RFID UHF Add-On Module for Agile X tablet PC

Features

- Read/write RFID transponders in a potentially explosive atmosphere

- Extension for the Agile X

- Available driver software makes it simple to install and set up

- UHF dual band reader for EU and US frequency range

Description

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 area in Zone 2/22 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 editing and display on the tablet PC, and can be forwarded simply to other devices in the network in real time via radio technology (Bluetooth, WiFi or LTE).

The Mercury API from Thing Magic enables applications to control the RFID reader to be programmed easily on the Windows based Agile X.

The Mercury API supports programming in Java, .NET and C.

The Mercury API Software Development Kit (SDK) includes examples of applications and source codes for developers. It demonstrates and simplifies the introduction to development and to the 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.

Type B7-A2Z0-0032

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 Ex area.

⮞ Explosion protection

Ex protection type

ATEX	⟨Ex⟩ II 3G Ex ic IIA/IIC T5 Gc
	⟨Ex⟩ 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

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
IECEx EPS 15.0010X

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

Certification
UL File E321557

Further approvales and certificates see www.bartec.de

➜ Technical data

■ System specification

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 suuport
C# - .NET - Java - C
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 (ISO1800-6C) 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)
done via the extension interface of the tablet PC

Operating system to the host (Agile X)
Windows® Embedded 8.1 Industry Pro (64 bit)
Windows® 7 Professional SP1 for Embedded Systeme (64 bit)
Windows® 10 IoT (64 bit)

Size (weight x length x height)
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 hazardous areas   -20 °C to +50 °C
outside hazardous areas   -20 °C to +60 °C

Storage temperature
-30 °C to +70 °C

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

Warranty
1 year, in order to request extension 1 or 2 years possible

Scope of delivery
- RFID UHF Add-On-Module
- Fixing screws
- Quick Start Guide

➡ **RFID UHF Add-On Module**
ATEX/IECEX Zone 2/22; Class I Division 2

Order no. B7-A2Z0-0032

Technical data subject to change without notice.