RFID UHF Add-on module for Agile X tablet PC

The intrinsically safe combination of the Agile X tablet PC system and the RFID UHF Add-on module enables the fast and efficient reading and writing of RFID transponders in a potentially explosive atmosphere in Zone 2/2 and Division 2. The modular system makes it possible to combine barcode and RFID recording in a single device. This means that users do not need to carry two separate devices with them. The data are available immediately for further processing and display on the tablet PC, and can be forwarded by means of radio technology (Bluetooth, WiFi or LTE) in real time to other devices in the network.

Applications to control the RFID reader can be programmed on the Windows based Agile X using the Mercury API from Thing Magic. The Mercury API Software Development Kit (SDK) contains numerous examples of applications and source codes for developers. It demonstrates and simplifies entry into the development and functionality of the RFID UHF reader. Further information on programming, the commands and the mode of operation can be found in the corresponding programming manual, the instructions for the SDK or on the Thing Magic website.

Explosion protection
Type B7-A2Z0-0033
The RFID UHF Add-on module is certified in combination with the Agile X, and can only be operated in combination with this in the potentially explosive atmosphere.

Marking ATEX
II 3G Ex ic IIA/IIC T5 Gc
II 3D Ex ic IIIB T90 °C Dc IP 54
(IIA when using hand strap Type 03-9849-0130)

Certification
EPS 15 ATEX 1 823 X

Marking IECEx
Ex ic IIA/IIC T5 Gc
Ex ic IIIB T90 °C Dc IP 54
(IIA when using hand strap Type 03-9849-0130)

Certification
EPS 15.0010X

Marking UL
Class I Div. 2 Groups A, B, C, D T4 A

Certification
UL File E321557

Other approvals and certificates, see www.bartec.de

Technical data

Note: the device cannot be combined with the Agile X version with internal RFID HF reader.

Module used
Thing Magic - Micro High Performance Multiprotocol embedded UHF RFID modules Type M6E-M

API support
Thing Magic - Mercury-API Software Development Kit (SDK)
A development platform to connect, configure and control the RFID reader.

Development support
Thing Magic - Universal Reader Assistant
This is a service program for the extended demonstration, testing and tuning of all Thing Magic RFID readers. It reduces the complexity for inexperienced users, while offering low level checking for advanced developers.

Frequency range
Dual band
US: 902 to 928 MHz
EU: 865.6 to 867.5 MHz
Frequency range can be adjusted in line with specific national specifications using the application development.

Supported standards
EPC Global GEN2 (ISO18000-6C) with DRM optional: IP-X and ISO 18000-6B

Nominal reading range
up to approx. 150 cm

Nominal writing range
up to approx. 150 cm

Antenna
integrated antenna (50 Ω)

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

Communication to the host (Agile X)
via the extension interface of the tablet PC

Operating system
Windows® Embedded 8.1 Industry Pro (64 bit)
Windows® 7 Professional SP1 for embedded systems (64 bit)
Windows® 10 IoT (64 bit)

Size (L x W x H)
125 mm x 125 mm x 10 mm

Weight
approx. 170 g

Protection class (IEC 60529)
mounted on tablet PC
IP 54
connector strip (PoGo Pins)
IP 20

Operating temperature
inside potentially explosive areas
-20 °C to +50 °C
outside potentially explosive areas
-20 °C to +60 °C

Storage temperature
-30 °C to +70 °C

Operating humidity
30 % ~ 90 % (non-condensing)

Warranty
1 year, can be extended by a further 1 or 2 years on request

Scope of delivery
RFID UHF Add-on module, fixing screws

Ordering information
RFID UHF Add-on module
Order no.
for ATEX/IECEx Zone 2/22; Class I Div 2
B7-A2Z0-0032

Technical data subject to change without notice.