High Frequency Long Range RFID Reader

Model: FU0049

Size: 220mmx309mmx38mm

Net Weight: 1880g

Xiamen Innov Information Science & Technology Co. LTD Tel：+86 592 3136888
Add:Xminnov IOT Industrial Park, No.943, Tonglong second road, Tong'an District, Xiamen www.rfidtagworld.com

Introduction

The high-frequency long-distance electronic tag reader FU0049 is a high-performance ISO/IEC 14443A protocol electronic tag reader with completely independent intellectual property design and full digital signal processing design, combined with a proprietary and efficient electronic tag collision processing algorithm, while maintaining While having a high reading rate, it can realize fast reading and writing of electronic tags, and can be widely used in smart bookshelves, unmanned retail, logistics, personal identification, conference sign-in systems, access control systems, anti-counterfeiting systems and production process control, etc. Radio frequency identification (RFID) systems.

Features

- Completely independent intellectual property design;
- Fully digital signal processing design, no manual adjustment required;
- Support ISO/IEC15693A protocol electronic label;
- RF output power is adjustable from 0.5~5W;
- Advanced tag collision processing algorithm, high reading rate;
- The 24-channel SMA antenna interface can be directly connected to a 50 Ω standard RFID antenna, with an effective distance of more than 30cm*;
- Support antenna working status detection;
- Support RS232 and TCPIP interface;
- The communication baud rate is software adjustable;
- Provide dynamic link library (DLL) and demonstration software source code to support secondary development;
- Support Firmware online upgrade.

**The effective distance is related to the external antenna, electronic tag and working environment.*

Electrical characteristics

- Limit parameters

Item	Symbol	Numerical Value	Unit
Voltage	VCC	28	V
Operating temperature	T_{OPR}	-20~+65	℃
Storage temperature	T_{STR}	-25~+80	℃

- Specification

  Unless otherwise specified, the specifications shown are taken under the working conditions of TA=25℃, VCC=+24V and output RF power 4W.

Item	Symbol	Min	typical	Max	Unit
Operating Voltage	VCC	13	24	26	V
Working current	I_C		0.56	1.0	A
Working frequency	F_{REQ}		13.56		MHz
Effective distance*	DIS	0		300	mm

Xiamen Innov Information Science & Technology Co. LTD Tel：+86 592 3136888
Add:Xminnov IOT Industrial Park, No.943, Tonglong second road, Tong'an District, Xiamen www.rfidtagworld.com

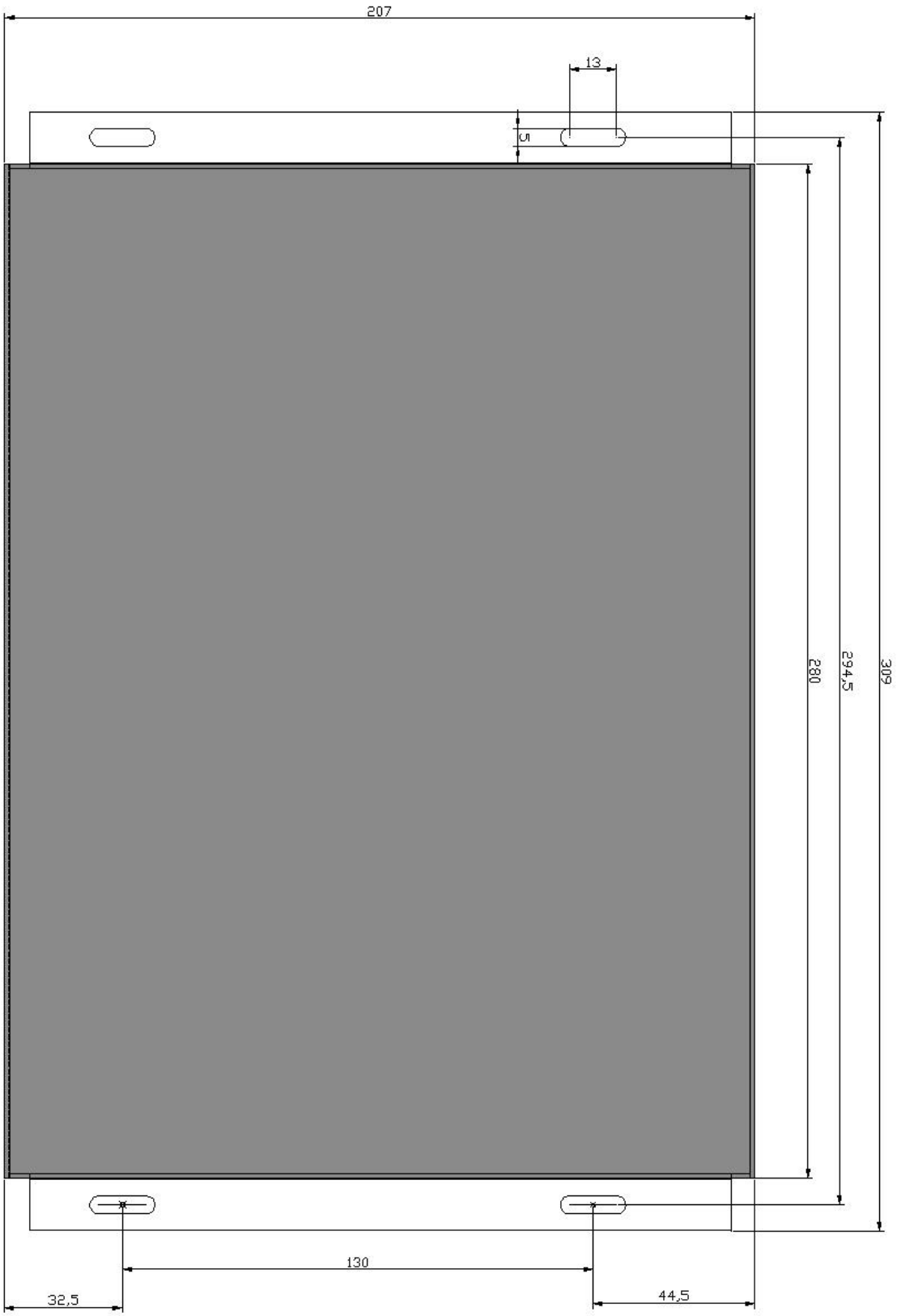
GPI Input level		V_{IH} V_{IL}	1.7	2.3 0.9	3.3 1.5	V
Relay	Terminal load	C_{LOAD}			0.5A at 125VAC 1A at 24VDC	
	Terminal operating voltage				125VAC 60VDC	V
	Terminal operating current				1	A

** The effective distance is related to the protocol format, external antenna, electronic tag and working environment.*

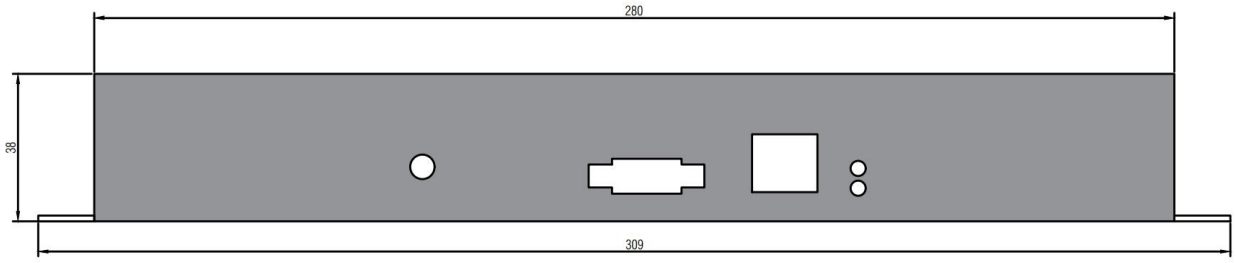
Mechanical properties（Unit mm）

- Reader size and hole location map

Xiamen Innov Information Science & Technology Co. LTD Tel：+86 592 3136888
Add:Xminnov IOT Industrial Park, No.943, Tonglong second road, Tong'an District, Xiamen www.rfidtagworld.com

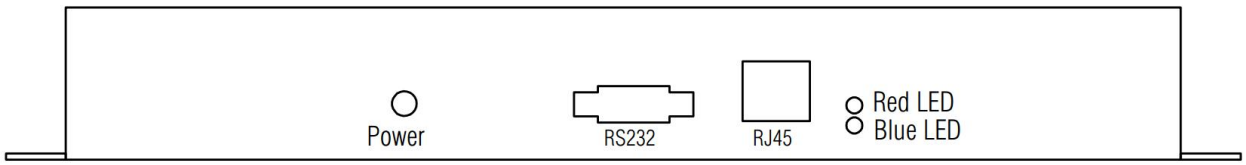


Xiamen Innov Information Science & Technology Co. LTD Tel：+86 592 3136888
Add:Xminnov IOT Industrial Park, No.943, Tonglong second road, Tong'an District, Xiamen www.rfidtagworld.com



Interface definition

- Host interface



LED light description:
Red light: Steady light indicates that the reader is working normally, flashing indicates that the reader is working abnormally, such as the antenna is not connected and other abnormal conditions.
Blue light: On means the command is being executed, off means the reader is idle.

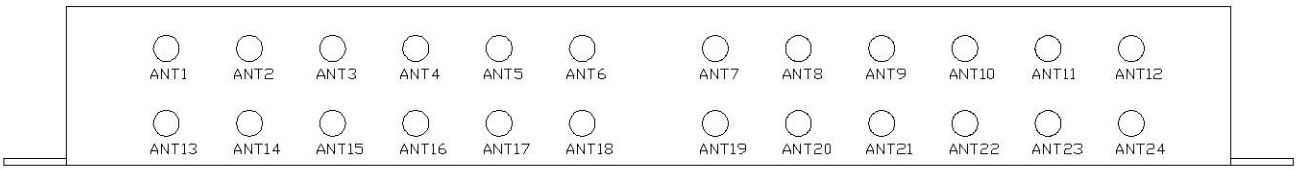
RS232Interface definition:

Serial Number	Symbol	Describe
1	GPI	TTL level universal input port, internal 40K pull-up to 3.3V
2	TXD	RS232 serial communication data output
3	RXD	RS232 serial communication data input
4	NC	reserve
5	GND	signal ground
6	NC	reserve
7	CM	Relay common terminal
8	NC	Relay normally closed end
9	NO	The relay is always on

RJ45interface:
Network communication interface。

- Antenna interface

Xiamen Innov Information Science & Technology Co. LTD Tel：+86 592 3136888
Add:Xminnov IOT Industrial Park, No.943, Tonglong second road, Tong'an District, Xiamen www.rfidtagworld.com



Note:
1. If the manual changes, please refer to the latest version.
2. Xiamen Innuoer Information Technology Co., Ltd. reserves the right of final interpretation.

Xiamen Innov Information Science & Technology Co. LTD Tel：+86 592 3136888
Add:Xminnov IOT Industrial Park, No.943, Tonglong second road, Tong'an District, Xiamen www.rfidtagworld.com