

# Tablet PC Agile X IS

## User Manual





## User Manual - Translation

# Agile X IS

## 10.1" Tablet PC

Type 17-A1B\* -\*\*\*\*/\*\*\*\*\*

ATEX / IECEx Zone 0

ATEX / IECEx Zone 1

ATEX / IECEx Group I

Class I, Division 1

Class I, II, III, Division 1

Class I, Zone 0

Class I, Zone 1

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# 1 Basic safety information

## 1.1 Information on this User Manual



### Read carefully before putting the devices into operation.

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

The User Manual 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 User Manual 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 User Manual 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 User Manual 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 User Manual with safety information is written in German. All other available languages are translations of the original User Manual.

The User Manual is available in German and English. If 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](http://www.bartec.com) or may be requested directly from BARTEC GmbH.

### 1.1.3 Registered trademarks

Intel®	is a registered trademark of Intel Corporation
Bluetooth®	is a registered trademark of Bluetooth Special Interest Group
WINDOWS	is a registered trademark of MICROSOFT Corporation

## 1.2 Handling the product

The product described in this User Manual 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 Tablet PC is a prerequisite for its perfect and correct functioning.



## **1.3 Intended use**

### **1.3.1 Exclusive purpose**

The Tablet PC 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 Tablet PC who

- are acquainted with the basic regulations on safety and accident prevention, and who have been inducted in the use of the Tablet PC,
- 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.

### 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. The applicable provisions must be observed in this respect.

### 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 Tablet PC. Labeling see chapter: Technical data.

The guidelines and standards applicable to the Tablet PC for devices and protected systems for intended use in potentially explosive atmospheres are provided in chapter: Declaration of Conformity.

## 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 tablet PC.
- Incorrect handling
- Failure to observe the information in 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 Tablet PCs (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 Tablet PC series Agile X IS.

This User Manual 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: <http://automation.bartec.de/mobileE.htm>

## 1.9 Co-applicable documents



All documents are available online from the following websites:

[www.bartec.com](http://www.bartec.com) or <http://automation.bartec.de/mobileE.htm>

Document	Explanation
<b>User manual</b> <b>Tablet PC Agile X IS</b>	This User manual describes the use of the Tablet PC Agile X IS.
<b>Quick Start Guide</b> <b>Tablet PC Agile S NI</b>	This Quick Start Guide describes the safety-related information, first use and further data of the Tablet PC Agile X IS
<b>Data sheet</b> <b>Tablet PC Agile S NI</b>	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.

<b>IS</b>	=	Intrinsically Safe => is used as generic term for the Zone 1 versions
<b>Agile</b>	=	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
<b>Processor</b>	Intel Pentium N3710 Quad Core 1.6 GHz
<b>Display</b>	10.1"
<b>Resolution</b>	1920 x 1200 pixel
<b>Memory</b>	8 GB SODIMM DDR3L-1600
<b>Mass storage</b>	128 GB SATA uSSD
<b>Operating system</b>	<ul style="list-style-type: none"> <li>Windows 10 IoT Enterprise CBB – 64 Bit</li> <li>Windows 10 IoT Enterprise LTSC – 64 Bit</li> </ul>
<b>Battery</b>	<p>The device is available with two batteries.</p> <p>Lithium-ion battery 7.4 V/4,200 mAh (31.08 Wh).</p> <p>An internal battery (not customer replaceable) is fix built-in, in every Agile X IS.</p> <p>Optional available is an external battery that can be inserted and replaced by customer.</p> <p>It can be replaced direct in hazardous area.</p> <p>The external battery can be replaced during operation. Important is to follow the correct procedure for replacement during operation to prevent device shutdown and data loss.</p>
<b>WLAN</b>	IEEE 802.11 a/b/g/n/ac
<b>Bluetooth</b>	Version 4.1 LE Class I
<b>WWAN (optional)</b>	<ul style="list-style-type: none"> <li>4G/LTE module with European frequencies</li> <li>4G/LTE module with North American frequencies</li> </ul>
<b>GPS</b>	u-Blox Neo-M8N
<b>Scanner Options (optional)</b>	1D/2D-Imager SE 4500 from Zebra Technologies Corporation
<b>RFID-Reader HF/NFC</b>	<p>13,56 MHz</p> <p>ISO 15693 (read and write)</p> <p>ISO 14443-A (read and write)</p> <p>ISO 14443-B (only read UID)</p>

## 2 Product description

### 2.1 Agile X IS

The Agile X IS is a tough Tablet PC with 10.1" display, which has been designed for use in the industrial environments and especially developed by BARTEC for use in potentially explosive atmospheres.



### 2.2 Purpose of use

The Tablet PCs Agile X IS are handheld electrical devices. They serve the purpose of entry, processing and (radio) transmission of data within potentially explosive atmospheres.

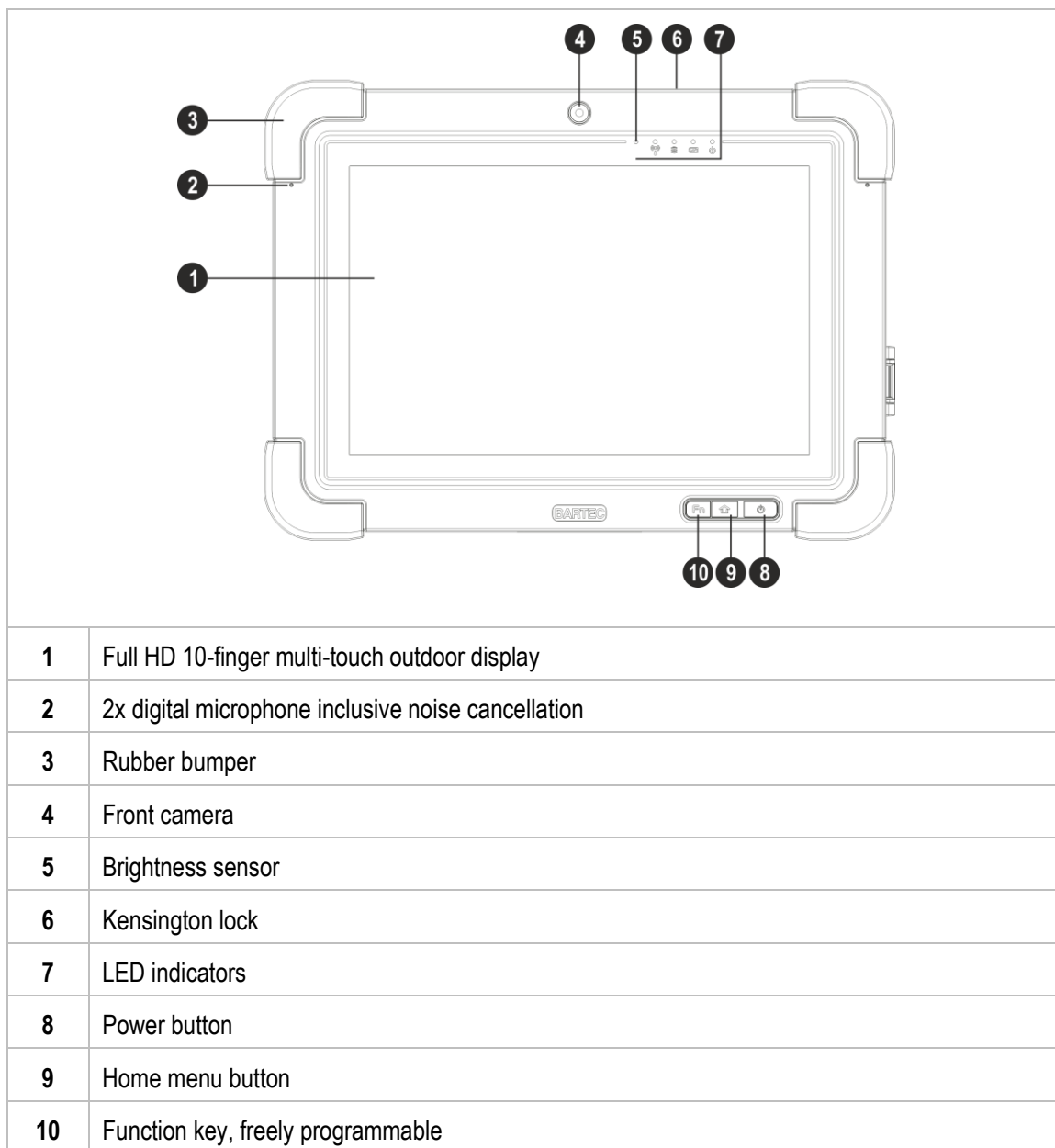
The Tablet PC Agile X IS is used exclusively in combination with devices which comply with the requirements placed on the overvoltage category I.

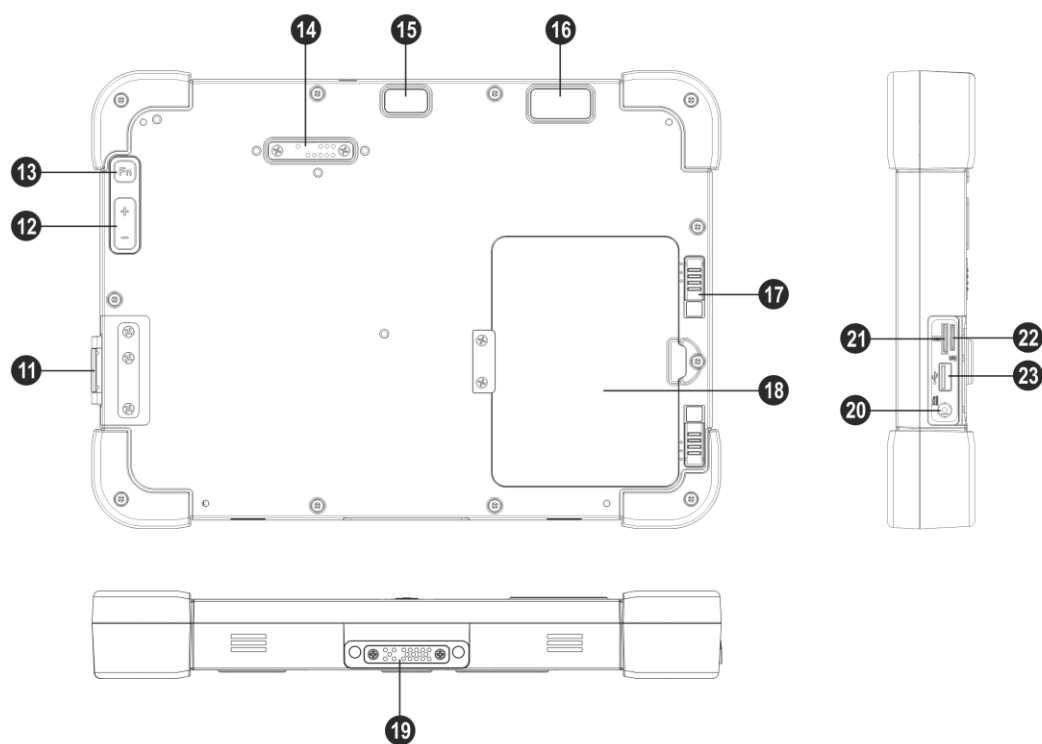
The **Agile X IS, Type 17-A1B\*-\*\*\*\*/\*\*\*\*\*** have been modified for use in the following potentially explosive atmospheres:

- ATEX / IECEx Zone 0
- ATEX / IECEx Zone 1
- ATEX / IECEx Group I
- Class I Division 1 Groups A, B, C and D
- Class II Division 1 Groups E, F and G
- Class III Division 1
- Class 1 Zone 0
- Class 1 Zone 1



### 3 Structure





11	Cover for I/O ports
12	Volume (+/-)
13	Function key (Fn2)
14	Expansion port for add on modules
15	High quality 5MP camera with flash
16	SE4500 1D/2D Imager from Zebra Technologies Corporation (optional)
17	Multi-stage battery compartment locking mechanism
18	Empty module/external battery (can be changed during active operations) for battery compartment
19	Docking station connection
20	Charging port
21	Micro SIM card slot
22	MicroSD card slot
23	USB 2.0 port (Ex i)

## 4 Technical data

### 4.1 Explosion protection

ATEX		
ATEX Zone 0	Type: 17-A1B6-****/***** 17-A1BB-****/*****	⊕ II 1 G Ex ia op is IIC T4 Ga -20 °C ≤ Ta ≤ +50 °C
ATEX Zone 1	Type: 17-A1B4-****/***** 17-A1BA-****/*****	⊕ II 2 G Ex ia op is IIC T4 Gb -20 °C ≤ Ta ≤ +50 °C
ATEX Group I	Type: 17-A1BF-****/*****	⊕ I M1 Ex ia op is I Ma -20 °C ≤ Ta ≤ +50 °C
Test certificate		DEMKO 16 ATEX 1803
Standards		see chapter: EU Declaration of Conformity
IECEx		
IECEx Zone 0	Type: 17-A1B6-****/***** 17-A1BB-****/*****	Ex ia op is IIC T4 Ga -20 °C ≤ Ta ≤ +50 °C
IECEx Zone 1	Type: 17-A1B4-****/***** 17-A1BA-****/*****	Ex ia op is IIC T4 Gb -20 °C ≤ Ta ≤ +50 °C
IECEx Group I	Type: 17-A1BF-****/*****	Ex ia op is I Ma -20 °C ≤ Ta ≤ +50 °C
Test certificate		IECEx UL 16.0160
Standards		see chapter: EU Declaration of Conformity


Class I, Division 1 and Class I Zone 0 / 1		
Class I Division 1	Type: 17-A1B4-****/***** 17-A1B6-****/***** 17-A1BA-****/***** 17-A1BB-****/*****	Class I, Division 1, Groups A, B, C and D
Class I, II, III Division 1	Type: 17-A1BA-****/***** 17-A1BB-****/*****	Class I, Division 1, Groups A, B, C and D; Class II, Division 1, Groups E, F and G; Class III, Division 1
USL	Type: 17-A1B6-****/***** 17-A1BB-****/*****	Class I, Zone 0, AEx ia IIC T4 Ga -20 °C ≤ Ta ≤ +50 °C
	Type: 17-A1B4-****/***** 17-A1BA-****/*****	Class I, Zone 1, AEx ia IIC T4 Gb -20 °C ≤ Ta ≤ +50 °C
CNL	Type: 17-A1B6-****/***** 17-A1BB-****/*****	Ex ia IIC T4 Ga -20 °C ≤ Ta ≤ +50 °C
	Type: 17-A1B4-****/***** 17-A1BA-****/*****	Ex ia IIC T4 Gb -20 °C ≤ Ta ≤ +50 °C
Test certificate for USA and Canada		E226123
Standards		see chapter: EU Declaration of Conformity
Guidelines		UL 913: 8th Edition UL 60079-0: 6th Edition CAN/CSA C22.2 No. 60079-0:15 UL 60079-11: 6th Edition CAN/CSA C22.2 No. 60079-11:14

## 4.2 Applicable standards

### 4.2.1 Performance features

<b>Processor</b>	Intel Pentium N3710 Quad Core 1.6 GHz 1.6 – 2.56 GHz clock speed
<b>Operating system</b>	<ul style="list-style-type: none"> <li>Windows 10 IoT Enterprise CBB – 64 Bit</li> <li>Windows 10 IoT Enterprise LTSC – 64 Bit</li> </ul>
<b>Memory</b>	8 GB SODIMM DDR3L-1600
<b>Mass storage</b>	128 GB SATA uSSD
<b>Expansion slot</b>	MicroSD card slot supports up to 32 GB
<b>Interfaces Tablet PC</b>	1x USB 2.0 port (Ex i) 1x MicroSD card slot 1x Micro SIM card slot 1x Charging port (DC 19 V) 1x Extension port for Add-on module 1x Port Docking station
<b>Interfaces Docking station</b>	4x USB 2.0 1x RS232 serial 1x Ethernet 10/100 Mbit/s 1x HDMI 1x Charging port (DC 9 V to 36 V)

### 4.2.2 Physikalische Merkmale

<b>Dimensions</b> (width x height x depth)	290 mm x 209 mm x 33 mm (11.4 inch x 8.2 inch x 1.3 inch)
<b>Weight</b> (including internal battery)	Depends on version and configuration approx. 2.3 kg (approx. 5.1 lb)
<b>Display</b> Size Background light Luminance Resolution Contrast Touch	10.1" LED 700 cd/m <sup>2</sup> (typical) 1920 x 1200 pixel 800:1 (typical) Projective capacity Multi-Touch
<b>Interactive sensor technology</b>	Light sensor G-Sensor E compass
<b>Keys on front side</b>	 <ul style="list-style-type: none"> <li>Function button (Fn1), free programmable</li> <li>Home- button</li> <li>Power button</li> </ul>

**Tasten Rückseite**


- Function button (Fn2), free programmable (if no 1D/2D-Imager))
- Button for volume (+/-)

**4.2.3 User environment**

<b>Operating temperature</b>	-20 °C to +50 °C (-4 °F to +122 °F)
<b>Storage temperature</b> (without battery)	-20 °C to +50 °C (-4 °F to +122 °F)
<b>Charging temperature</b>	0 °C to +40 °C (+32 °F bis +104 °F)
<b>Relative humidity</b>	10 % to 90 % (non-condensing)
<b>Class of protection (IEC 60529)</b>	IP 65

**4.2.4 Data transmission Bluetooth**

<b>Bluetooth-Standard</b>	Bluetooth V4.1 from 1.2 and 3 Mbit/s
<b>Antenna reference</b>	0–2 dBi peak gain
<b>Frequency band</b>	2402 MHz – 2480 MHz
<b>Maximum output power</b>	FHSS: 6.90 dBm Wideband Modulation (BT LE): 5.40 dBm



## 4.2.5 Data transmission WiFi

<b>Radio standard</b>	IEEE 802.11 a/b/g/n/ac
<b>Antenna reference</b>	0-2 dBi peak gain
<b>WiFi (2,4 GHz) RF Specification</b>	
<b>Frequency range</b>	2.4000 GHz ~ 2.4835 GHz (2.4 GHz ISM Band)
<b>Maximum output power</b>	802.11b:16.30 dBm 802.11g:17.80 dBm 802.11n_20M:17.60 dBm
<b>WiFi (5 GHz) RF Specification</b>	
<b>Frequency range</b>	5.15 GHz – 5.35 GHz, 5.47 GHz – 5.725 GHz (5.0 GHz ISM Band)
<b>Maximum output power</b>	5.15 GHz – 5.35 GHz 802.11a: 20.44 dBm 802.11n_20M: 20.84 dBm 802.11n_40M: 19.14 dBm 802.11AC_80M: 17.74 dBm  5.47 GHz – 5.725 GHz 802.11a:19.94 dBm 802.11n_20M:20.64 dBm 802.11n_40M:20.44 dBm 802.11AC_80M: 19.74 dBm

**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

#### 4.2.6 Data transmission LTE

Module support is not provided for all required bands. In terms of LTE support, only data is supported (no speech function). Video calls can be supported via other apps such as Skype or Line. For connectivity, the WWAN module supports the following bands:

##### 4.2.6.1 PLS8-E (Europe)

Frequency band	
<b>GSM/GPRS/EGDE UMTS/HSPA+ LTE</b>	Dual band: 900/1800 MHz Triple band: 900 (Bd 8)/1800 (Bd 3)/2100 MHz (Bd 1) Bands: 800 (Bd 20)/900 (Bd 8)/1800 (Bd 3)/ 2100 (Bd 1)/2600 MHz (Bd 7)
<b>Output power</b>	Class 4 (+33dBm $\pm$ 2dB) for EGSM900 Class 1 (+30dBm $\pm$ 2dB) for GSM1800 Class E2 (+27dBm $\pm$ 3dB) for GSM 900 8-PSK Class E2 (+26dBm +3 /-4dB) for GSM 1800 8-PSK  Class 3 (+24dBm +1/-3dB) for UMTS 900, WCDMA FDD Bd 8 Class 3 (+24dBm +1/-3dB) for UMTS 1800, WCDMA FDD Bd 3 Class 3 (+24dBm +1/-3dB) for UMTS 2100, WCDMA FDD Bd 1  Class 3 (+23dBm $\pm$ 2dB) for LTE 800, LTE FDD Bd 20 Class 3 (+23dBm $\pm$ 2dB) for LTE 900, LTE FDD Bd 8 Class 3 (+23dBm $\pm$ 2dB) for LTE 1800, LTE FDD Bd 3 Class 3 (+23dBm $\pm$ 2dB) for LTE 2100, LTE FDD Bd 1 Class 3 (+23dBm $\pm$ 2dB) for LTE 2600, LTE FDD Bd 7

## 4.2.6.2 PLS8-X-US

Frequency band	
<b>GSM/GPRS/EGDE:</b> <b>UMTS/HSPA+:</b> <b>LTE:</b>	Quad band: 850 MHz/900 MHz/1800 MHz/1900 MHz Triple band: 850 (Bd 5)/AWS (Bd 4)/1900 MHz (Bd 2) Bands: 700 (Bd 17) 850 (Bd 5)/AWS (Bd 4)/ 1900 MHz (Bd 2)
<b>Output power</b>	<p>Class 4 (+33dBm <math>\pm</math>2dB) for EGSM850  Class 4 (+33dBm <math>\pm</math>2dB) for EGSM900  Class 1 (+30dBm <math>\pm</math>2dB) for GSM1800  Class 1 (+30dBm <math>\pm</math>2dB) for GSM1900  Class E2 (+27dBm <math>\pm</math> 3dB) for GSM 850 8-PSK  Class E2 (+27dBm <math>\pm</math> 3dB) for GSM 900 8-PSK  Class E2 (+26dBm +3 /-4dB) for GSM 1800 8-PSK  Class E2 (+26dBm +3 /-4dB) for GSM 1900 8-PSK</p> <p>Class 3 (+24dBm +1/-3dB) for UMTS 850,  WCDMA FDD Bd 5  Class 3 (+24dBm +1/-3dB) for UMTS AWS,  WCDMA FDD Bd 4  Class 3 (+24dBm +1/-3dB) for UMTS 1900,  WCDMA FDD Bd 2</p> <p>Class 3 (+23dBm <math>\pm</math>2dB) for LTE 700, LTE FDD Bd17  Class 3 (+23dBm <math>\pm</math>2dB) for LTE 850, LTE FDD Bd 5  Class 3 (+23dBm <math>\pm</math>2dB) for LTE AWS, LTE FDD Bd4  Class 3 (+23dBm <math>\pm</math>2dB) for LTE 1900, LTE FDD Bd2</p>

## 4.2.7 Data transmission RFID/NFC



The maximum scanning/writing ranges of the HF/NFC RFID readers depend on various ambient conditions, such as:

Transponder (tag), size, antenna used in the tag (size, design, etc.), mounting location (metal, wood or other base), environmental conditions, external magnetic influences, temperature and humidity

Frequency band		
RFID/NFC	13.56 MHz	
Output power	-2.39 dBuA @ 10m	
HF/NFC support protocol		
RFID Tag Typ	Description	Support
ISO 18092 (NFC)		Read / Write
ISO 15693	TI HF-I Plus TI HF-I Pro NXP I-Code SLI NXP I-Code SLI-X	Read / Write
ISO 14443-A	NXP Mifare_One (S50_4byte) NXP Mifare_One (S70_4byte) NXP Mifare_One (S50_7byte) NXP Mifare_UltraLight NXP Mifare_UltraLight C NXP Mifare Plus S 2K/4K NXP Mifare Plus X 2K/4K NXP NTAG213	Read / Write
ISO 14443-A	NXP Mifare DESFire_EV1 4K BROADCOM BCM20203T96 BROADCOM BCM20203T512	Only Read UID
ISO 14443-B		Only Read UID
NFC Tag Typ	Description	Support
Type 1	TOPAZ (BCM20203T96)	Only Read UID
Type 2	Mifare Ultralight	Read / Write
Type 4	DESFire EV1(MF3ICD81)	Only Read UID
ISO 15693	ICODE SLI (SL2ICS20) HF-I Pro HF-I Plus	Read / Write
ISO 14443A	Mifare Classic (MF1S50)	Read / Write

## 4.2.8 1D/2D-Imager (SE4500-SR)

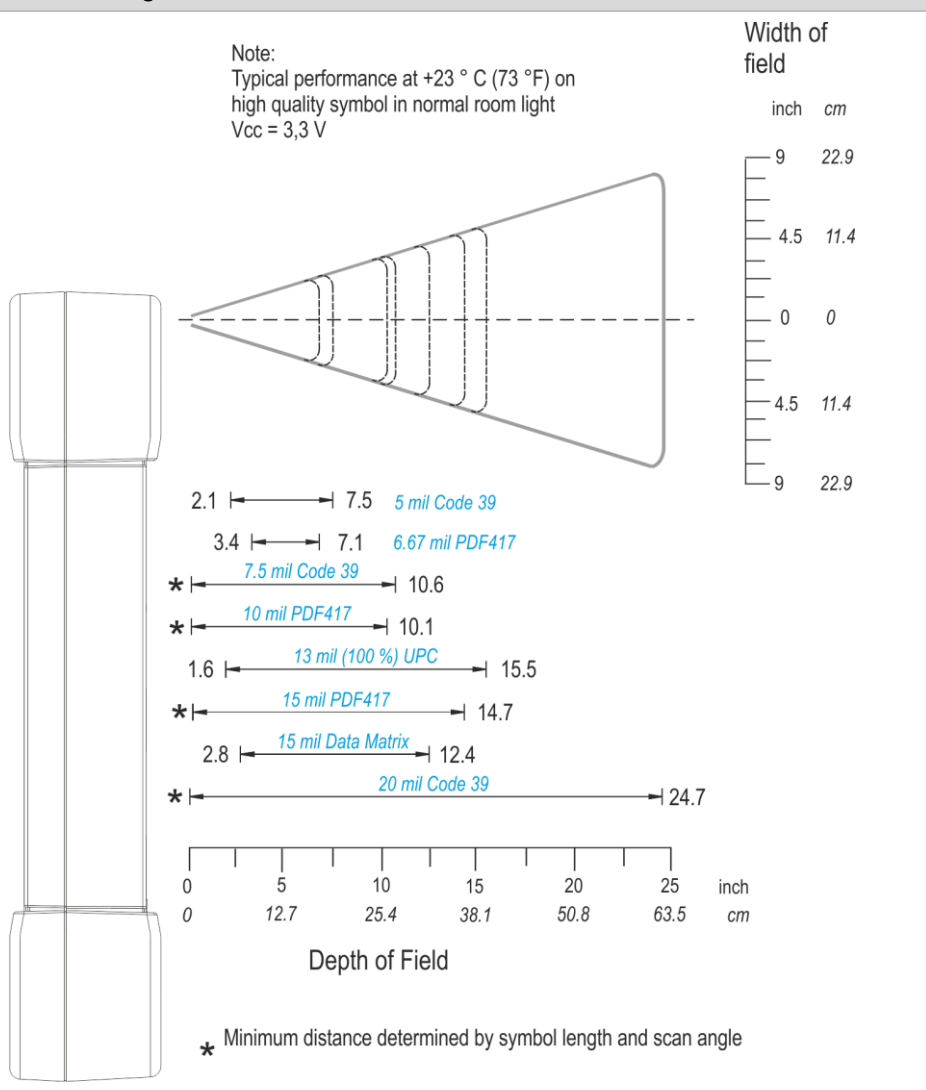


The SE4500-SR is ideal for small to medium-sized 1D/2D barcodes.

The maximum scanning range of the 1D/2D Imager depends on the barcode type, print quality, module width (in mm) and software setting.

<b>Laser class</b>		CDRH Class 2 / IEC Class 2
<b>Aiming LED (VLD)</b>		655 nm ± 10 nm
<b>Decode range</b>	<b>5 mm Code 39</b>	Near: 5.3 cm (2.09 inch) Far: 19.1 cm (7.52 inch)
	<b>100 % UPC/EAN</b>	Near: 4.1 cm (1.61 inch) Far: 39.4 cm (15.51 inch)
	<b>6.7 mm PDF 417</b>	Near: 8.6 cm (3.39 inch) Far: 18.0 cm (7.09 inch)
<b>Skew, pitch &amp; roll</b>		Skew tolerance: ± 60° Pitch tolerance: ± 60° Roll tolerance: 360°
<b>Focal distance from front of engine</b>		approx. 20 cm (8 inch)
<b>Scan rate</b>		up to 60 fps
<b>Sensor resolution</b>		752 x 480 Pixel HxV (Grayscale)
<b>Field of view</b>		horizontal 40 ° vertical 25 °
<b>Illumination element</b>		2 LEDs, 625 nm
<b>Minimum print contrast</b>		25% absolute dark/light reflectance measured at 650 nm
<b>Insensitivity to ambient light</b>		96,900 Lux

# Decode range





Supported Symbologies / Barcodes	
<b>1D/Linear Symbol/Codes</b>	Code 11 Code 39 Code 93 Code 128 Codabar Coupon code Chinesisch 2 of 5 Discrete 2 of 5 EAN-8 EAN-13 Interleaved 2 of 5 MSI Trioptic 39 UPC-A UPC/EAN additions UPC-E RSS 14 RSS Expanded RSS Limited Webcode
<b>2D Symbol/Codes</b>	Aztec Australian 4-state Canadian 4-state Composite AB Composite C Data Matrix Dutch Kit Japanese 4-state (Macro) Mikro PFD-417 MaxiCode microQR PDF-417 PDF-417 Macro QR Code TLC39 UK 4-state US Planet US Postnet USPS 4-state (US4CB)

#### 4.2.9 Application development



The software and SDK are available for download at:  
<http://automation.bartec.de/mobileE.htm>

##### **Creating a customer-specific image**

All drivers for creating a dedicated image are available on the BARTEC download page.

##### **1D/2D imager**

The Zebra SE4500-SR Imager is the 1D/2D Imager. The Zebra Scanner SDK contains a package of components that forms a uniform framework for software development and offers a large number of functions for communication between Zebra scanners and user-specific applications and solutions.

##### **HF/NFC RFID reader**

An SDK for integration in customer-specific applications is available.

## 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 the power management
- Use and setting of the 1D/2D Imager
- Use and setting of the 4G/LTE module
- Use and setting of the RFID reader HF/NFC
- Use and setting of the add-on module
- Use and setting of the camera

<b>Internal battery</b> (fixed integrated)	Lithium-ion battery 7.4 V/4200 mAh (31.08 Wh)
<b>External battery</b> (optional; hot swappable)	Type 17-A1Z0-0006 Lithium-ion battery 7.4 V/4200 mAh (31.08 Wh)
<b>Operating temperature</b> (internal + external battery)	-20 °C to +50 °C (-4 °F to 122 °F)
<b>Charging temperature</b>	0 °C to +45 °C (+32 °F to 113 °F)
<b>Storage temperature</b>	-20 °C to +50 °C (-4 °F to 122 °F)
<b>Relative humidity</b>	5 %-90 % (non condensing)
<b>Lifecycle</b>	≥ 300
<b>Charging time in Tablet PC</b>	
▪ only internal battery	approx. 2 hours
▪ internal + external battery	approx. 4 hours
<b>Operating hours</b>	(from BatteryMark )
▪ only internal battery	Idle mode: 2 hours 45 minutes Burn in: 1 hour 20 minutes
▪ internal + external battery	Idle mode: 5 hours 40 minutes Burn in: 2 hours 44 minutes

#### 4.3.1 Use of batteries

- Batteries are designed to be discharge and charged in room temperature.
- Batteries have a limited life time which is affected by several factors including:
  - a) the number of charge/discharge cycles to which they have been subjected
  - b) the environments in which they are used and stored
  - c) the levels of charge they are stored at
  - d) the demands they are subjected to
- Degradation in performance may increase with battery service life due to the stresses of daily charging and discharging. Li-ion batteries are typically replaced after 300 to 500 charge cycles (full charge-discharge cycles) or when the battery capacity has reached 70% to 80%. The actual number of cycles will vary depending on usage patterns, temperature, age and other variables.
- Prolonged battery usage will lead to impaired device performance.
- Batteries may be subjected to discharging even when not installed in a device. Batteries should not be discharge below 5% in order to prevent permanent deterioration of capacity due to self-discharge.

#### 4.3.2 Handling of batteries

- If there is a significant reduction in device operating time, the battery is past its useful life and should be replaced.
- Dropping, crushing or other mistreatment of a battery, or a device containing a battery, may cause a fire or a chemical burn hazard.
- Do not stack objects or materials on the top of batteries.
- Keep batteries away from conductive or combustible materials.
- Keep batteries away from children.
- Use only genuine BARTEC batteries with a BARTEC device.
- Charge batteries with genuine BARTEC devices or charging stations only.
- Promptly and properly dispose of used batteries according to local regulations for disposal of batteries. Before disposal, you should insulate the battery terminals with tape. Please follow local battery recycling guidelines
- Care should be taken to avoid “shorting” a battery across the terminals or across other batteries. This includes, but is not limited to, carrying batteries in a pocket that may contain loose change, paper clips, other batteries or other conductive (metal) materials.
- Do not expose batteries to water and do not incinerate or expose batteries to temperatures above 50°C (122°F).
- Do not put devices or batteries in a microwave.
- Do not attempt to disassemble or pierce the battery with a sharp object.
- Do not attempt to remove a battery from a device with a sharp object.
- Damaged or leaking batteries should be handled with extreme care. Personal injury may result from the mishandling of a damaged or leaking battery.

- As with any electrical device, if overheating or burning odors are noticed during charging, leave the area immediately and contact safety personal to handle the situation.
- BARTEC batteries are Ex-certified in combination with the device. Use of other batteries as specified and listed in certificate leads to invalid Ex-certification.

#### 4.3.3 Tip's for energy saving of batteries

For Windows-powered portable devices, the battery endurance has always been a touchy subject. Some users were satisfied, others, well, not so much. For example with Windows 10 Creators Update, the battery life should be improved or at least you will get to be more in control over main battery consumers.

However, it seems that some users encountered sudden battery leaks or reduced battery life after the upgrade. We certainly hope that some of the upcoming Microsoft patches will address that. But, while we are at it, there are ways to troubleshoot battery issues and, at least temporarily, resolve battery drains.

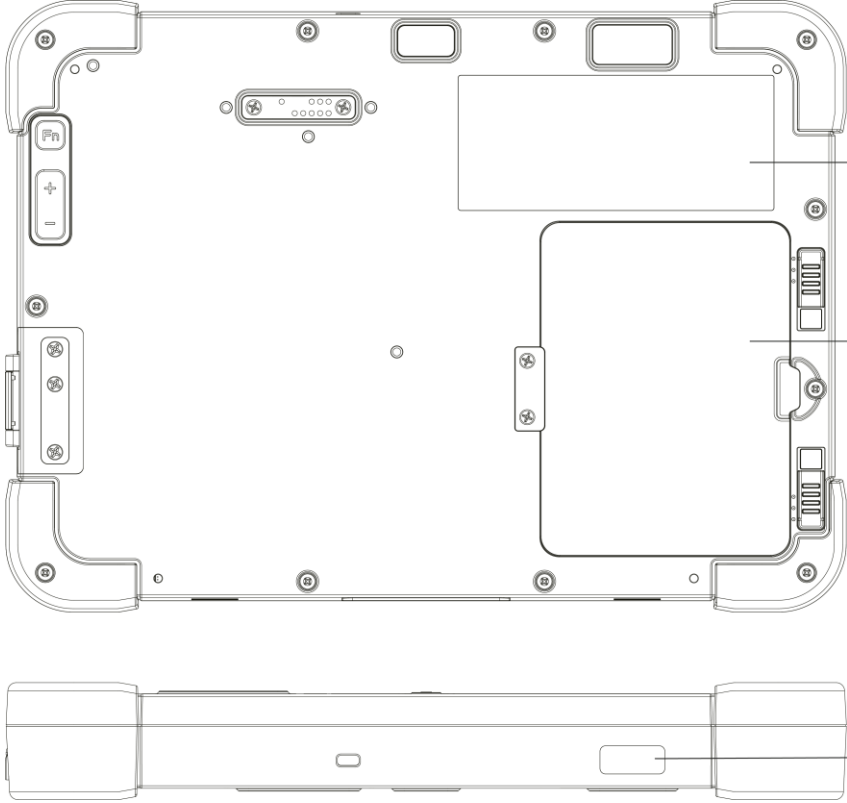
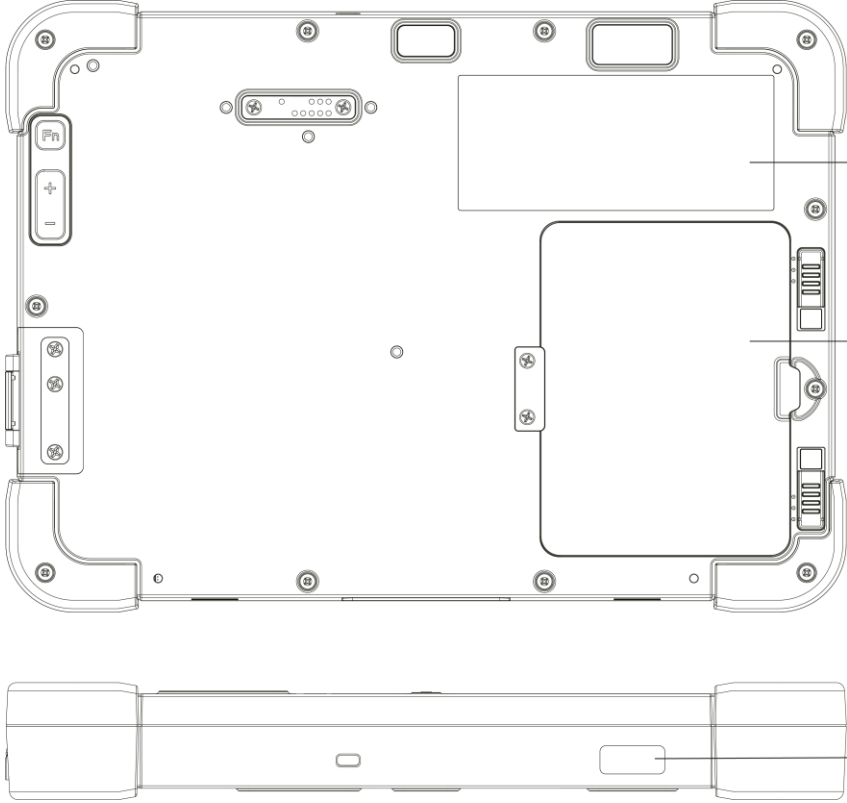

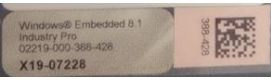

- Turn off all radio modules what are not needed or in use.
- Check and optimize settings of radio devices
- Reduce the display and backlight brightness to the minimum comfortable level.
- In the utility (depending on the operating system in the Mobility Center or HotTab) turn off all modules that are not being used. e.g. GPS, Barcode Scanner, Camera
- Enable battery saver.
- Setup a power plan according to Microsoft guidelines.
- Setup power saving options according to Microsoft guidelines.
- Setup sleep settings according to Microsoft guidelines.
- Reinstall Windows 10
- (Use 3rd party tool to improve battery life)



General saving tips for Windows operating systems can be found in Internet forums about Microsoft.

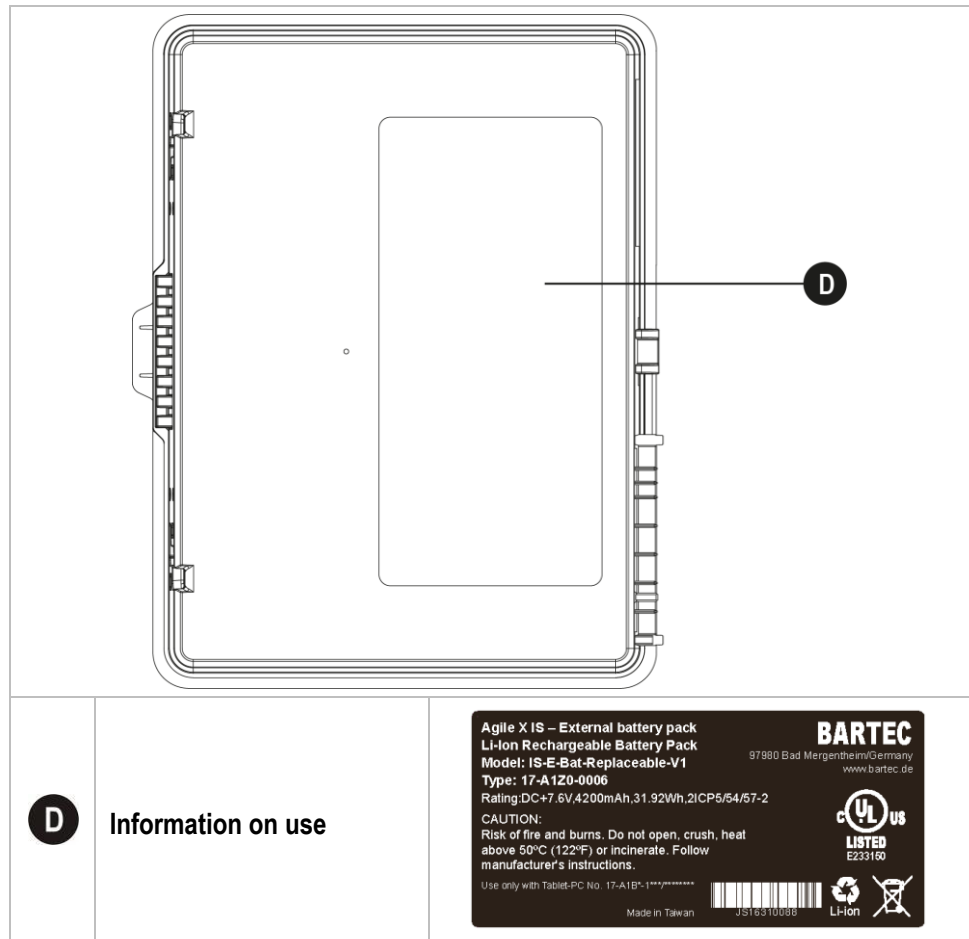
## 4.4 Product labelling

### 4.4.1 Agile X IS

		
<b>A</b>	<b>Type label</b> <b>(here: Type</b> <b>11-A1B4-****/*****))</b>	
<b>B</b>	<b>Microsoft Windows licence</b> <b>(in battery compartment; depending on operating system)</b>	
<b>C</b>	<b>Laser warning</b> <b>(for devices with 1D/2D-Imager)</b>	



#### 4.4.2 Battery



#### 4.4.3 USB stick and MicroSD card



## 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>

### 5.2 Storage

#### ATTENTION

##### Property damage through incorrect storage!

- ▶ Observe storage temperatures.
- ▶ Keep humidity away from the tablet PC.

#### Additional information on the batteries

The batteries of BARTEC 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 tablet PC.

## 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 tablet PC.
- ▶ 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 Scope of delivery

- Tablet PC Agile X IS
- Dual stylus
- Power supply
- AC power cable EU+US
- Cover module or external battery
- Quick Start Guide

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

## 6.2 Requirements in potentially explosive atmosphere

### Tablet PC

- The Tablet PC may not be opened.
- In the event of malfunctions or damage to the housing, switch off the tablet PC and remove it from the potentially explosive atmosphere.
- Do not use, swap or replace and non-specified components.
- Protect the Tablet PC from impact!
- Do not expose the Tablet PC to caustic/aggressive liquids, vapours, mists!
- Avoid the impact of moisture outside the specifications.
- Avoid thermal impact outside the specified temperature range.

### Battery

- The battery may not be opened.
- Only charge the battery outside the potentially explosive atmosphere.
- To charge the battery, the charging temperature must be between 0°C and 40°C (32°F and 104°F).
- Only use the battery for the purpose listed in this Quick Start Guide and are only suitable for the Tablet PC Agile X IS Type 17-A1B\*-\*\*\*\*/\*\*\*\*\*.
- The battery must be locked within the potentially explosive atmosphere.
- 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. Exception: Micro SIM card.

## 6.3 First steps

- ▶ Unpack the Tablet PC
- ▶ Depending on the scope of delivery, insert either the cover module or the battery into the Tablet PC.  
  
or  
  
charge the battery and then insert it into the Tablet PC
- ▶ Use one of the following accessories to charge:

Description	Charging process	
	Battery (in Tablet PC)	Spare battery
Docking station Type: 03-9914-0022	Yes	No
2-slot battery charging station Type: 03-9914-0021	No	Yes

- ▶ Switch on the Tablet PC.

### Optional:

- ▶ Insert a Micro SIM/MicroSD card.
- ▶ Remove/replace screen protector.

## 6.3.1 Insert external battery/cover module

**⚠ DANGER**

**Non certified accessories endanger explosion protection.**

**Danger to life exists in potentially explosive atmospheres!**

▶ Only use original accessories from BARTEC.

**Spark formation when inserting/changing the battery!**

▶ Only insert or remove batteries outside the potentially explosive atmosphere.

**⚠ WARNING**

**Dirt on the battery contacts can impair the functionality!**

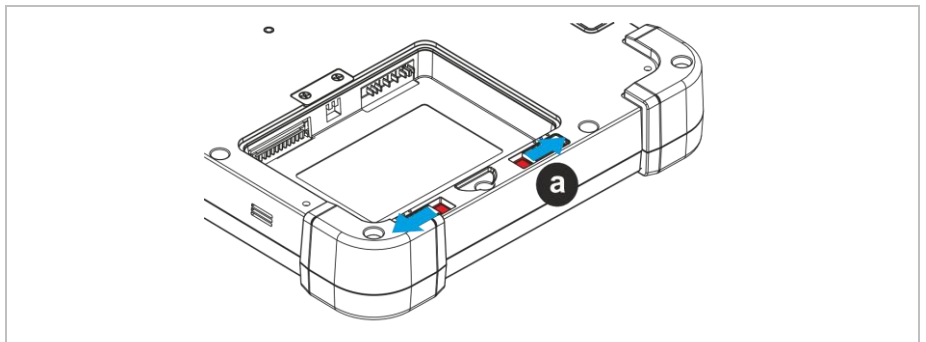
▶ Ensure that no external influences damage the external battery contacts when replacing the external battery/cover module.

▶ Protect the battery contacts by always using a external battery or the cover module.

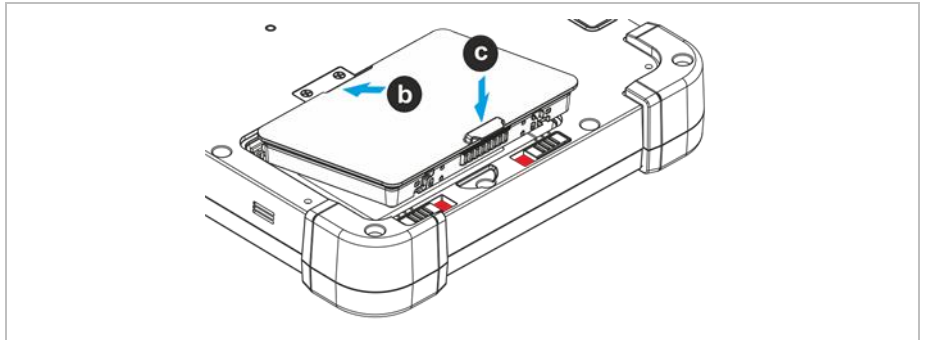
Only the following batteries/cover modules are permitted:

Variant	Type
Battery - 7.4 V/4200 mAh (31.08 Wh)	17-A1Z0-0006
Cover module	03-9849-0150

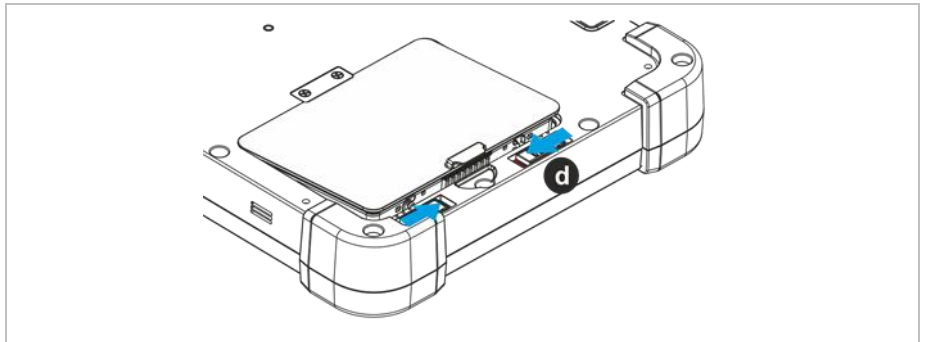
1. Place the Tablet PC with the front side (display facing down) on a flat surface. Be careful not to scratch the display. The power supply automatically switches from the external battery to the internal battery.
2. Before using the battery or cover module, make sure that the multi-stage release latch **(a)** of the battery compartment is open. Make sure that both lock sliders are locked in the outer position (red markings in the release latch).



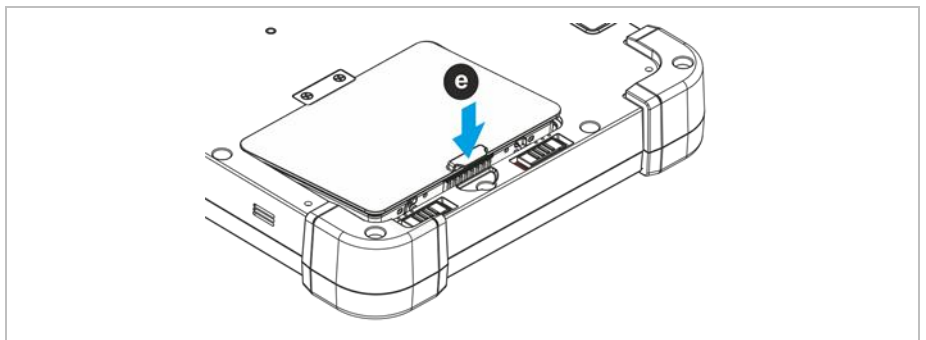
3. Insert the battery/cover module into the battery compartment **(b)** first. Press the battery/cover module into the clamp position **(c)**.



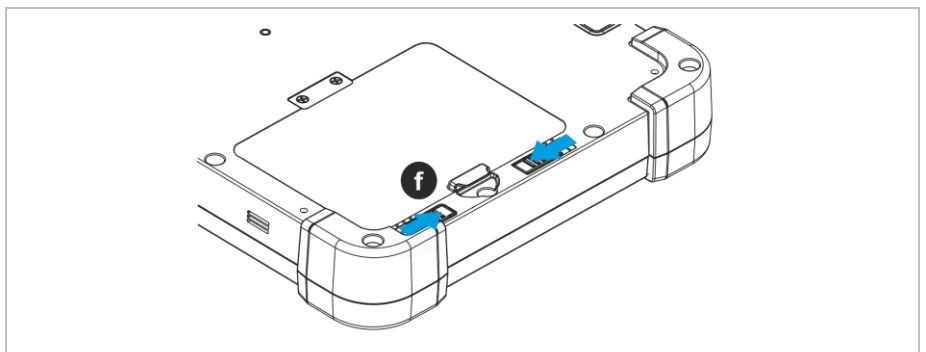
4. Move the lock sliders to the middle position **(d)**.



5. Press the battery/cover module into the battery compartment **(e)**.



6. Move the lock sliders into the locking position **(f)**.



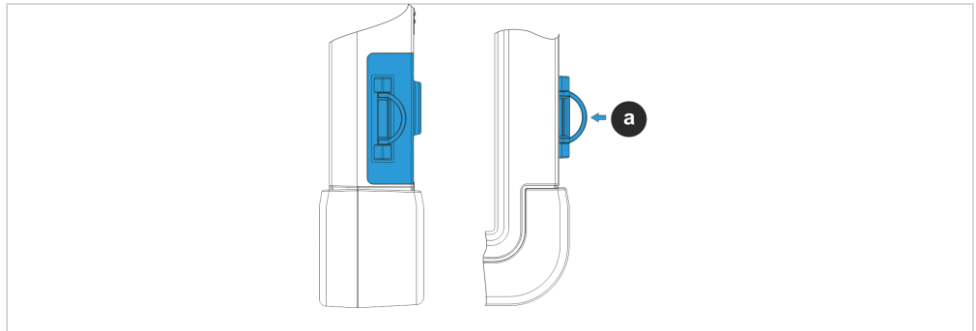
## 6.3.2 Charging the internal/external battery

**⚠ DANGER**

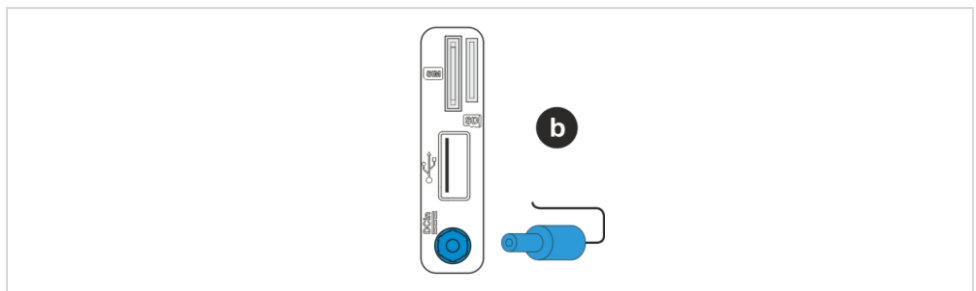
**A danger to life exists in a potentially explosive atmosphere!**

- ▶ Charge the batteries only outside potentially explosive atmospheres.
- ▶ Only use batteries and chargers that are certified/specified for the Agile X IS from BARTEC.

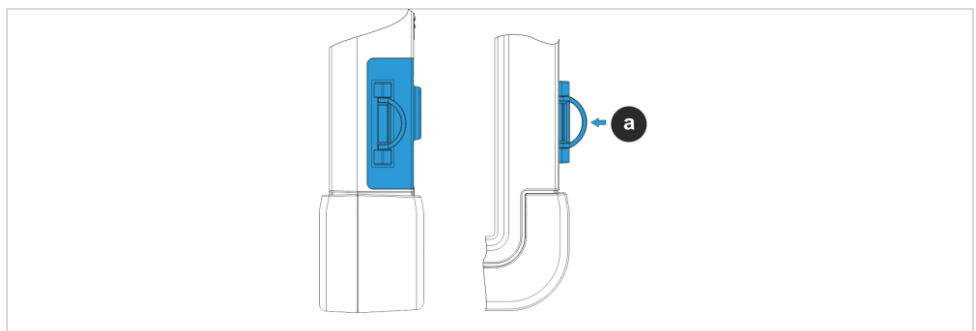
1. Pull out the folding metal bracket from the side of the cover **(a)**.



2. Plug the power supply plug (Type 03-9911-0040) into the charging port **(b)**.



3. Connect the power supply to an electrical outlet.
4. The device is fully charged as soon as the status LED is green.
5. Remove the power supply after charging.
6. Close the side cover **(a)**.



The protection class IP65 is guaranteed only when the side cover is completely closed.



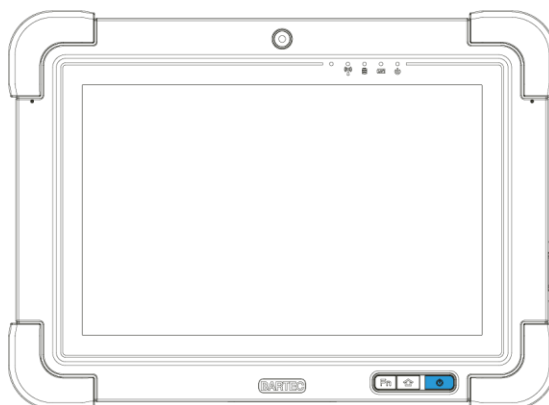
The charging options for docking station and 2-slot battery charging station are described in their associated Quick Start Guide.



### 6.3.3 LED status battery

LED indicator	Color	Signal	Bedeutung
	green	quickly flashing	Charging under 15%
		slowly flashing	Charging over 15%
		Steady light	fully charged
	red	Steady light	Remaining capacity Battery level 15% to 30%
		flashing	Remaining capacity Battery level under 15%
	off		No charging

### 6.3.4 Turn on/Turn off the Agile X IS



#### Turn on

Press and hold the power button on the device for more than three seconds.

#### Turn off

Press and hold the power button for six seconds or more.



Close all open programs before shutting down. Properly shut down the operating system from the Start menu.

## 6.3.5 Operating system Windows - Getting started

**CAUTION**

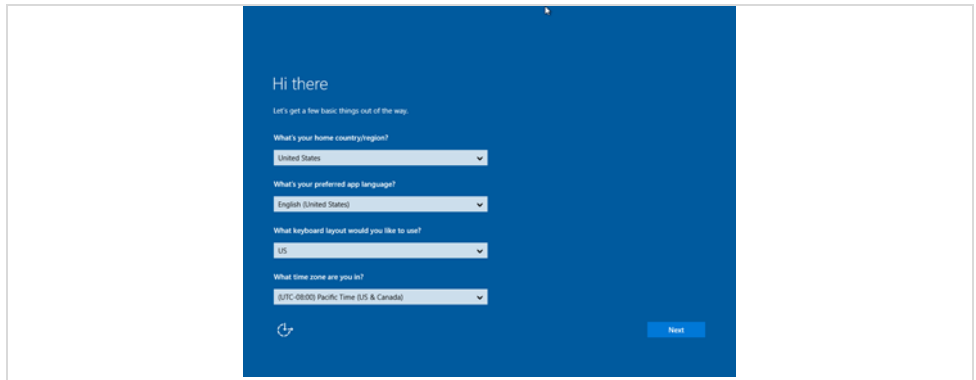
**A lack of voltage can cause damage to the device.**

- ▶ When booting up the Tablet PC for the first time, make sure that the rechargeable battery has been fully charged.

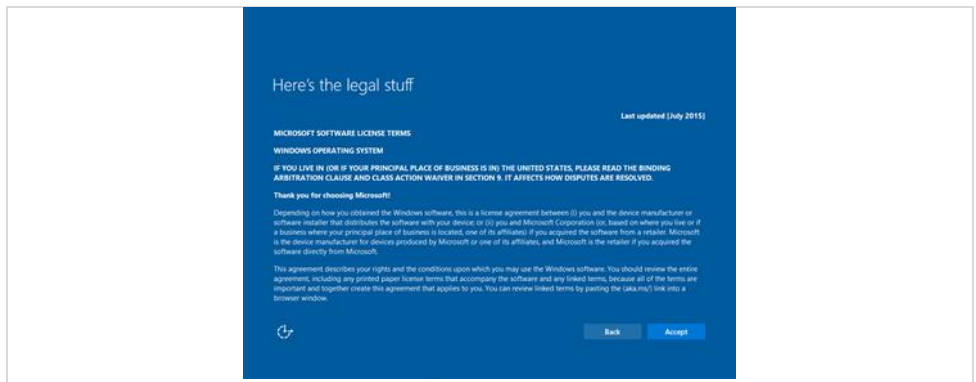
1. Press the On/Off button.
2. Wait until the operating system has detected all of the Tablet PC's hardware components.



3. Select the language for the operating system. Confirm by clicking on **"Next"**.



4. Accept the license conditions for the use of Windows and then click on **"Accept"**.



5. Follow the individual steps for the installation system.

### 6.3.6 Activating peripheral equipment in the utility program

A utility program is used to control the installed devices, e.g. barcode scanner, RFID reader, LTE module, touch, etc. The utility program is used to switch the devices on/off.

The utility program is used to switch the devices on/off.

In the settings menu, customer-specific settings can be made for some of the devices regarding their mode of operation.

Depending on the operating system used, a utility is available for the tablet PC.

- Windows® 10 IoT Enterprise CBB/SAC      Utility program HotTab
- Windows® 10 IoT Enterprise LTSC      Utility program Mobility Center

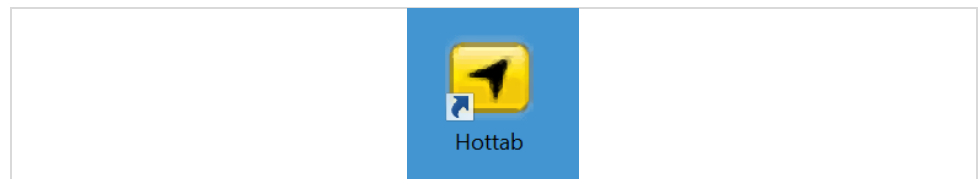


The utility programs are available on the BARTEC download page as a download with description at: <http://automation.bartec.de/indexE.htm>

#### 6.3.6.1 Utility program for Windows 10 IoT Enterprise CBB/SAC - HotTab

The HotTab application offers fast access to the Tablet PC's functions (such as use of a camera, activating/deactivating installed devices, programming the function key).

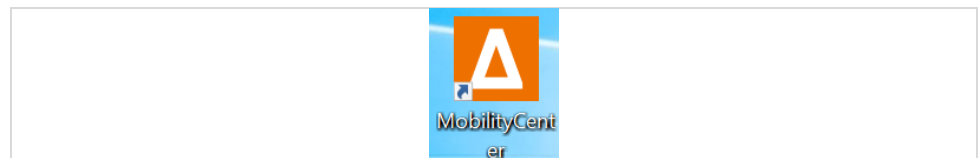
The application is already included in the image provided by BARTEC.



#### 6.3.6.2 Utility program for Windows 10 IoT Enterprise LTSC - Mobility Center

The Mobility Center application offers fast access to the Tablet PC's functions (such as use of a camera, activating/deactivating installed devices, programming the function key).

The application is already included in the image provided by BARTEC.



## 7 Operation

### 7.1 Handling accessories

#### DANGER

**Non certified accessories endanger explosion protection.**

**Danger to life exists in potentially explosive atmospheres!**

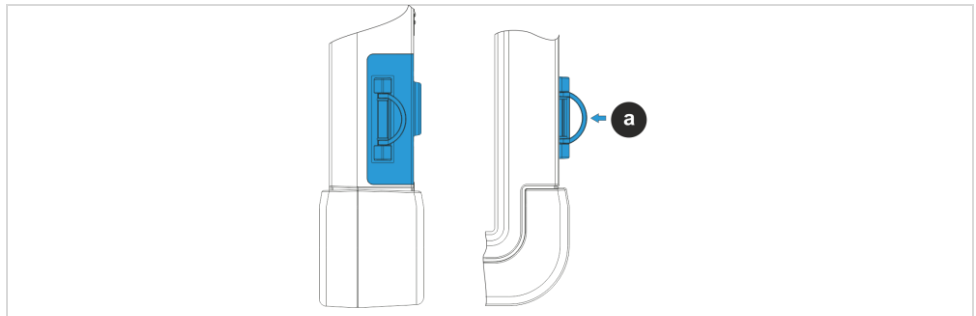
► Only use original accessories from BARTEC.

**Only permitted outside the potentially explosive atmosphere:**

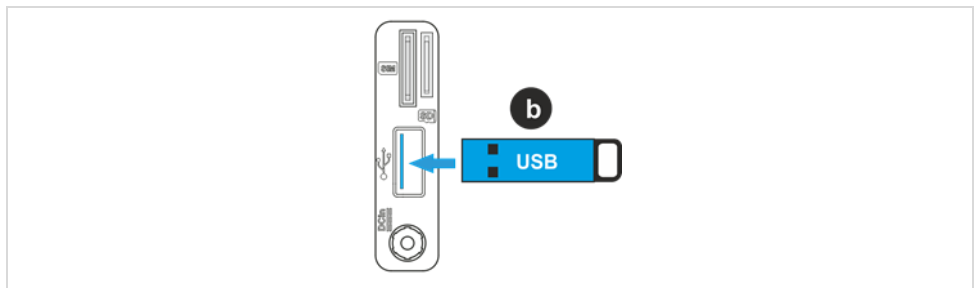
- Insert/charge battery.
- Insert/replace microSD card.
- Insert/replace SIM card.
- Attach/remove accessories such as dual stylus, leather carry case, hand strap and shoulder strap.

#### 7.1.1 Insert the USB stick (Ex i)

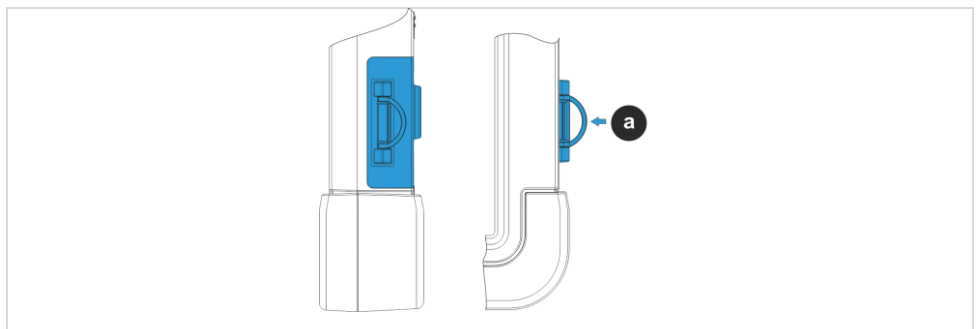
1. Pull out the folding metal bracket from the side of the cover (a).



2. Insert the USB stick (Ex i) (b) into the USB port (Ex i).

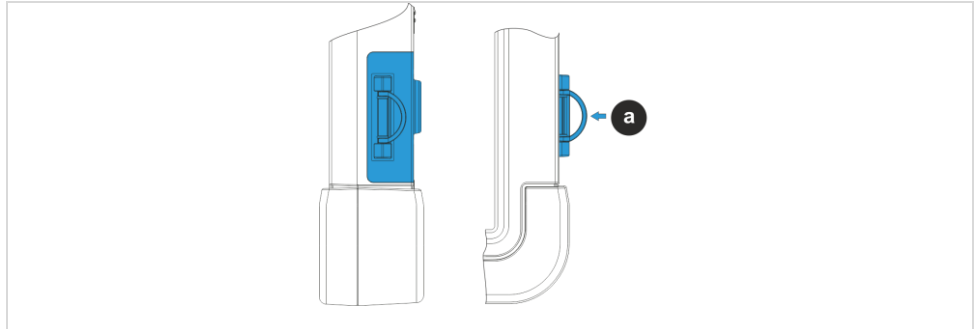


3. Close the side cover when you remove the USB stick (Ex i) (a).

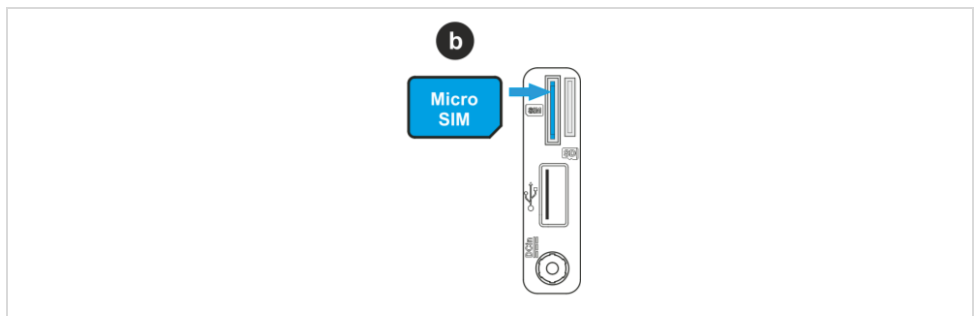


**7.1.2 Insert Micro SIM card (only with optionally available LTE module)**

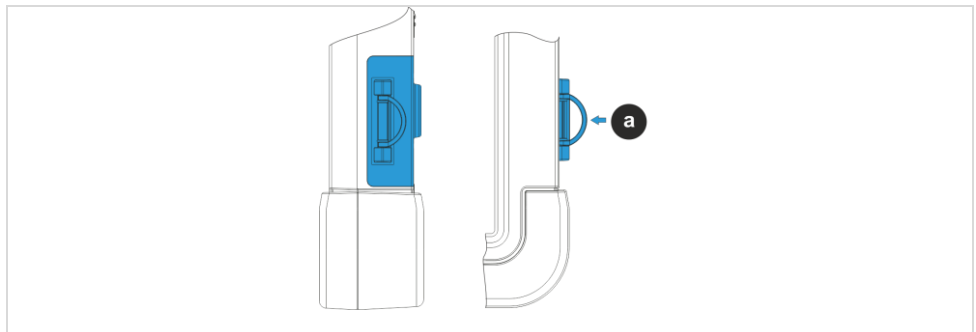
1. Pull out the folding metal bracket from the side of the cover (a).



2. Insert the Micro SIM card (b) with the contacts toward the rear of the device.

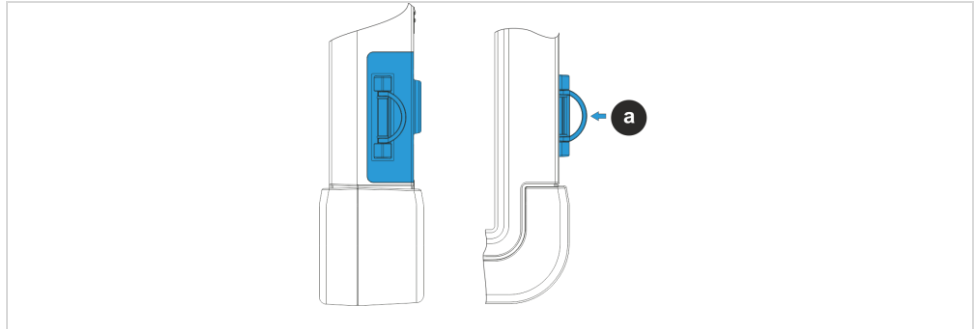


3. Close the side cover (a).

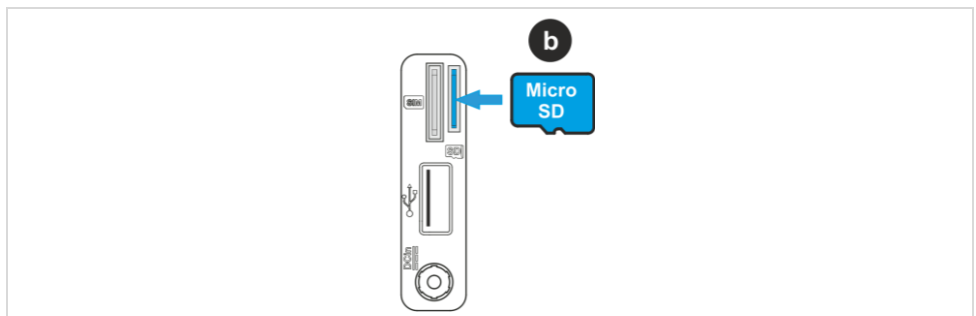


### 7.1.3 Insert MicroSD card

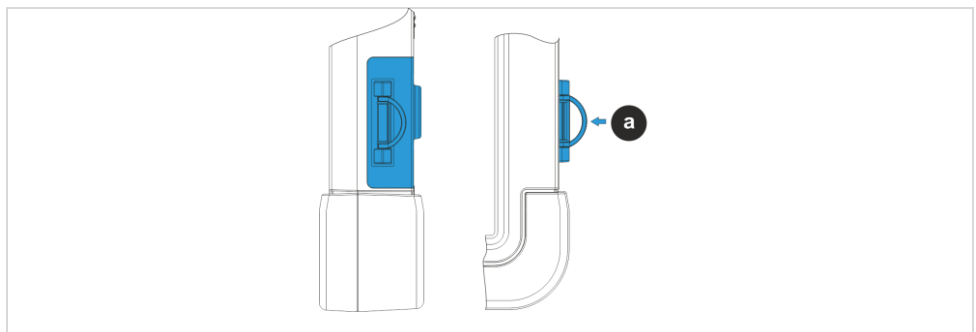
1. Pull out the folding metal bracket from the side of the cover (a).



2. Insert the MicroSD card (b) with the the gold contacts toward the display.



3. Close the side cover (a).



## 7.2 Function key combination (reset key)

### Before Windows boots up

Combinations	Funktionen
Home menu key	F7 - BIOS Setup
Function key (Fn1)	F6 - Recovery Menü
Function key (Fn2)	ESC
Button Volume (+)	Up
Button Volume (-)	Down
Home menu key + Function key (Fn1)	Enter
Home menu key + Button Volume (+)	Right
Home menu key + Button Volume (-)	Left
Home menu key + Button Volume (+) + Function key (Fn2)	BIOS reset (Clear CMOS)

### Under Windows

Combinations	Funktionen
Home menu key	HotTab Menu (when using Windows 10 IoT Enterprise CBB/SAC) Mobility Center Menu (when using Windows 10 IoT Enterprise LTSC)
Function key (Fn1)	Default: Open WebBrowser
Function key (Fn2)	Default: 1D/2D Imager (Units with 1D/2D Imager) Default: Camera (Units without 1D/2D Imager)
Button Volume (+)	Louder
Button Volume (-)	Quieter
Button Power	On/Off
Button Volume (+) + Button Volume (-)	Ctrl + Alt - Del
Home menu key + ButtonVolume (+) + Function key (Fn2)	BIOS reset (Clear CMOS)

## 7.3 Check battery status

The Agile X IS provides two menus in which the current battery status can be checked

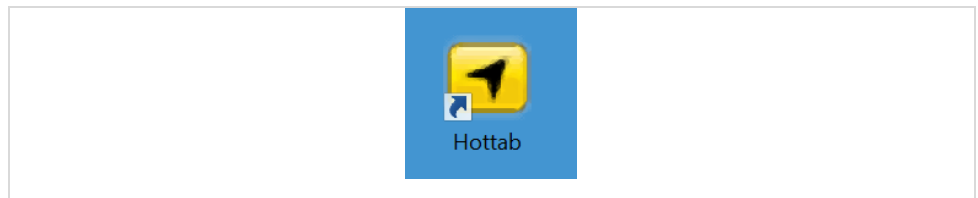
- Utility program (depending on the used operating system - Mobility Center or HotTab Utility)
- Windows OS standard battery status bar



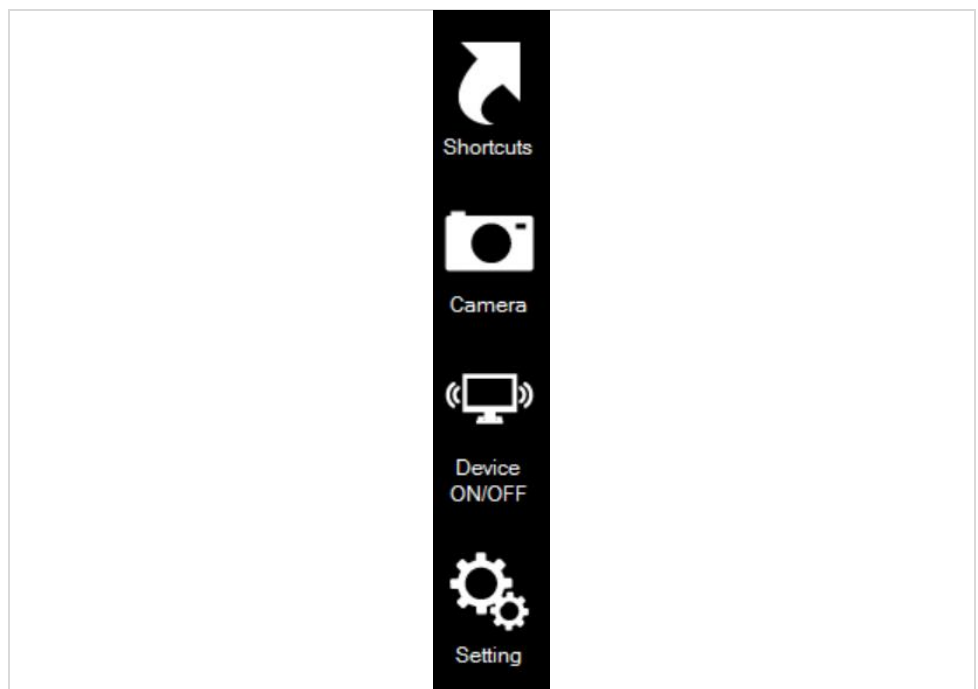
If you use only the internal battery then the external battery (customer replaceable) is not visible/present in system.

### 7.3.1 How to check battery status in the utility program HotTab

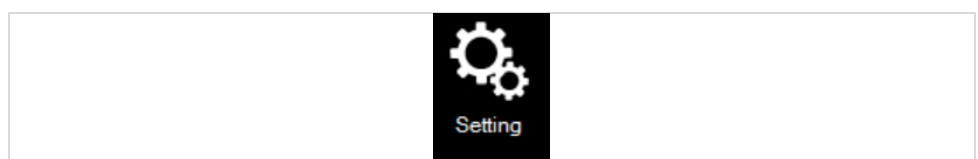
1. Open "HotTab utility".



2. On the right side of the display the HotTab main menu appears.



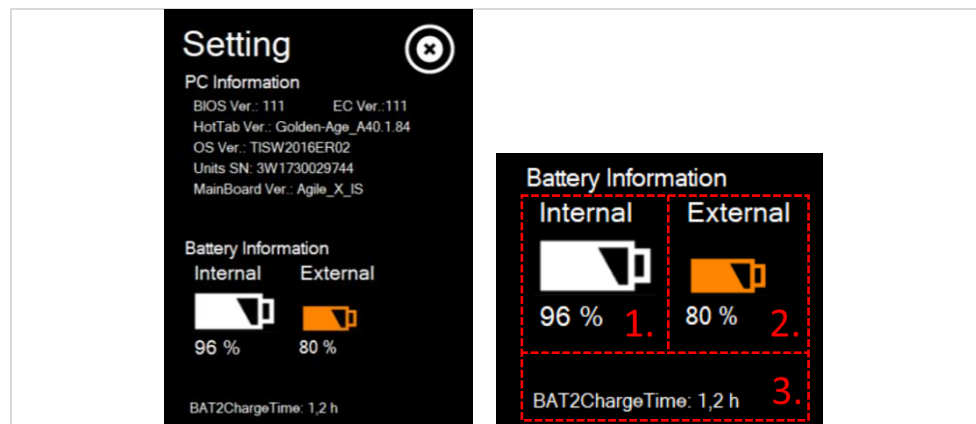
3. Select the menu "Setting".



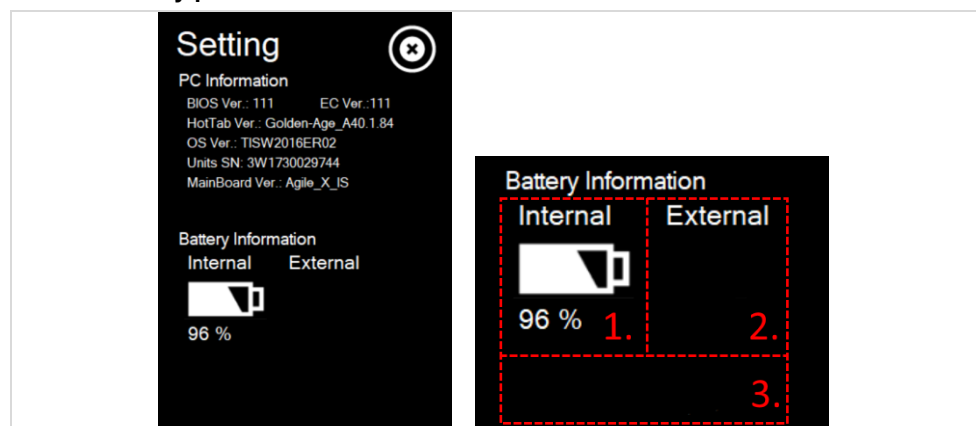


4. In setting menu you can check the battery status.
  - **Field 1:** Battery status of the internal battery (not customer replaceable)
  - **Field 2:** Battery status of the external battery (customer replaceable)  
The status field is not visible if external battery is not inserted
  - **Field 3:** Charging time for the current battery if device connected to external power  
The status field is not visible if device is not connected to external power  
Charging time BAT1 = internal / Charging time BAT2 = external

#### Internal and external battery present in device:

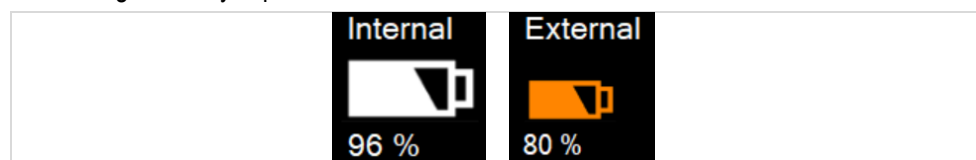


#### Internal battery present in device:



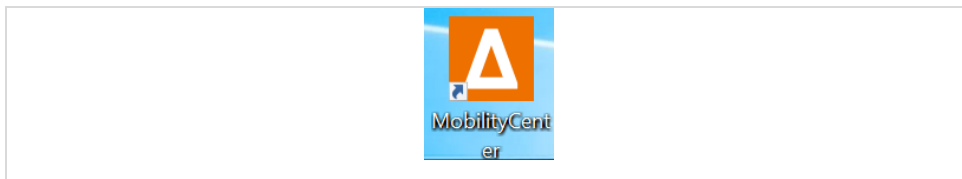
The colors of the battery indicator indicated which of the batteries is currently active in use.

- White: Battery is present but not in use.
- Orange: Battery is present and in use.

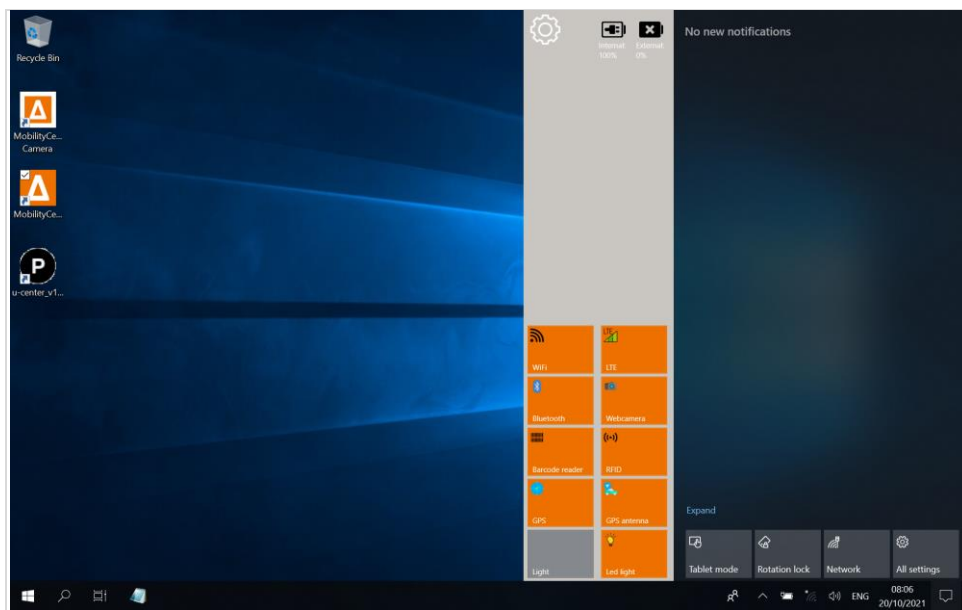


### 7.3.2 How to check battery status in the utility program Mobility Center

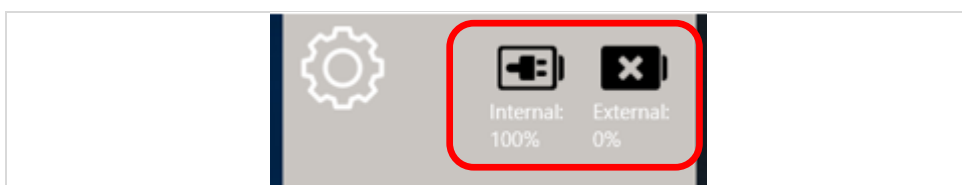
1. Open "Mobility Center".



2. On the right side of the display the HotTab main menu appears.



3. The battery status is displayed in the header of the main menu.  
Display for internal and external battery in the device:



The batteries can indicate the following states:

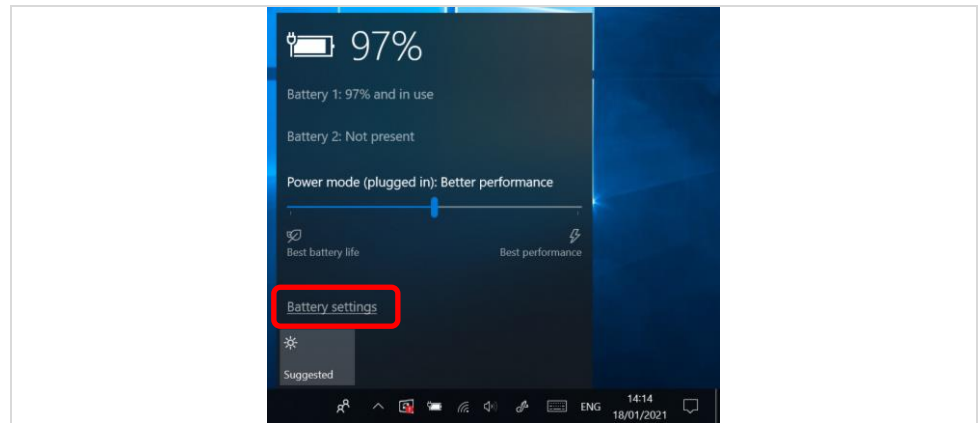
Picture	Battery state
	Battery is used and charged.
	Battery is in use and is being discharged.
	Battery is not used and is discharged.
	Battery is not installed. <ul style="list-style-type: none"> <li>• External battery is not installed.</li> <li>• External or internal battery is not recognized by the device hardware (defective)</li> </ul>

### 7.3.3 How to check battery status in Windows

1. Open the Windows task bar with a click on the battery icon the menu for it.

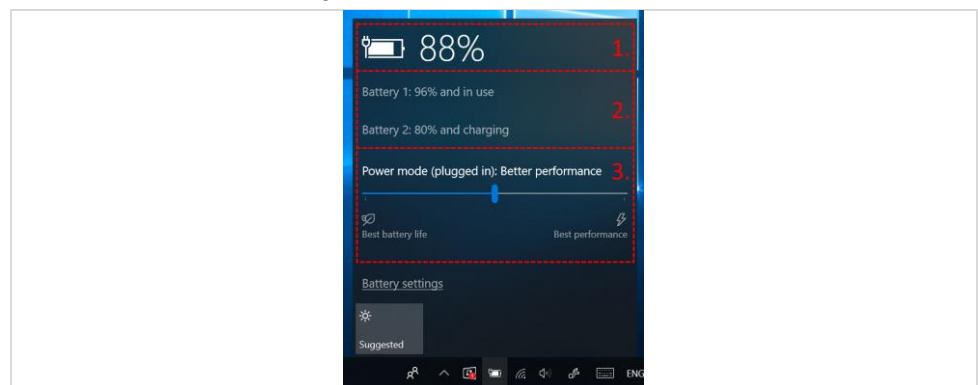


2. The menu provides information about the batteries and the current state. For more information, you can open the "battery settings" menu.

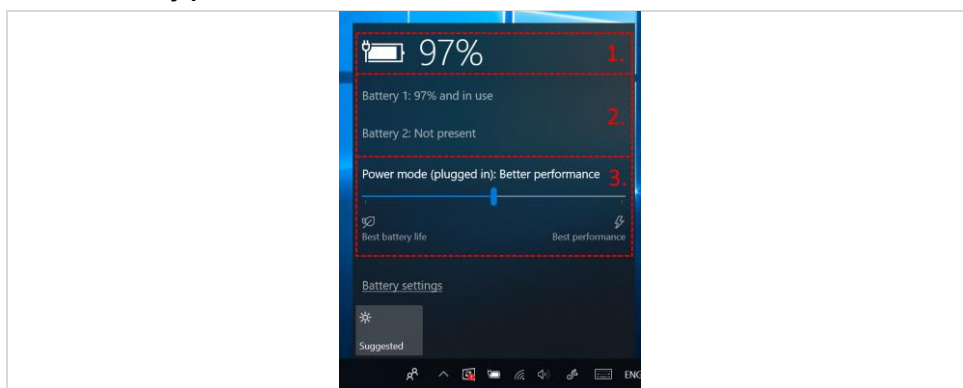


3. In the battery menu you can check the battery status.
  - **Field 1:** Charging state in sum (internal + external battery)
  - **Field 2:** Battery status of internal and external (customer replaceable) battery  
Battery 1 = internal / Battery 2 = external
  - **Field 3:** With "slide bar" you can setup if you prefer that device settings are on "Best battery life" or "Best Performance" (short battery life time before battery need charging).

#### Internal and external battery present in device:



Internal battery present in device:



## 7.4 Handling, recommendations and requirements

### 7.4.1 Basic safety and health protection requirements

Consult your safety officer to ensure that you are acquainted with the safety regulations in your company which serve to protect employees at the workplace.

### 7.4.2 Information on the use of wireless devices

Heed all warnings referring to the use of wireless devices

### 7.4.3 Safety in aircraft

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

### 7.4.4 Safety in hospitals

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

### 7.4.5 Heart pacemakers

Manufacturers recommend that a minimum distance of 15 cm be observed between a wireless handheld device and a pacemaker to avoid potential interference.

- Persons with heart pacemakers should ALWAYS keep at least 15 cm away from the activated device.
- The device may not be worn by these persons in the breast pocket.
- The device should be held to the ear which is further away from the heart pacemaker.
- If you have reason to assume that interference has arisen you should SWITCH-OFF the device immediately.

### 7.4.6 Hearing aids

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

### 7.4.7 Other medical equipment

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

#### 7.4.8 Equipping laser devices

##### Laser warning note

Notice no. 50 dated June 24th, 2007 and EN60825-1: 2007 and IEC60825-1 (ed. 2.0).  
The laser classification is specified on a sticker attached to the device.



Class 2 laser scanners use a low-power laser diode with visible light. As is the case with any bright light source, such as the sun, always avoid looking directly into the light beam. No information is available regarding the potential dangers of being exposed to class 2 laser light for a brief period.

Caution: The use of control elements which change settings or initiate procedures that are not mentioned here can lead to a situation in which persons are exposed to hazardous laser beams.

#### 7.4.9 LED units



##### CAUTION

**Laser radiation! May damage eyesight!**

- ▶ Do not look into the laser beam.

Mit LED-Licht ausgestattete Geräte von BARTEC erfüllen die Richtlinie:

- EN 60079-28 für LED-Sicherheit

#### 7.4.10 Restrictions in the case of wireless devices



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

##### Radio modules

The device contains radio modules. The identification data for these modules are provided below:

Radio module from BARTEC which supports WLAN 802.11 a/b/g/n/ac and Bluetooth.

##### Bluetooth® radio technology

This is an authorized Bluetooth® product. Further information and an end product list is provided at <https://www.bluetooth.org/tpg/listings.cfm>.

##### Country-specific roaming

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

##### Ad-hoc operation

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

## 7.5 Operating frequency - FCC and IC

### Only 5 GHz

The use in the UNII (Unlicensed National Information Infrastructure) band 1 5150 -5250 MHz band is restricted to Indoor Use Only; any other use will make the operation of this device illegal.

### Industry Canada Statement



#### CAUTION - AVERTISSEMENT

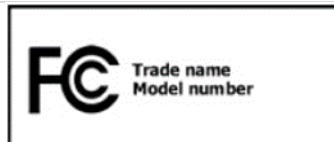
#### Devices can be damaged by inappropriate handling!

- ▶ The device for operation in the band 5150-5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems;
- ▶ High-power radars are allocated as primary users (i.e. priority users) of the bands 5250-5350 MHz and 5650-5850 MHz and that these radars could cause interference and/or damage to LE-LAN devices.

#### Devices can be damaged by inappropriate handling!

- ▶ *Les dispositifs fonctionnant dans la bande 5 150-5 250 MHz sont réservés uniquement pour une utilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux;*
- ▶ *De plus, les utilisateurs devraient aussi être avisés que les utilisateurs de radars de haute puissance sont désignés utilisateurs principaux (c.-à-d., qu'ils ont la priorité) pour les bandes 5 250-5 350 MHz et 5 650-5 850 MHz et que ces radars pourraient causer du brouillage et/ou des dommages aux dispositifs LAN-EL.*

### FCC requirements for protection against radio frequency interference



This device has been tested and satisfies the limit values for a digital device of Class B according to Part 15 of the FCC Guideline. These limit values were stipulated to guarantee appropriate protection against disturbances if the device is used in residential areas.

The device generates and uses radio frequency energy and may emit this energy. This can have a disturbing effect on other radio frequencies if the device is not connected and used in accordance with the operating instructions. A guarantee that no interference will arise for a certain installation cannot be given.

If the device causes interference to the radio or TV reception which can be recognized by switching the device on and off, the interference should be eliminated by one or several of the following measures:

- Re-alignment or moving of the receiving aerial.
- Enlarging the distance between device and receiver.
- Connecting the device to a different socket than the one to which the receiver is connected.
- Advice from the dealer or a radio/television technician.

**Declaration in accordance with the FCC regulations, Part 15.21**

Changes which have not been explicitly approved by the party responsible for compliance with the regulations can lead to the expiry of the operating authorization for this device.

**Radio transmission devices (Part 15)**

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

- The device may not cause any damaging interference.
- The device must absorb all receiving interference including interference which may lead to undesirable operation.

**Requirements placed on the protection from high frequency interference – Canada**

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

**Radio transmission devices**

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

- The device may not cause any damaging interference.
- The device must absorb all receiving interference including interference which may lead to undesirable operation.

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

**Country approvals****For 2.4-GHz products:**

Europe covers Belgium, Bulgaria, Denmark, Germany, Estonia, Finland, France, Greece, Great Britain, Ireland, Iceland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Netherlands, Norway, Austria, Poland, Portugal, Romania, Sweden, Switzerland, Slovakia, Slovenia, Spain, Czech Republic, Hungary and Cyprus

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

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

The channels 1 to 11 are available in the USA for 802.11 b/g operation. The range of the channels is restricted by the firmware.

**Radio transmitters for RLAN devices**

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

- Frequency range restricted to 5.60 GHz to 5.65 GHz.

This device complies with the radio standard RSS 210 of the Industry & Science Canada.

The operation of the device is based on the following two conditions:

- The device may not cause any damaging interference
- The device must absorb all receiving interference including interference which may lead to undesirable operation.



## 7.6 Electromagnetic fields

### International

The device complies with the internationally recognized standards for the recommended maximum values for electromagnetic fields of radio devices. Information on “internationally” recommended maximum values for electromagnetic fields is provided in BARTEC’s Declaration of Conformity at BARTEC at <http://www.bartec.com>

### Europe

Portable devices have been specially tested for operation in direct body proximity. Use exclusively carry systems and similar accessories which have been tested and approved by BARTEC to ensure compliance with the EU regulations.

### USA and Canada

Declaration on joint use

To comply with the FCC guidelines with respect to exposure to high frequency energy, the aerial for this transmitter should not be used in the direct vicinity of, or in an operation unit with, other transmitters/aerials with the exception of those approved in this document.

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

### MicroSD card

The MicroSD card provides a secondary, non-volatile memory. The slot is located at the side of the tablet PC. Further information is provided in the documentation supplied with the card. Observe the manufacturer’s recommendations on use.

## 8 Cleaning

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

### WARNING

#### **Improper use can damage the device.**

- ▶ Only clean devices and accessories outside potentially explosive atmospheres.
- ▶ As a general rule, disconnect the Tablet PC from the power supply.
- ▶ Ensure that there is no residue stuck to the contacts.

To guarantee your own safety and the operational safety of the device, observe the precautionary measures carefully.

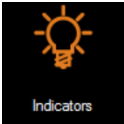
## 9 Faults and troubleshooting


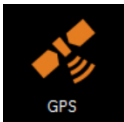
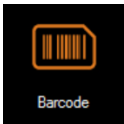
### DANGER

**Danger to life exists in potentially explosive atmospheres!**

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

### 9.1 Troubleshooting

Problem	Solution
The battery is not charging	Check, <ul style="list-style-type: none"> <li>▪ whether the external power supply is connected.</li> <li>▪ whether the external battery was inserted correctly.</li> </ul>
No image appears in the display	Check, <ul style="list-style-type: none"> <li>▪ whether you can wake up the device using the On/Off button</li> <li>▪ whether the backlight settings may be too low. Increase the backlight settings in the Tablet PC's control panel or using the utility program (HotTab or Mobility Center).</li> </ul>
The screen suddenly switches off	Check, <ul style="list-style-type: none"> <li>▪ whether the external power supply is connected.</li> <li>▪ whether the external battery was inserted correctly. If necessary, charge the internal/external battery</li> </ul>
The power LED goes out	Check, <ul style="list-style-type: none"> <li>▪ whether the LED option is activated in the utility program (HotTab or Mobility Center).</li> </ul> activated = orange / deactivated = white 

<p><b>The Bluetooth connection to other devices is not working</b></p>	<p>Check,</p> <ul style="list-style-type: none"> <li>whether the Bluetooth option is activated in the utility program (HotTab or Mobility Center). activated = orange / deactivated = white</li> </ul>  <ul style="list-style-type: none"> <li>whether Bluetooth is activated on the other device.</li> <li>whether the two Bluetooth devices are compatible with one another</li> <li>whether the two devices are not more than 5 m apart.</li> </ul>
<p><b>The GPS application cannot find my location</b></p>	<p>Check,</p> <ul style="list-style-type: none"> <li>whether the GPS option is activated in the utility program (HotTab or Mobility Center). activated = orange / deactivated = white</li> </ul>  <ul style="list-style-type: none"> <li>whether other devices in the area are generating interference. Remove the Tablet PC from the range of any such devices.</li> </ul>
<p><b>No sound is coming from the speakers</b></p>	<p>Check,</p> <ul style="list-style-type: none"> <li>the loudspeaker setting using the volume up and down buttons.</li> </ul>
<p><b>No laser appears on the 1D/2D Imager and the 1D/2D Imager does not seem to be working</b></p>	<p>Check,</p> <ul style="list-style-type: none"> <li>whether the 1D/2D Imager is active in the utility program (HotTab or Mobility Center). activated = orange / deactivated = white</li> </ul>  <ul style="list-style-type: none"> <li>whether COM15 is set in the system settings of the 1D/2D Imager, so that the utility program (HotTab or Mobility Center) has access.</li> </ul>
<p><b>The laser appears on the 1D/2D Imager, but no data is displayed</b></p>	<p>Check,</p> <ul style="list-style-type: none"> <li>the distances between the 1D/2D Imagers and reduce them (see chapter on decoding range).</li> <li>whether the barcode type being used is activated in the 1D/2D Imager configuration.</li> </ul>

**Agile X IS does not start or hang up**

Check,

- whether the device is charged.
- whether the battery is defective by connecting the device to the external power supply
- the test key combination for BIOS reset (clear CMOS).

Press at same time key combination:

Home menu key + Button Volume (+) + Function key (Fn2)

## 9.2 How to identify defect internal battery

With following procedure, you can identify a defect internal battery:

1. Remove external battery if it is present.
2. Connect external power and turn the device on.
3. Check in the utility program (HotTab or Mobility Center) if the internal battery is present and charging.
4. Remove external power.
5. Check if device is working or turn off.

Following scenarios show you a defect or problem on the internal battery.

- If device turns off then the internal battery is with defect.
- If battery can't be charged to minimum 25% then battery is with a defect.

## 9.3 How to identify defect external battery

With following procedure, you can identify a defect external battery:

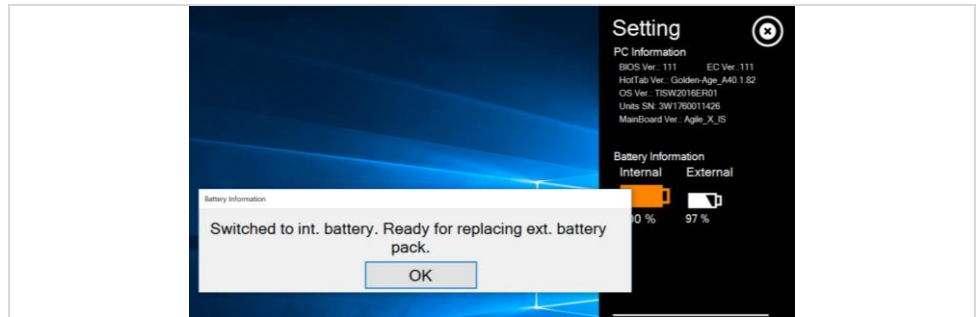
1. Insert external battery.
2. Connect external power and turn the device on.
3. Check in the utility program (HotTab or Mobility Center) if the internal battery is present and charging.
4. Remove external power.
5. Check if device is working or turn off.

Following scenarios show you a defect or problem on the external battery:

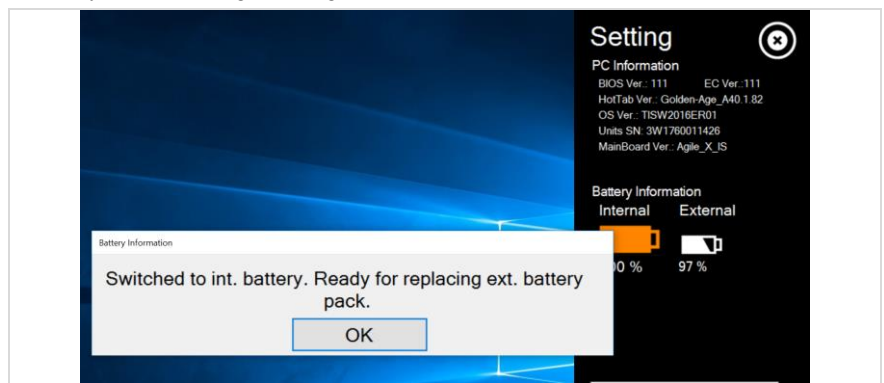
- If device turns off then the external battery is with defect.
- If device switch to the internal battery and do not use the external battery then the battery is with a defect.

Further test to get more feedback from device:

- If you place the Agile X IS with face down position on a table then device switches automatically to the internal battery.
- In this position, the external battery can be replaced.
- On display, you can see in this case the following message:



- Remove the external battery.
- Now three scenarios are possible:
  - a) If the battery is charged over a certain level and it is detected to be able to work properly, the following message appears:



- b) If the battery is discharged or under a certain threshold level and it is detected not to work properly, the following message appears:



- c) If the battery is defective or an error problem has occurred, the Agile X IS switches off to a safe state. When the battery is reinserted, it tries to switch to the external battery. However, the device does not get power from the external battery, so it breaks down when the battery is changed.

## 9.4 Resetting the Tablet PC using the recovery function

### ATTENTION

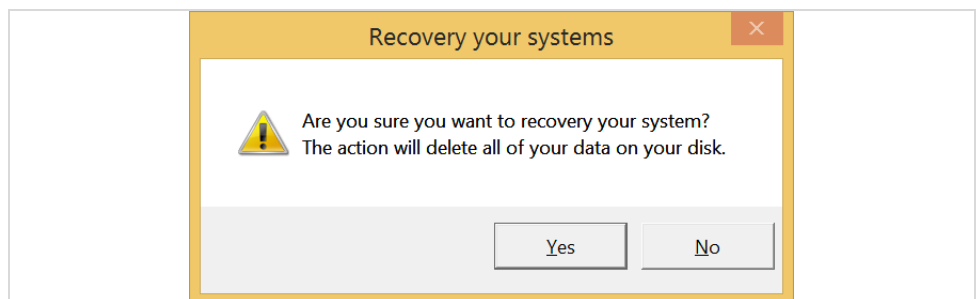
#### Data loss due to recovery!

- ▶ First perform a complete backup to prevent any unwanted data losses.
- ▶ It is important to be aware that any data saved on the Tablet PC which has not been backed up will be deleted and cannot later be retrieved.

1. Switch the Tablet PC on using the "On/Off" button.
2. Select one of the two options displayed when the boot screen appears to access the recovery menu.
  - Press the **Fn1** button on the front of the Tablet PC.
  - Press the **F6** button when using an external USB keyboard (only possible via docking station).
3. The following recovery function screen appears.

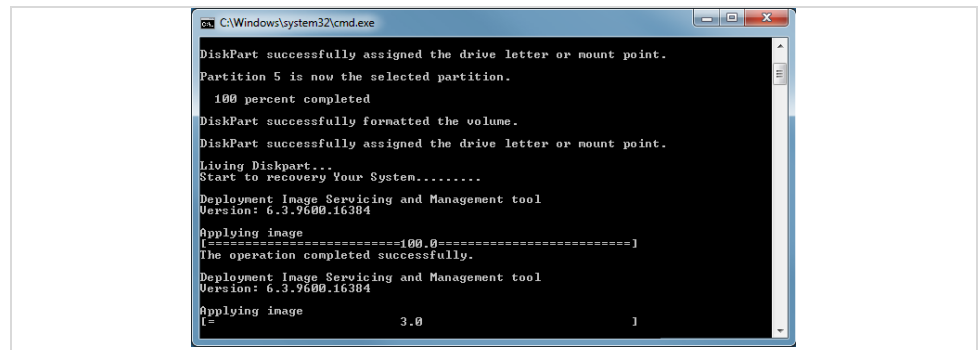


4. Select the **Recovery** option to continue.
5. A warning message appears that all data will be deleted. Select **Yes** if you are absolutely certain that you have backed up your data.





6. Wait until the recovery process is complete. While the recovery process is running, a command window appears and displays the progress.



7. Press the **Fn1** or **Fn2** button to terminate the recovery procedure and restart the Tablet PC.
8. Check whether the Tablet PC is working, then copy your data back to the PC and reinstall any applications.

## 10 Service, inspection, repair

Service, inspection, and repair of Tablet PCs may be conducted exclusively by trained and qualified staff! The staff who is familiar with the service, inspection, and repair of the tablet PCs, has been informed about the risks and has the qualifications necessary for this work.

### 10.1 Service intervals

The service intervals depend on the ambient conditions. Regular servicing is not required if the device is operated properly in accordance with the User Manual/Quick Start Guide and taking into account the ambient conditions.

- Check the Tablet PC regularly for external damage.

### 10.2 Inspection

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

### 10.3 Information on sending in for repairs

The following information is required for the repair:

- Serial number of the device, see label for series number.
- Model number or product name, see type plate
- Software type and version number from the system information in system control

Please read through the handling guidelines for the RMA process before you send in a defective device for repair. Then complete the RMA form (Return Merchandise Authorization), sign it and send it to our "Returns Centre".

E-Mail: [services@bartec.com](mailto:services@bartec.com)

Fax: +49 7931 597-119

We cannot guarantee the processing within the contractually agreed period for any returns received by us without RMA number.

The handling guidelines and the RMA form are available for download from our website:

<http://www.bartec.com>

Do you have any questions? Write us an e-mail or give us a call.

E-Mail: [services@bartec.com](mailto:services@bartec.com)

Fon: +49 7931 597-444

## 11 Disposal



Tablet PC and accessories contains metallic and plastic parts and electronic components.

WEEE registration number of the BARTEC GmbH:  
DE 95940350



As 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.

# 12 Declaration of Conformity

## 12.1 EU Declaration of Conformity

EU Konformitätserklärung  
EU Declaration of Conformity  
Déclaration UE de conformité

**BARTEC**

Nº 11-A1B0-7C0001\_A

Wir	We	Nous
<b>BARTEC GmbH</b> 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
<b>10.1" Tablet PC Agile X IS Serie</b>	<b>10.1" Tablet-PC Agile X IS series</b>	<b>10.1" Tablet-PC Agile X IS séries</b>
<b>Typ 17-A1B*-****/*****</b>		
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
<b>ATEX-Richtlinie 2014/34/EU</b>	<b>ATEX-Directive 2014/34/EU</b>	<b>Directive ATEX 2014/34/UE</b>
<b>RED-Richtlinie 2014/53/EU</b>	<b>RED-Directive 2014/53/EU</b>	<b>Directive RED 2014/53/UE</b>
<b>RoHS-Richtlinie 2011/65/EU</b>	<b>RoHS-Directive 2011/65/EU</b>	<b>Directive RoHS 2011/65/UE</b>
<b>WEEE-Richtlinie 2012/19/EU</b>	<b>WEEE-Directive 2012/19/EU</b>	<b>Directive WEEE 2012/19/UE</b>
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
<b>EN IEC 60079-0:2018</b> <b>EN 60079-11:2012</b> <b>EN 60079-28:2015</b> <b>EN 50303:2000</b>  <b>EN 62368-1:2014/A11:2017</b> <b>EN 50566:2013</b> <b>EN 62209-2:2010</b> <b>EN 62133:2013</b> <b>EN 60825-1:2014 (Laser)</b> <b>EN 62471:2008 (LED)</b>	<b>EN 300 328 V2.1.1</b> <b>EN 300 330 V2.1.1</b> <b>EN 301 511 V12.5.1</b> <b>EN 301 893 V2.1.1</b> <b>EN 301 908-1 V13.1.1</b> <b>EN 301 908-2 V13.1.1</b> <b>EN 301 908-13 V13.1.1</b> <b>EN 303 413 V1.1.1</b>	<b>EN 301 489-1 V2.2.3</b> <b>Draft EN 301 489-3 V2.1.2</b> <b>EN 301 489-17 V3.2.4</b> <b>Draft EN 301 489-19 V2.2.0</b> <b>Draft EN 301 489-52 V1.1.2</b> <b>EN 61000-3-2:2014</b> <b>EN 61000-3-3:2013</b> <b>EN 61000-6-2:2005</b> <b>EN 55024:2010/A1:2015</b> <b>EN 55032:2015</b>
Verfahren der internen Fertigungskontrolle	Procedure of internal control of production	Procédure de contrôle interne de fabrication

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