

# Tablet PC Agile X IS HART Add-on Module

Installation instruction





## Installation instructions - Translation

### HART Add-on Module

for Agile X IS – 10.1" Tablet PC

Type 17-A1Z0-0005

ATEX/IECEX Zone 1

UL Class I Division 1

Document No.: B1-A2Z0-7N0001

Status: July 2021 / Revision B

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

Content	Pages
English	1-15



# 1 Basic safety information

## 1.1 Information on this Installation instruction



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.

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

The Installation instruction 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 Installation instruction 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 Installation instruction 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 Installation instruction.

Safety and warning information is particularly emphasized in this Installation instruction 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 Installation instruction is written in German. All other available languages are translations of the original Installation instruction.

The Installation instruction 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, certificates, and EU declarations of conformity can be downloaded from [www.bartec.com](http://www.bartec.com) or may be requested directly from BARTEC GmbH.

## 1.2 Handling the product

The product described in this Installation instruction 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 HART Add-on Module is a prerequisite for its perfect and correct functioning.



## 1.3 Safety information

- Do not dry wipe or clean devices in potentially explosive atmospheres!
- Do not open devices 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 concerning the danger of hazardous electrostatic charges.
- Avoid heat influences outside the specified temperature range.
- Protect the device from external influences! Do not expose the device to caustic/aggressive liquids, vapors, 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.

## 1.4 Labeling, test certificate, and standards

Labels on explosion protection and the test certificate are attached to the HART Add-on module. Labeling see chapter: Technical Data.

The guidelines and standards applicable to the HART Add-on module for devices and protected systems for intended use in potentially explosive atmospheres see chapter: EU Declaration of Conformity.

## 1.5 Co-applicable documents



All documents are available online from the following websites:

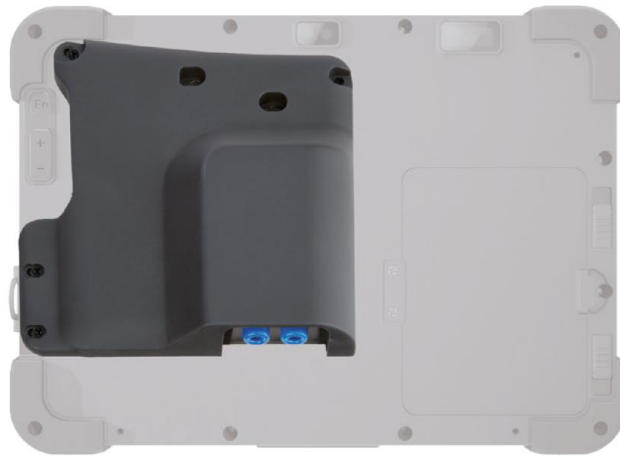
**BARTEC:** [www.bartec.com](http://www.bartec.com) or <http://automation.bartec.de>

Document BARTEC	Explanation
<b>Quick Start Guide Agile X IS</b>	This Quick Start Guide describes the safety information, initial use and other data about the Tablet PC Agile X IS.
<b>User Manual Agile X IS</b>	This User Manual describes the use, commissioning, and settings of the Tablet PC Agile X IS.

## 2 Product description

### 2.1 HART Add-on module


The intrinsically safe combination of Tablet PC and HART Add-On Module makes it possible to perform diagnostics, set parameters, and manage field devices much more quickly and efficiently. The HART modem is used as an add-on module for the tablet PC system in its extension interface. Since the user is now able to switch safely between the Ex and non-Ex area, only one device is then needed for the wireless uploading or adjusting of the field devices distributed there, completely independently of the control system.





## 3 Technical data

### 3.1 Explosion protection

ATEX Zone 1		
Type	17-A1Z0-0005	HART Add-on Module
Labeling	 Ex II 2G Ex ia [ia Ga] IIC T4 Gb	
Test certificate	EPS 15 ATEX 1 069 X	
Standards	See chapter: EU Declaration of Conformity	
IECEx Zone 1		
Type	17-A1Z0-0005	HART Add-on Module
Labelling	Ex ia [ia Ga] IIC T4 Gb	
Test certificate	IECEx EPS 15.0065X	
Standards	See chapter: EU Declaration of Conformity	
Class I, Division 1		
Type	17-A1Z0-0005	HART Add-on Module
Labelling	Class I Div 1 Groups A, B, C, D T4	
Test certificate USA and Canada	CSA 70045374	

#### X - labeling (special conditions of use for secure operation within the potentially explosive atmosphere)

The ambient temperature range is  $-20\text{ °C} \leq T_a \leq +50\text{ °C}$ .

The device must be protected from impact with high impact energy, from intense UV-irradiation, and strongly charge generating processes.

It is allowed to connect the HART add-on module to non-certified HART circuits outside hazardous areas.  $U_m = 60\text{ V}$  shall never be exceeded. The user is responsible to meet this condition.

## 3.2 Features

<b>HART interface</b>	$U_I \leq \text{DC } 30 \text{ V}$ $I_I \leq 130 \text{ mA}$ $P_I \leq 1 \text{ W}$ $U_O \leq \text{DC } 3 \text{ V}$ $I_O \leq 10 \text{ mA}$ $P_O \leq 5 \text{ mW}$ $U_m \leq \text{DC } 60 \text{ V}$ max. cable length: 1.8 m
<b>Dimensions:</b> <b>(Length x Width x Height)</b>	125 x 125 x 24 mm (4.92 x 4.92 x 0.94 inch)
<b>Weight</b>	approx. 200 g (approx. 7.05 oz)

### 3.2.1 User environment

<b>Operating temperature</b>	-20 °C to +50 °C ( -4 °F to +122 °F)
<b>Storage temperature</b>	-30 °C to +70 °C (-22 °F to +158 °F)
<b>Relative humidity</b>	5 % to 95 % (non-condensing)
<b>Class of protection (IEC 60529)</b>	Mounted on Tablet PC: IP54 Connector strip (PoGo Pins): IP20

## 4 Commissioning

### DANGER

**Avoid electrostatic charging in a potentially explosive atmosphere.**

**Danger to life in an explosive atmosphere!**

- ▶ Do not dry wipe or clean the devices.
- ▶ Wear suitable clothing and shoes.
- ▶ Do not use rubber gloves or similar.

### DANGER

**Unintended use endangers explosion protection.**

**Danger to life in an explosive atmosphere!**

- ▶ Only remove or mount the cover of the extension module outside the potentially explosive atmosphere.
- ▶ Only assemble/dismantle the HART Add-On Module 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 HART Add-On Module on the Tablet PC.

Store the cover of the extension port safely.

## 4.1 Installation HART Add-On Module

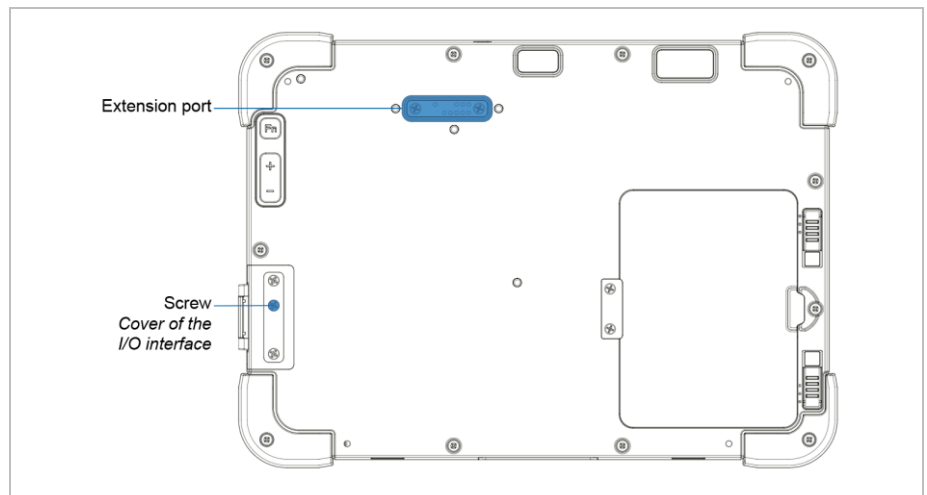
1. Shut the Tablet PC down using the operating system.



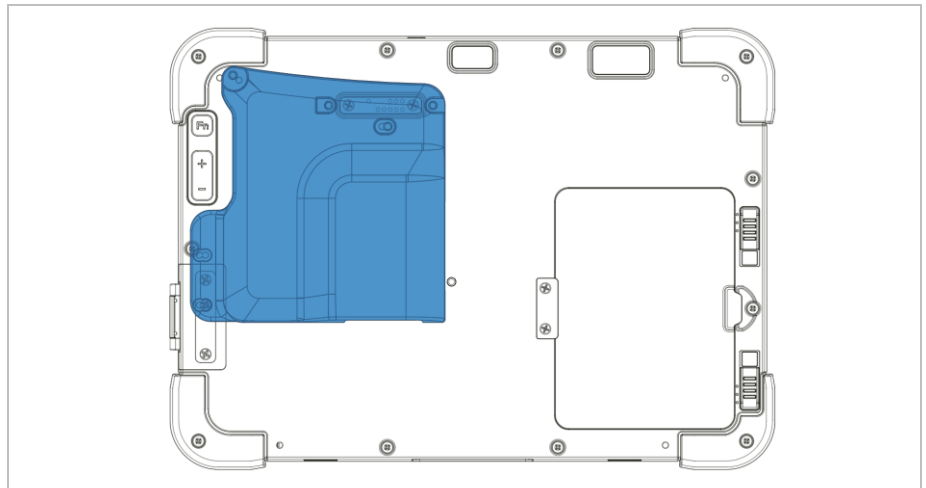
Avoid data losses!

Do not just switch the tablet PC using the "ON/OFF" switch

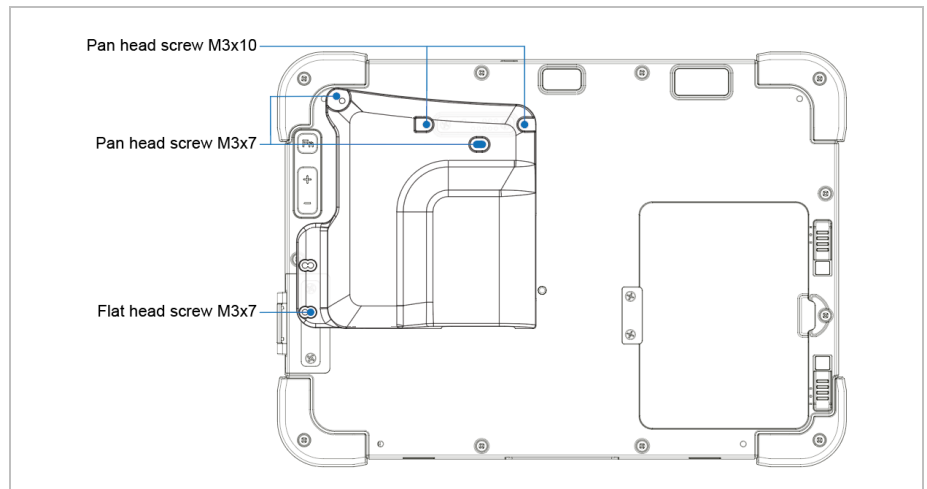
2. Place the Tablet PC on the display side, taking care that no parts nearby scratch the screen.
3. Remove the cover on the extension interface and the middle screws on the cover of the I/O interface.



4. Unpack the HART Add-on Module (the screws supplied for mounting are in the packaging) and place the HART Add-On Module on the extension interface



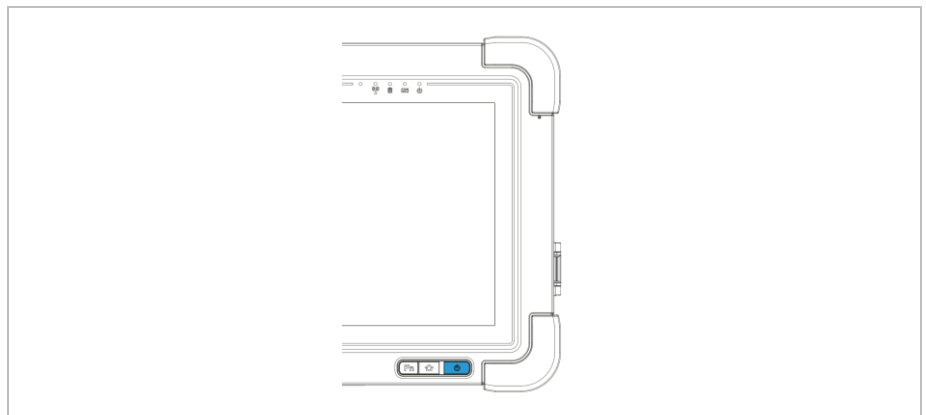
5. Fasten the HART Add-On Module using the screws supplied.  
Torque 3 Nm



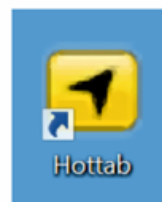
6. Visual inspection of the HART Add-On Module to ensure correct positioning and assembly.
7. Switch on the Tablet PC using the "ON/OFF" button.

## 4.2 Setting up/activating the HART Add-On Module

1. For switching on the Tablet PC press the ON/OFF button for three seconds.



2. For activating the HART Add-on Module click on "Hottab" on the start screen to start the application.



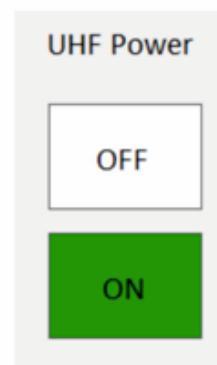
3. Click in the menu on the option "Device ON/OFF".



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



5. Power set to ON.



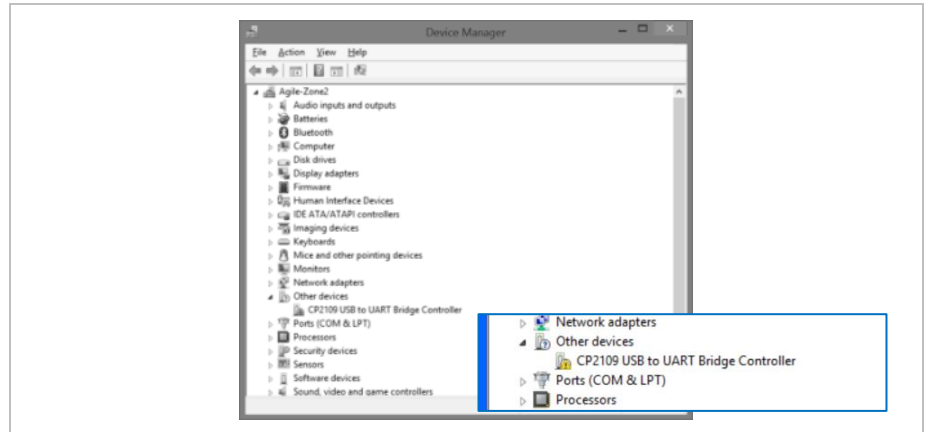
In up-to-date versions of the operating system, the driver has already been integrated into the image. With older versions, the driver must be installed manually using the device manager.

Affects "Hottab" versions from 1.40 and higher.

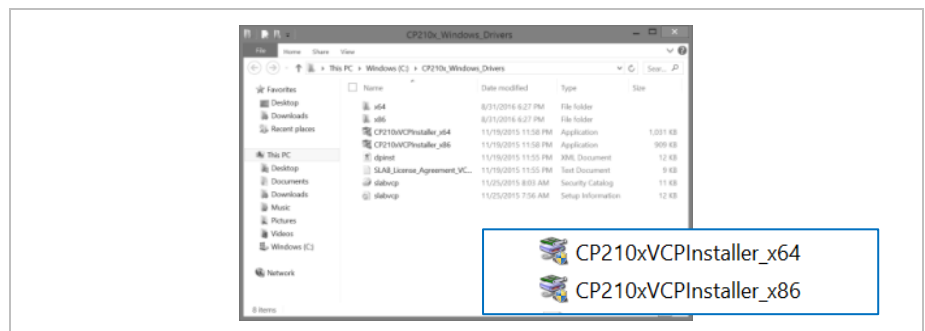
Older versions can be updated.

## 4.3 Downloading and installing the driver software

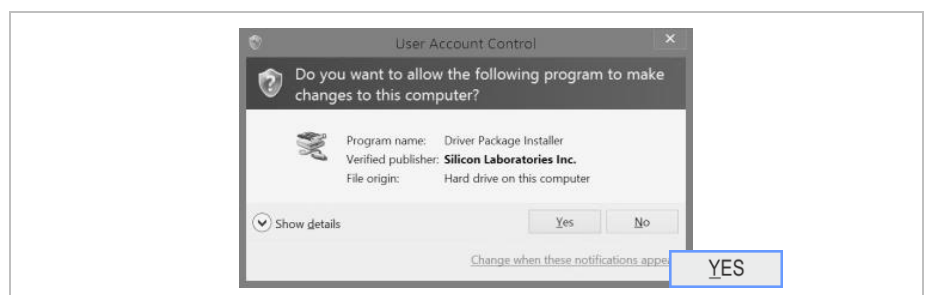
1. If the driver for the virtual COM port is not listed in the Tablet PC's system image, a new **"CP2109 USB to UART Bridge Controller"** device will appear under **"Other devices"** in the device manager once the HART Add-On Module has been mounted.



2. Download the driver from: <http://automation.bartec.de/>
3. Unzip the zip file and select the right driver installer for the operating system  
32-bit driver version: CP210xVCPInstaller\_x86-Installer  
64-bit driver version: CP210xVCPInstaller\_x64-Installer



4. The **"User Account Control"** (UAC) windows open.  
Start the installation by clicking on **"Yes"**.

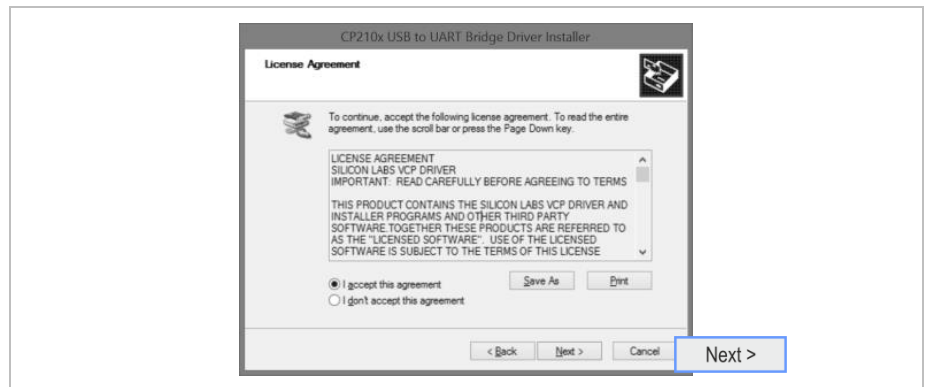




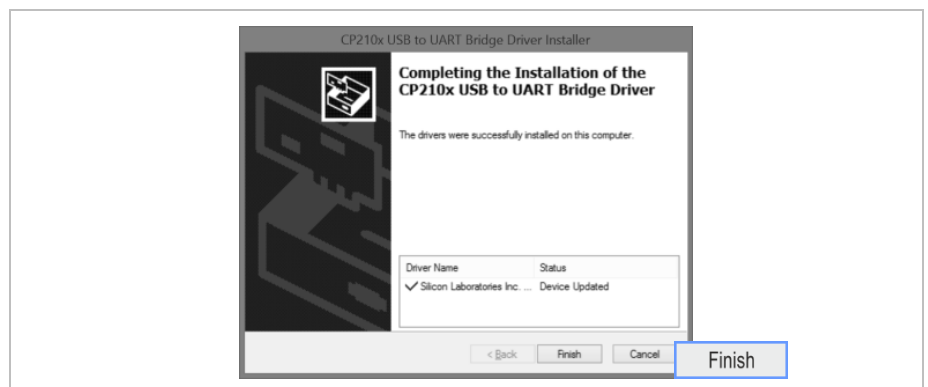
- Continue installation in the "CP210x USB to UART Bridge Driver Installer" window by clicking on **"Next"**.



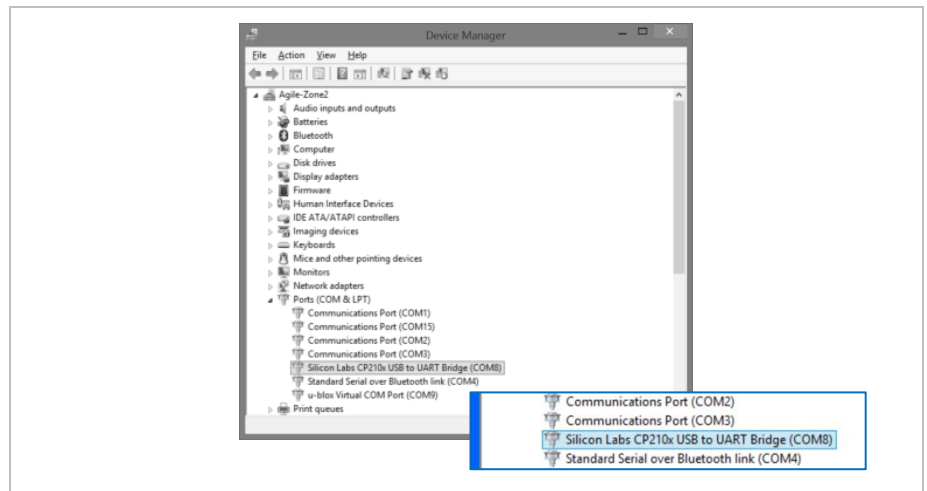
- Accept the license conditions by clicking on **"I accept this agreement"** and confirm by clicking on **"Next"**.




- The **"The Drivers were successfully installed on this computer"** message appears in the window. Complete installation by clicking on **"Finish"**.



8. Once the driver has been installed, the HART Add-On Module can be found in the device manager under: **"Ports (COM & LPT)"** with the designation **"Silicon Labs CP210x USB to UART Bridge"**.



## 5 EU Declaration of Conformity

EU Konformitätserklärung EU Declaration of Conformity Déclaration UE de conformité		<b>BARTEC</b> BARTEC GmbH Max-Eyth-Straße 16 97980 Bad Mergentheim Germany
N° 11-A1Z0-7C0001		
Wir	We	Nous
<b>BARTEC GmbH,</b>		
erklären in alleiniger Verantwortung, dass das Produkt	declare under our sole responsibility that the product	attestons sous notre seule responsabilité que le produit
HART Add-On Modul	HART Add-On Modul	HART Add-On Modul
<b>Typ 17-A1Z0-0005</b>		
auf das sich diese Erklärung bezieht den Anforderungen der folgenden <b>Richtlinien (RL)</b> entspricht	to which this declaration relates is in accordance with the provision of the following <b>directives (D)</b>	se référant à cette attestation correspond aux dispositions des <b>directives (D)</b> suivantes
<b>ATEX-Richtlinie 2014/34/EU</b> <b>EMV-Richtlinie 2014/30/EU</b> <b>RoHS-Richtlinie 2011/65/EU</b> <b>WEEE-Richtlinie 2012/19/EU</b>	<b>ATEX-Directive 2014/34/EU</b> <b>EMC-Directive 2014/30/EU</b> <b>RoHS-Directive 2011/65/EU</b> <b>WEEE-Directive 2012/19/EU</b>	<b>Directive-ATEX 2014/34/UE</b> <b>Directive-CEM 2014/30/UE</b> <b>Directive-RoHS 2011/65/UE</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 60079-0:2012</b> <b>+ A13:2013</b> <b>EN 60079-11:2012</b> <b>EN 55022:2010</b> <b>EN 55024:2010</b>	<b>EN 61000-4-3:2006</b> <b>+A1:2008 +A2:2010</b> <b>EN 61000-4-6:2014</b> <b>EN 61000-4-4:2012</b> <b>EN 61000-4-5:2014</b> <b>EN 61000-4-2:2009</b>	
Kennzeichnung	Marking	Marquage
 <b>II 2G Ex ia [ia Ga] IIC T4 Gb</b> <b>-20°C to +50°C</b>		
03-0383-0362		Seite / page / page 1 von / of / de 2

EU Konformitätserklärung  
EU Declaration of Conformity  
Déclaration UE de conformité

**BARTEC**

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Germany

Nº 11-A1Z0-7C0001

Verfahren der EU-Baumuster-  
prüfung / Benannte Stelle

Procedure of EU-Type Examina-  
tion / Notified Body

Procédure d'examen UE de type  
/ Organisme Notifié


EPS 15 ATEX 1 069 X

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

**CE** 0044

Bad Mergentheim, den 10.10.2016

  
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