MTR2018 Instruction Certification

Document Title	MTR2018 Instruction Certification
Version	N/A
Author	Bruce.Chen
Date	2019-04-26
Status	Release
Document Control ID	

Document Title	MTR2018 User Manual
Version	V1.00
Date	2019-05-21
Status	Release
Document Control ID	QSZACCDR100UM0005

General Notes

Targa Telematics offers this information as a service to its customers, to support application and engineering efforts that use the products designed by Targa Telematics. The information provided is based upon requirements specifically provided to Targa Telematics by the customers. Targa Telematics 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 Targa Telematics 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

Revision History

Revision	Date	Author	Description of change
1.00	2016-12-01	Kevin Xiang	Initial
1.00	2019-05-21	Larry wen	Adjust the chapters

General Description

MTR2018 adopts NXP Semiconductors MIFARE standard. Through RS232 communication, it can work along with other Queclink GVxxx Series products as an accessary. The red LED is for power supply indication and the green LED is for successful card reading indication. There is also a buzzer and it will alarm for each successful card reading. Moreover, MTR2018 can also be used as an accessary of other third-party devices so long as these devices support MIFARE standard.

Product Specification

1.1 Appearance

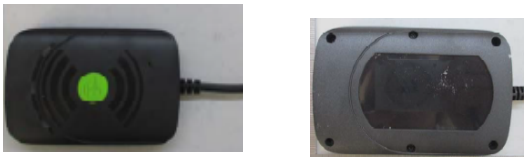
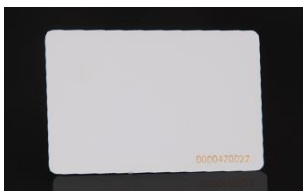


Figure 1. Appearance of MTR2018

Table 1. Parts List

Name	Picture	Dimensions	Weight
MTR2018		96*64*20mm	82grams (MAX)
RF Card 1 (13.56MHZ)		85.6*54*0.9 mm	
RF Card 2 (125 KHZ)		85.6*54*0.9 mm	

1.2 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

1.3 Enviroment Condition

NO	TYPE	SPECIFICATION	Unit
1	Storage Temperature	-20~+50	℃

1.4 RFID Specifications

NO	TYPE	SPECIFICATION
1	Frequency	13.56MHz /125kHz
2	RF Output Power	13.56MHz:84.27dBμV/m@3m 125kHz:98.17dBμV/m@3m
3	Supported RF Standards and Transponders	MIFARE Mini, MIFARE Ultralight, MIFARE- DESFire EV1, MIFARE Plus, MIFARE ONE(S50), MIFARE ONE(S70), MIFARE Pro(X)

1.5 UART Specifications

NO	TYPE	SPECIFICATION
1	Signal voltage level	RS232 standard - 12V
2	Baud Rate	19200bps
3	Flow control	None(Didn’t has RTS CTS signal)
4	Data bits	8bit
5	Stop bits	1bit

1.6 Support product model

NO	Product Model	Remark
1	GV300N	

1.7 4Pin Input Interface

MTR2018 02 Input Interface Connect To GVXXX Series Devices

MTR2018	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

1.8 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.

1.8 Device Status Buzzer

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

Message Format and Operation

Reference GVXXX @Track Air Interface Protocol.

Interface Description

PIN-3.0mm Connector Interface

PIN NO.	PIN name	Function Description
1	Serial TXD	Used for configuration and firmware update
2	Serial RXD	Used for configuration and firmware update
3	GND	GND
4	PWR	Primary Power 8-32V

FCC Statement
Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and
(2) This device must accept any interference received, including interference that may cause undesired operation.