S1Z0-0020/**** BARTEC GmbH Max-Eyth-Straße 16 97980 Bad Mergentheim, Germany www.bartec.com Battery info 3.68 V, 4300 mAh, 15.8 Wh Limited Charge Voltage (4.2 V) **CAUTION:** Do not disassemble, short circuit or dispose of in fire! Dispose of used batteries properly! **WARNING/ATTENTION:** Use only in BARTEC SP9EX Smartphone or BARTEC SC9EX Smartscanner Type *7-S*9*-****/******** Utiliser uniquement en BARTEC SP9EX Smartphone ou BARTEC SC9EX Smartscanner Type *7-S*9*-****/******** QR-code S/N: TTTTTTYYSSSSSS MFD: MONTHYY Made in Thailand CE 0044 c UL us E233150 1INP7/62/80

6 Transport and storage

6.1 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.

Batteries conforms to UN38.3.

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

- Smartphone
- Tab „General“

6.2 Storage

ATTENTION

Property damage through incorrect storage!

- ▶ Observe storage temperatures
- ▶ Keep humidity away from devices and batteries

Additional information on the batteries

The batteries of BARTEC (Type 17-S1Z0-0020/****) 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 severe impact. If a battery is stored longer than six months, the performance may be impaired on a permanent basis.

When storing batteries for 6 months or longer, the charge level should be verified at least every 3 months and charged to at least 50%.

When storing the Device for longer than two weeks, remove the battery from the Device to prevent fast discharge.

7 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 Smartphone/Smartscanner.
- ▶ 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!

7.1 Handling in hazardous areas

Device

- The Device may not be tampered with
- The battery may not be removed from the Device
- Protect the Device from impact
- Do not expose the Device to caustic/aggressive liquids, vapours, and/or mists
- Avoid exposing the Device to liquid and dust outside the specified IP rating
- Do not operate the Device outside the specified temperature range

Battery

- Do not short circuit the battery!
- The battery may not be tampered with
- Only charge batteries (Type 17-S1Z0-0020/****) outside hazardous areas
- Defective batteries must not be used and should without delay be disposed of according to local regulations
- The battery may explode if it catches fire

Accessories

- Only install or replace accessories outside the hazardous area
- Only use accessories that have been tested and certified by BARTEC for use in the hazardous areas

7.2 First steps

- ▶ Unpack Smartphone/Smartscanner and battery
- ▶ Charge the battery to 100% after unpacking.

  Charging options:

  - Insert and charge the battery in the Smartphone/Smartscanner.

  - Charge the battery and then insert it into the Smartphone/Smartscanner

  Use one of the following accessories to charge:

Description	Charging process	
	Battery (in the device)	Spare battery
1-slot charging station Type: G7-A0Z0-0012	Yes	Yes
4-slot charging station Type: G7-A0Z0-0013	Yes	Yes
USB-C cable Type: G7-A0Z0-0010	Yes	No

- ▶ Switch on Smartphone/Smartscanner.

Optional:

- ▶ Insert the nano SIM card.
- ▶ Mount the Scan handle.
- ▶ Attach Screen protector, Protective cover and Stylus.
- ▶ Attach Wrist strap, Hand strap or Neck strap

8 Operation

8.1 Handling accessories

DANGER

Non certified accessories endanger explosion protection.
Danger to life exists in hazardous areas!

- ▶ Only use original accessories from BARTEC.

Only permitted outside hazardous areas:

- ▶ Insert/replace nano SIM cards.
- ▶ Insert/charge battery.

8.1.1 Insert Nano SIM card

ATTENTION

Damage to the Nano SIM card through electrostatic discharges!

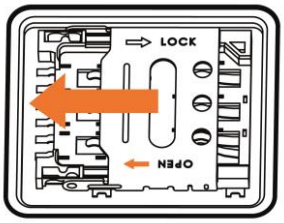
- ▶ Use an antistatic base.
- ▶ Ensure that the operator is correctly earthed.

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

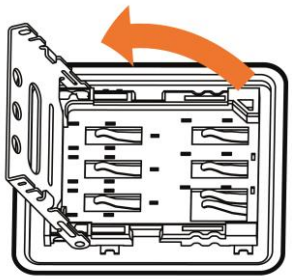
Work steps:

1. Only install or replace the Nano SIM card outside the potentially explosive atmosphere.
2. The slot for the SIM card is located in the battery compartment.

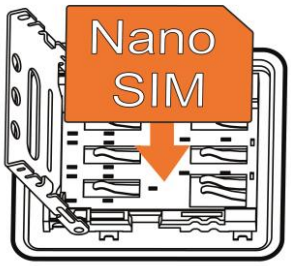
3. Slide metal lid from “LOCK” position to “OPEN” position.



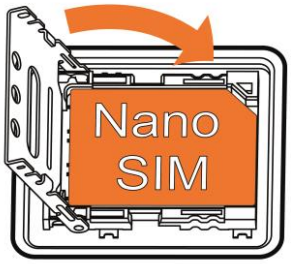
4. Open metal lid to allow Nano SIM card to be inserted.



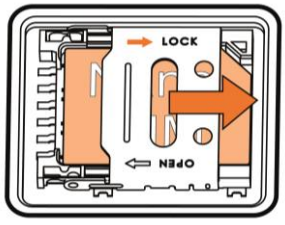
5. Place Nano SIM card against contacts, chip face down.



6. Close metal lid.



7. Slide the metal lid of the SIM card holder back into the "LOCK" position.



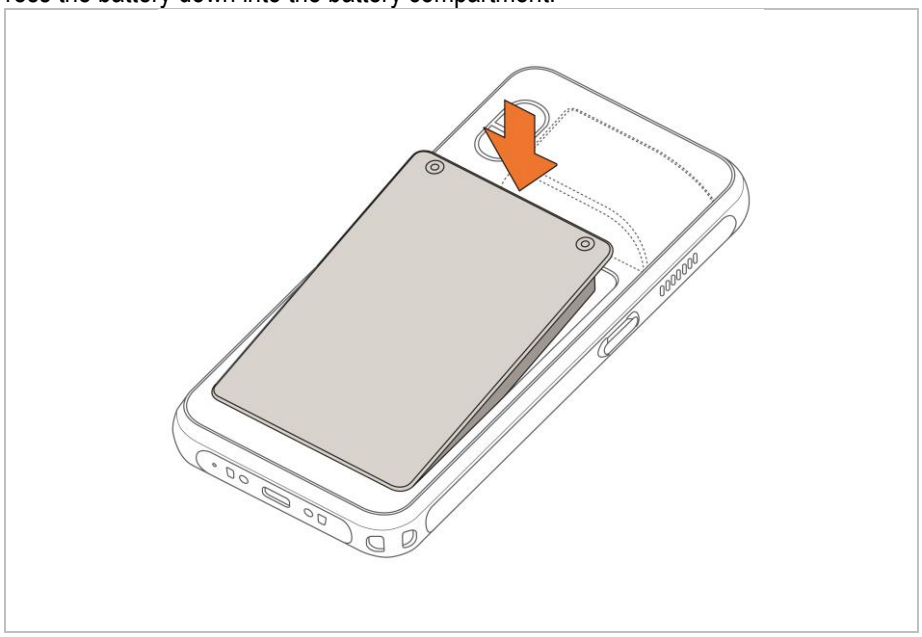
8.1.2 Insert/change battery

BARTEC SP9EX Smartphone and BARTEC SC9EX Smartscanner are supplied with a standard battery:

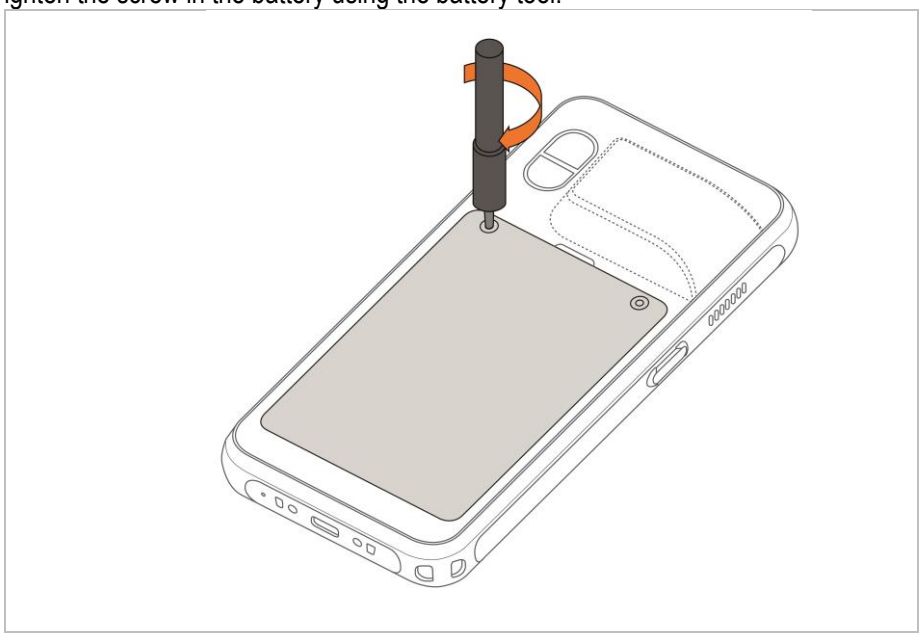
Type	Order number
Lithium Ion battery 3.68 V / 4300 mAh	17-S1Z0-0020

Insert battery - work steps:

1. Charge the battery only outside hazardous areas.
2. The battery (Type 17-S1Z0-0020) 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.



6. Tighten the screw in the battery using the battery tool.



Change battery - work steps:

ATTENTION

Incorrect handling may cause damage to property!

▶ Use only batteries which have been tested or certified by BARTEC for this purpose.

1. Remove any accessory attached to the device.
2. Press the Power button until the menu appears.
3. Touch Switch off.
4. Follow the on-screen instructions.
5. Wait for the red LED to completely turn off.
6. Open the screw in the battery using the battery tool.

7. Lift the battery from the device.

8. Insert the replacement battery, bottom first, into the battery compartment in the back of the device.
9. Press the battery down and tighten the screw in the battery again using the battery tool.
10. Press and hold the Power button to turn on the device.

8.1.3 Charging the device/the battery

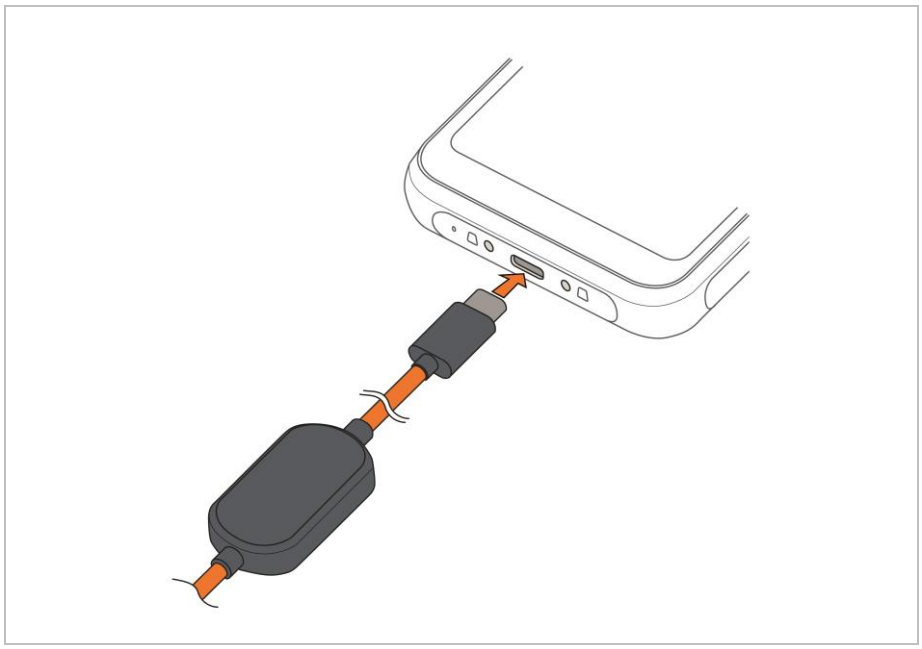
The battery has advance protection circuitry to ensure safety in hazardous areas. To ensure normal functionality of the battery, it is important to follow the following guidelines:

- Avoid allowing the battery to go completely empty to avoid damage to the battery
- If the battery goes completely empty, charge it to full within 48 hours from reaching empty state to ensure it continues to work normally
- If the battery does not accept charge after charging it, contact Enterprise Mobility Support Portal at bartec.com

8.1.3.1 Charging the main battery in the device with USB-C cable

Insert the USB C cable to charge your device.

For safety reasons the device will disable the USB port (and notify the user) if it detects a non-Bartec approved cable



8.1.3.2 Charge LED Indicator

---Reserved---

8.2 Scanning (only SC9EX Smartscanner)

---Reserved---

8.3 Cleaning

Do not use any chemical cleaning agents to clean the device.
Use a damp cloth.

8.4 Troubleshooting and Support

If the device becomes unresponsive or does not boot successfully, try performing a soft reset. This is done by pressing and holding the power button for 10 seconds.

FAQs and technical support can be found in the Enterprise Mobility Support Portal at bartec.com

9 Disposal

SP9EX Smartphone, SC9EX Smartscanner and accessories contains metallic and plastic parts and electronic components.

WEEE registration number of the BARTEC GmbH:
DE 95940350

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.

10 Declaration of Conformity

The latest versions of the Declarations of Conformity and other certificates can be found on the BARTEC website at: www.bartec.com

10.1 EU Declaration of Conformity

---Reserved---