

File No.: U6-2306-01 Version: A1 Date: 09/09/2023



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latest version of the relevant information.

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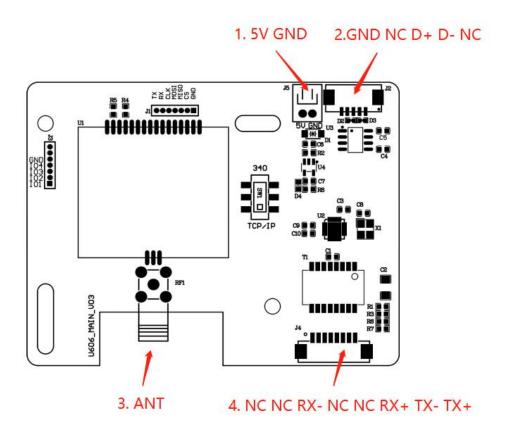


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1.Product Introduction

U6-NE-01 UHF Reader Module is equipped with Fongwah self-designed UHF read write module and supports main protocols including EPC global C1 Gen2, ISO18000 6C and GB/T 29768 -2013. We offer multi-platform open SDK as to support any software development. The module is applied for occasions where group uhf tags and long distance reading, data transmission and high security are required. Moreover, it also supports to read/write our self-designed temperature sensing tags. In the near future, it will enjoy a promising market in a variety of industries including asset management, aviation, logistics, retail, identification etc.

2.Interface Definition





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PH2.0MM/2PIN	5V	DC 5V
	GND	Negative Side
2. 1.25-5P WT	GND	Negative Side
	NC	Not Connect
	D+	USB DATA+
	D-	USB DATA-
	NC	Not Connect
3. SMA-KWE	ANT	Antenna port
4. 1.25-8P WT	NC	Not Connect
	NC	Not Connect
	RX-	Negative Receive Data
	NC	Not Connect
	NC	Not Connect
	RX+	Positive Receive Data
	TX-	Negative Transmit Data
	TX+	Positive Transmit Data

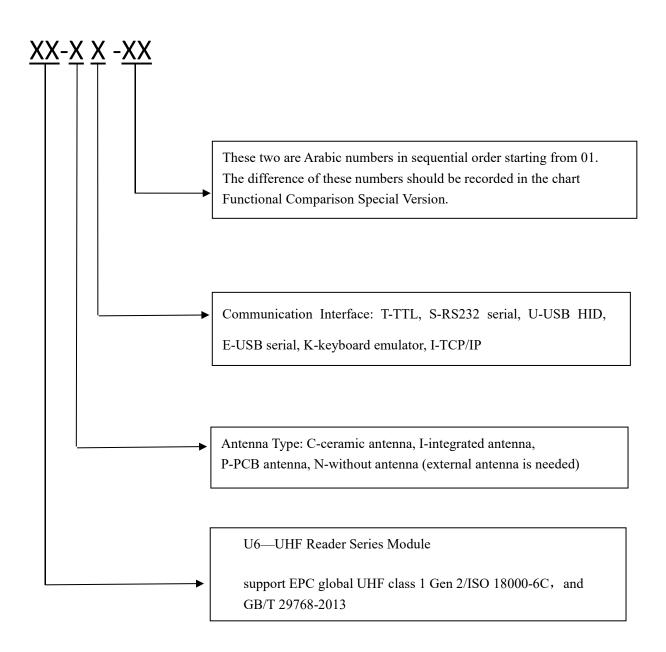


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3. Model Type Description

Users can choose their model types on their demands. Below is the model type description for

Fongwah U6 series UHF Reader Module.





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4.Product Features

Items	Specifications					
Performance Parameters						
Protocols Compliance	EPC Global UHF Class1 Gen2, ISO18000-6C,					
	GB/T29768-2013					
Output Power	3~30dBm					
Output Power Accuracy	±1dB					
Output Power Flatness	±0.5dB					
Receiver Sensitivity	-76dBm					
Working Frequency	FCC 902~928MHz/GB 920~925MHz					
Peak Power	500 pcs/second					
Tags Buffer Zone	700 pcs @96bit EPC					
Read Write Range for Tags	0-8m (depending on the performance of antenna and tags as					
	well as the working environment)					
Interface Parameters						
Communication Interface	USB serial port (RS232, HID, TCP/IP optional)					
Maximum Baud Rate	115200bps					
Power Supply	Powered by USB					
Antenna Type	SMA					
Antenna Port	1 port					
Antenna Impedance	50Ω					
Man-machine Interface						
Support Systems	Windows Me, 2K, XP, 2003, Vista, Unix, Linux, WinCE,					
	Win7					
Power Parameters						



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Working Voltage	5V				
Working Current	260mA~670mA				
Working Temperature	-40℃~70℃				
Working Humidity	10%~95%				
Physical Parameters					
Product Dimension	76mm x 58mm x 12mm				
Product Weight	about 20g				
Service Support					
Software Development Kit	Including dynamic link library(DLL), application				
	examples, user manual and demo software, operation				
Supporting Service	Our professional sales technician answers any technical issues in your software development process.				



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5.Product Advantages

- Self-interference cancellation circuit
- Support main protocols including EPC Global UHF Class 1 Gen 2, ISO 18000-6C and GB/T 29786-2013
- Support anti-collision
- Support multi tags identification, reading/writing data
- Support Tags RSSI
- The device can be custom-made according to any specific request of users.
- The UHF reader module can be used via a PC and be embedded into other self-designed equipment of users.
- The attached CD provides most driver SDKs and program examples on regular platforms.
 Users simply call specific functions and they can accomplish the software development,
 reducing the difficulty of software development and the development circle of products.
- The attached demo program includes all functions to read and write UHF tags.



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6.Product Applications

- Smart Garbage Collection Truck
- Smart Warehouse Inventory
- Smart Car Park
- Assembly Line Management
- Automatic Equipment Manufacturer
- Parcel Sorting
- Counting Conveyor System
- Smart Lock Industry
- Retail
- Books and Achieve
- Identification

Note: RFID module is sensitive to its environment. Metals reflect and shield electromagnetic waves, which means metals affect the performance of both readers and tags. If the module is placed near metals, the reading rate of tags shall be lower. Therefore, please try to keep away metal objects and other items like electronic coils while installing this device.