

MP100 Hardware User Manual

Rev1.0





Revision History

Revision	Date	Author	Description
1.0	2013.04.11	C.K	1 st Release

The United States Federal Communications Commission has specified that the following notice be brought to the attention of users of this product:



NOTE

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at this own expense.





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1. Introduction

Introducing MP100, GIGA-TMS's latest released RFID module. It not only equips build-in SAM socket, but also support multiple ISO standards.

Other than contactless RFID cards, MP100 also support SAM card. User do not need to understand the complicated ISO/IEC 14443 and ISO7816 standard to operate MP100. With simple command through RS232/USB, user may master multiple RFID standards easily.

MP100 support wild ranges of transmission protocols and transponder ICs available on the market. Designed to meet the requirements of both secure personal identity verification and supply chain management applications.

MP100 is ideal for access control, as well as Automatic Fare Collection(AFC), ticketing, vending and mobile solutions.

2. Specifications

Specifications		
Power requirement	5V regulated for operate voltage	
Current	Active 130mA @ 5VDC	
requirement		
Interface	MP100R – RS232	
	MP100U – USB(Visual Comport)	
Baud rate	19200 N 8 1	
Protocol	ISO14443A	
	Standard functionality	
	Mifare read and write data	
	Ultralight read and write data	
	Ultralight C read and write data	
	Desfire read and write data	
	Desfire EV1 read and write data	
	VISA pay wave read UID	
	Master pay wave read UID	
	T=CL	
	ISO14443B	
	Standard functionality	



	Cepas read UID	
	SRI read and write data	
	VISA pay wave read UID	
	Master pay wave read UID	
	T=CL	
	ISO15693	
	Standard functionality	
	Tag-IT read and write data	
	I-Code series read and write data	
	SIC5600 read and write data	
	PicoTag read UID and data	
	Felica read UID	
	ISO7816	
	Contactless smart card	
Frequency	13.56MHz	
Slot	ISO7816 ID Type x 1	
	ISO7816 SIM Type x1	
Dimensions		
Weight		
Environment	Operating temperature : 0° C $\sim 50^{\circ}$ C	
	Humidity : 10 ~ 90 %relative	

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.

Federal Communications Commission Requirements

The equipment has been tested and found to comply with the limits for Class B Digital Device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction, may cause harmful interference to radio communication. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

Reorient of relocate the receiving antenna.

Increase the separation between the equipment and receiver.

Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

Consult the dealer or an experienced radio/TV technician for help.

THE 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 receiver.
- (2) This device must accept any interference received, including interference that may cause undesired operation.