DR102 User Manual

FOR GVXXX-Series Devices

QSZACCDR102UM0001

Version: V1.00

Document Title	DR102 User Manual
Version	V1.00
Date	2017-12-01
Status	Release
Document Control ID	QSZACCDR102UM0001

General Notes

Queclink offers this information as a service to its customers, to support application and engineering efforts that use the products designed by Queclink. The information provided is based upon requirements specifically provided to Queclink by the customers. Queclink has not undertaken any independent search for additional relevant information, including any information that may be in the customer's possession. Furthermore, system validation of this product designed by Queclink within a larger electronic system remains the responsibility of the customer or the customer's system integrator. All specifications supplied herein are subject to change.

Copyright

Contents

Table Index

Figure Index

0. Revision History

Revision	Date	Author	Description of change
1.00	2017-12-01	Kevin Xiang	Initial

1. General Description

This is a MIFARE READER MODULE for GVXXX-serial modules and other modules. It has an RS-232 serial port to communicate with the modules, a RED LED indicator for POWER SUPPLY, and a GREEN LED indicator for target reading correct, as well as a BUZZER for indicating. The reader has a RFID Reader interface to READER MIFARE targets. The reader supports all MIFARE transponders which worked with MIFARE protocol.

2. Product Specification
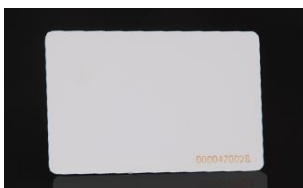
2.1 Appearance

Figure 1. Appearance of DR102

Table 1. Parts List

Name	Picture	Dimensions	Weight
DR100		118*75*17 mm	82grams (MAX)
RF Card		85.6*54*0.9 mm	

2.2 Electronic Condition

NO	TYPE	SPECIFICATION	Unit	Condition
1	Power Voltage（Vin）	8-32	V(DC)	
2	Standby Current（I$_{sta}$）	5	mA	Vin=12VDC
3	Sleep Current（I$_{sleep}$）	3	mA	Vin=12VDC

2.3 Environment Condition

NO	TYPE	SPECIFICATION	Unit
1	Operation Temperature	-20~+80	℃
2	Storage Temperature	-20~+85	℃

2.4 RFID Specifications

NO	TYPE	SPECIFICATION
1	Frequency	13.56MHz
2	RF Output Power	200mW（VCC=5VDC） 700mW （VCC=3.0/3.3VDC）
3	Supported RF Standards and Transponders	MIFARE Mini, MIFARE Ultra-light, MIFARE-DESFire EV1, MIFARE Plus, MIFARE ONE(S50), MIFARE ONE(S70), MIFARE Pro(X)

2.5 UART Specifications

NO	TYPE	SPECIFICATION
1	Signal voltage level	RS232 standard -15~-3V 3V-15V
2	Baud Rate	19200bps
3	Flow control	None(Didn't has RTS CTS signal)
4	Data bits	8bit
5	Stop bits	1bit

2.6 Support Product Model

NO	Product Model	Remark
1	GV300N	

3. Interface

3.1   Interface Definition

There are 4wires input interface on DR102, which can be directly connected to the GVXXX Series Devices.

3.2   4Pin Input Interface

DR102 Input Interface Connect To GVXXX Series Devices

DR102	PIN	Colour	Description	Connect to GV300N
Input Interface	PWR	Red	8-32V input，Can be connected to the vehicle battery directly	PIN11 PWR
	GND	Black	Ground	PIN6 GND
	TXD_232	Blue	RS232 level, receiver data, connect to TXD of GVXXX Devices	PIN5 TXD
	RXD_232	Green	RS232 level, Transmit data, connect to RXD of GVXXX Devices	PIN4 RXD

3.3   Device Status LED

LED	Trigger Event	State
Power LED (Red)	Power on device	Indicate the power status
RFID status LED (Green)	Power on device	Green LED flashes for 1s, then off.
	Read a RFID success.	Green LED lights for 0.5s, then off.

3.4   Device Status Buzzer

BUZZER	Trigger Event	State
Buzzer	Power on device	Beeps for 0.5s.
	Read a RFID success.	Beeps for 0.5s

4. Message Format and Operation

Reference GVXXX @Track Air Interface Protocol.