BARTEC

ATEX/IECEx Zone 2/22 UL Class I Division 2

Installation Instruction

RFID UHF Add-On Modul Type B7-A2Z0-0032

Installation Instruction - Translation

RFID UHF Add-On Module

Type B7-A2Z0-0032

ATEX/IECEx Zone 2/22
UL Class I Division 2

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

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

Contact:
Service-mobilecomputing@bartec.de
Download: www.bartec.de

Basic Information

Read carefully before putting the devices into operation.

The Installation Instruction 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.

More detailed instructions of the use can be found at www.bartec.de as well as the current versions of the datasheets, user manual, certificates and EU declaration conformity or may be requested directly from BARTEC GmbH.

Knowledge of the safety and warning information and the strict compliance with it is essential for safety installation and use. Injuries and material damage can be avoided by circumspect handling and systematically following the instructions.

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

Maintenance and Repairs The pertinent erection and operating provisions for electrical systems must be observed! 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.

Inspections 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.

Warranty 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.

Disposal As professional electrical devices, our devices are intended exclusively for commercial use, so-called B2B devices, in accordance with the WEEE Directive. Observe the national waste disposal regulations when disposing of the devices. All products purchased from us can be returned to us by our customers for disposal. The sender shall bear the costs of postage and packaging.

Safety Instructions The RFID UHF Add-On module may only be operated in a clean, undamaged condition and may only be deployed within the specified temperature class and the temperature range indicated for it. Special Conditions for explosion protection must be observed.

The assembly/dismantling must be conducted by qualified personnel authorised and trained to install electrical components in potentially explosive areas.

The use in areas other than those specified or alteration of the product releases BARTEC from liability for defects and further liability. Modifications and changes to the module are not permitted.

The generally applicable statutory regulations and other binding guidelines on occupational health and safety, on accident prevention and on environmental protection must be complied with.

Danger, Warning and Note Symbols Safety instructions and warnings are specially highlighted in this installation instruction and marked by symbols.

DANGER

The DANGER sign draws attention to a direct threat which if not avoided will lead to death or very serious injuries.

WARNING

WARNING draws attention to a possible threat which if not avoided can lead to death or very serious injuries.

CAUTION

CAUTION draws attention to a possible danger which if not avoided can lead to slight or minor injuries.

ATTENTION

ATTENTION draws attention to a potentially damaging situation which if not avoided can cause damage to the equipment or to objects in its vicinity.

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

Marking, test certificate, and standards

Note: Full information see "user manual" Agile X

Type B7-A2Z0-0032	
ATEX Zone 2 and 22 Ⓔx II 3G Ex ic IIA/IIC T5 Gc Ⓔx II 3D Ex ic IIIB T90 °C Dc IP 54 (IIA when using hand strap type 03-9849-0130)	EPS 15 ATEX 1 823 X
IECEx Zone 2 and Zone 22 Ex ic IIA/IIC T5 Gc Ex ic IIIB T90 °C Dc IP 54 (IIA when using hand strap type 03-9849-0130)	IECEx EPS 15.0010X
UL Division 2 Class I Div. 2 Groups A, B, C, D T4 A	UL File E321557

Special conditions for safe use:

- Maximum ambient temperature range: -20°C to +50°C.
- External connectors shall never be used in hazardous areas.
- The RFID module shall never be mounted or removed in hazardous areas.
- The apparatus shall be protected against mechanical impact, excessive UV-light and strong charge generating processes.
- In combination with BARTEC accessory 03-9849-0130 (hand strap) the device is only suited for gas group IIA.
- Um = 60 V shall never be exceeded. The user is responsible for meeting this condition.

Device / system specifications

Supported standards	EPC Global GEN2 (ISO1800-6C) with DRM optional: IP-X and ISO 18000-6B
Frequency range Dual band	US: 902 to 928 MHz EU: 865 to 867.5 MHz
Nominal reading range	up to approx. 150 cm
Nominal writing range	up to approx. 150 cm
Maximum transmission power	The transmission power can be adjusted separately for reading and writing. Adjustable from 0 dBm to +30 dBm in 0.5 dBm steps Accuracy: +/- 1 dBm
Energy management	power supply is via the extension interface of the tablet PC
Size (weight x length x height)	125 mm x 125 mm x 10 mm
Masse	170 g
Protection class (IEC 60529) mounted on tablet PC: connector strip (PoGo Pins):	 IP 54 IP 20
Operating temperature inside hazardous areas outside hazardous areas	 -20 °C to +50 °C -20 °C to +60 °C
Storage temperature	-30 °C to +70 °C
Operating humidity	30 % ~ 90 % (non-condensing)

Introduction

The intrinsically safe combination of the Agile X tablet PC system and the RFID UHF Add-On Module enables the fast, easy and secure reading and writing of RFID transponders in a potentially explosive atmosphere in Zone 2/2 and Division 2.

Scope of delivery

- 1x RFID UHF Add-On Module
- 2x Pan head screw M3x10
- 2x Pan head screw M3x7
- 2x Truss head screw M3x7
- 1x Installation instruction RFID UHF Add-On Module

⚠ DANGER

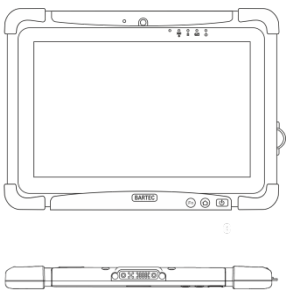
The extension interface of the Agile X industrial tablet PCs must always be sealed in a potentially explosive atmosphere! There is a risk of explosion!

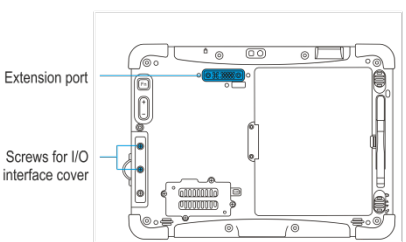
- ▶ Only remove or mount the cover of the extension module outside the potentially explosive atmosphere.
- ▶ Only assemble/dismantle the RFID UHF Add-On Modules outside the potentially explosive atmosphere.
- ▶ Risk of short circuiting if the screws supplied with delivery are not used.
- ▶ Carry out the correct assembly for the attachment.

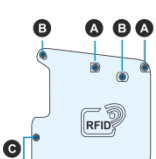
Use the screws supplied with delivery. All screws must be used to ensure the safe mechanical assembly of the RFID UHF Add-On Module on the Agile X.

Store the cover of the extension port safely.

Installation of RFID UHF Add-On Module







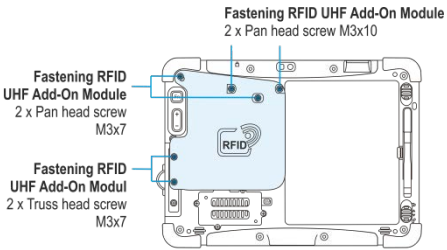
A Pan Head Screw M3x10
B Pan Head Screw M3x7
C Truss Head Screw M3x7

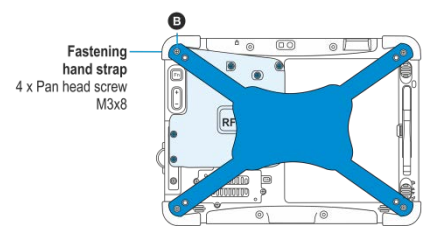
Only assemble/dismantle the RFID UHF Add-On Module outside the potentially explosive atmosphere.

Only use the RFID UHF Add-On Module for the purpose that they have been tested and certificated by BARTEC.

Avoid data losses!
Do not just switch the Agile X using the "ON/OFF" switch.

1. Shut the Agile X down using the operating system.
2. Place the Agile X on the display side, taking care that no parts nearby scratch the screen.
3. Remove the cover on the extension interface.
4. Remove the top two screws on the I/O interface cover.
5. Unpack the RFID UHF Add-On Module (the screws supplied for mounting are in the packaging).
6. Place the RFID UHF Add-On Module on the extension interface.





7. Fasten the RFID UHF Add-On Module using the six screws supplied. Torque: 3 Nm.
8. Visual inspection of the RFID UHF Add-On Module to ensure correct positioning and assembly.
9. Switch the Agile X on using the "ON/OFF" button.

Optional: Attach hand strap.

(Material No. 03-9849-0130)

10. Loosen the top screw M3x7 that holds the RFID UHF Add-On Module in place.
11. Place the hand strap on and fasten using the four M3x8 (supplied) pan head screws. Torque: 3 Nm.

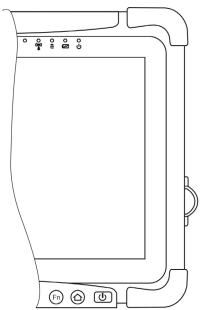
Do not assemble or remove the hand strap in a potentially explosive atmosphere.

DANGER

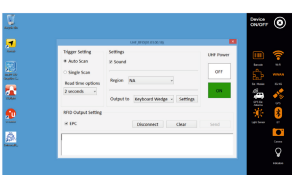
There is a risk of fatal injury in an explosive atmosphere!

- The hand straps may only be used in areas with gas group IIA.

Setting up / activating the RFID UHF Add-On Module



(1)



(2)

(3)

(4)

(5)

Switching the Agile X on.

(1) Press the ON/OFF button for three seconds.

Activating the RFID UHF Add-On Module.

(2) Click on "Hottab" on the start screen to start the application.

(3) Click in the menu on the option "Device ON/OFF".

(4) Select "Ext. Module" to active the extension interface.
(orange = ON; White = OFF)

(5) UHF power set to ON.

In up-to-date versions of the operating system the driver has already been integrated in the image. With older versions the driver must be installed manually using the device manager.

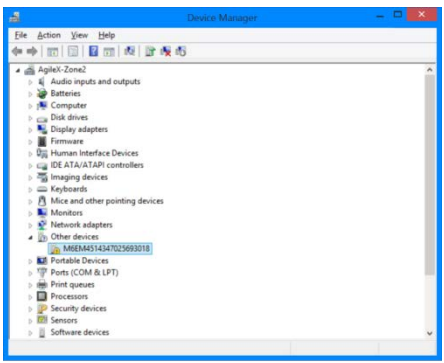
ATTENTION

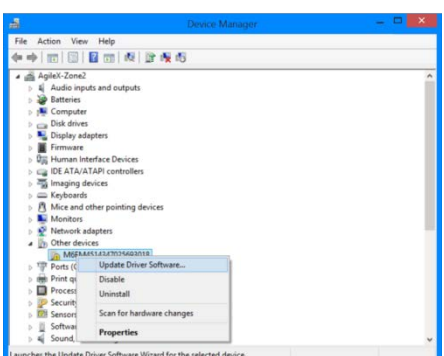
There is a risk of overheating during continuous use of AutoScan!

- Switch over to Single Scan.
- The read function can be started using the "F2" function button or the "Send" button.

Affects "Hottab" versions from 1.40 and higher. Older versions can be updated.

Downloading and installing the driver





Downloading the driver

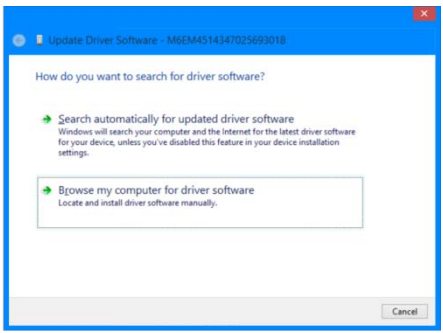
1. If the driver for the virtual COM connector is not included in the system image of the tablet PC, a new "M6Exx" device is shown in the device manager under "Other devices" after assembly of the RFID UHF Add-On Module.
2. Download the driver at:

   USB to RFID UHF driver:
   http://automation.bartec.de/

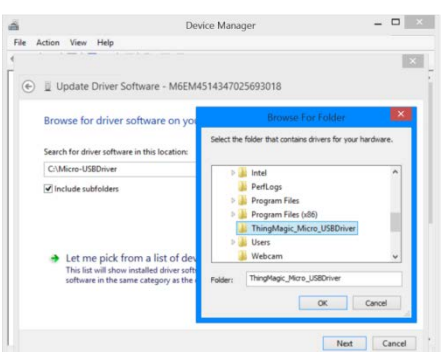
If no new device is recognised, first check in the Hot Tab Utility whether the extension interface is switched on.

Installing the driver

1. Switch to the device manager to install the driver.
2. Activate the "M6Exx" device and open the drop-down menu with a right mouse click.
3. Select the "Update Driver Software" option.

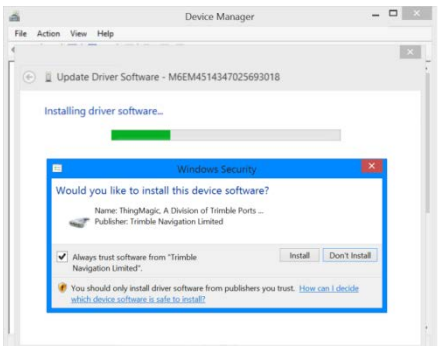


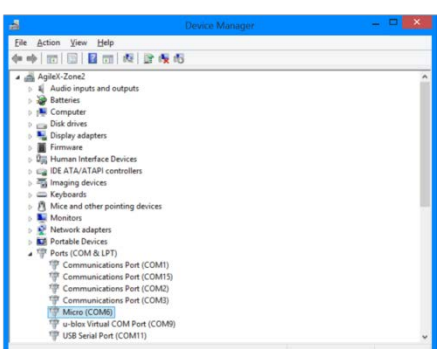
3. In the new "Update Driver Software" window, click on the "Browse my computer for driver software" option.



4. Click on the "Browser" button and manually switch to the driver folder. Confirm selection with "OK".

5. Click on the "Next" button to continue the installation.





6. In the "Windows Security" window, confirm the installation using the "Install" button.

7. At the end of the installation, Windows reports that the driver has been successfully installed. Close the "Update Driver Software" window using the "Close" button.

8. After installing the driver, the RFID UHF Add-On Module can be found under the name “Micro” under "Ports (COM & LPT)".

Carry out manual assignment to COM20 so that the RFID UHF Add-On Module functions with "Hottab" application starting from Version 1.40 or higher.

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BARTEC

Your partner

for safety

technology.

Challenge us!

EN_B1-A220-7N0002-08/2016-Automation-403699

BARTEC GmbH
Germany

Max-Eyth-Str. 16
97980 Bad Mergentheim

Phone: +49 7931 597 0
Fax: +49 7931 597 119

info@bartec.de
www.bartec.de