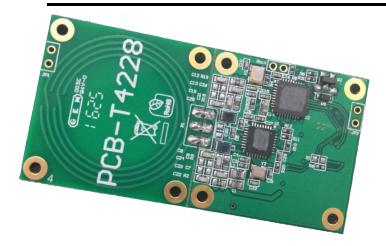
# **PROMAG™**



### INTRODUCTION

The MP30 is a OEM read/write module with antenna designed for simple integration. The Serial TTL-interface can be directly connected to microprocessors and easily converted to the RS232 serial interface device. The typical reading range of the module is up to 20~40mm depending on the antenna and TAG.

The MP30 is a RFID Module for all popular 13.56-MHz RFID/contactless standard protocols. The MP30 supports and compatibles with all major global secured baseband ISO standards including ISO14443 Type A, Type B, and Smartlabel ISO15693.

The MP30 is well suited for mobile devices due to its low power consumption and low operating voltage from 5V. The on-chip 3.3V regulators are provided to stabilize the chip's power, and simultaneously supply the power to the external companion microcontroller up to 120 mA.

The MP30 support the DLL and easy to control this module, The ActiveX Control can be using any terminal program (VB .NET , C#...etc)

### **Standard Configurations:**

- ✓ MP30R----RS232 Interface
- ✓ MP30U----USB Virtual COM Interface

### **FEATURES**

Supported Protocols

ISO14443A/B, all bit rates: 106 kbps ISO15693, all modes Downlink 1 of 4 and 1 of 256 Uplink 6.6/13/26/53 kbps with 1 & 2 subcarrier

Card Compatibilities

ISO14443A ISO14443B ISO15693 ISO14443-3 ISO14443-4 NFC1-4 TAGs

- Ultra small outline 60x30x6.0 mm
- Information Support
   Visual C# demonstration St

Visual C# demonstration Software Protocol Information

- Low power, low profile for portable designed
- Plug-in fitting for 13.56Mhz
- Serial TTL Interface.
- Baud Rate 19200,N,8,1
- Power supply Active 120mA @5VDC
- Firmware Update

✓ We welcome OEM inquiries

 Custom device programming is available



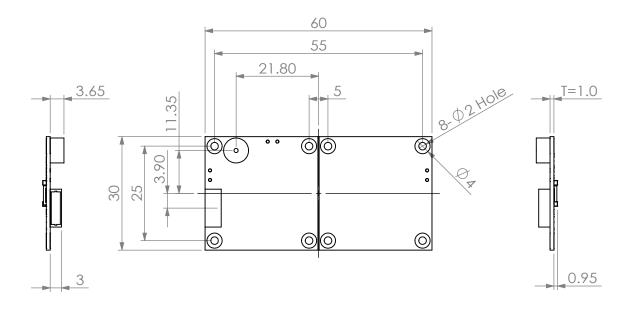
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### **SPECIFICATIONS:**

| POWER REQUIREMENT    | 5V regulated for Operate Voltage . A linear regulator is recommended.        |
|----------------------|--|
| CURRENT REQUIREMENTS | Active 120mA @5VDC   |
| INTERFACE            | Serial TTL (reserved)/ RS232 / USB HID (reserved)/ USB Virtual COM Interface |
| SUPPORTED PROTOCOLS  | ISO14443A/B, all bit rates : 106 kbps<br>ISO15693, all modes                 |
|                      | Downlink 1 of 4 and 1 of 256   |
|                      | Uplink 6.6/13/26/53 kbps with 1 & 2 sub-carrier                              |
| CARD TYPE            | ISO14443A  |
|                      | ISO14443B  |
|                      | ISO15693   |
|                      | ISO14443-3   |
|                      | ISO14443-4   |
| FERQUENCY            | NFC1-4 TAGs 13.56MHz standard.   |
| READ RANGE           | Mifare: 1~3 cm   |
| NEXT TO THE          | ISO 15693 : 2~4 cm   |
| TRANSPONDER          | Read / Write   |
| BAUD RATE            | 19200,N,8,1  |
| DIMENSIONS           | SMT: 60(L) x 30(W) x 6.0(H) mm   |
| WEIGHT               | 5.0g   |
| ENVIRONMENT          | Operating Temp : -20°C ~ +80°C   |
|                      | Humidity: 10 ~ 90 % relative   |

## **PACKAGE DESCRIPTION**

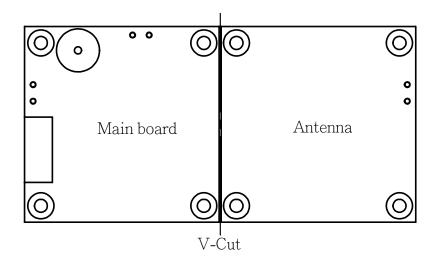


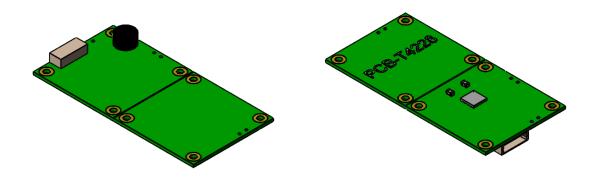
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# **PROMAG**™

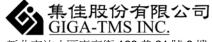




| ı           |              |                              |
|-------------|--------------|------------------------------|
|             | MP30R- 00    | MP30U- 00                    |
| Description | RS232        | USB<br>(Virtual serial port) |
| Pin Numbers | 8            | 8                            |
| Connector   | JST SH 1.0mm | JST SH 1.0mm                 |
|             |              |                              |
| PIN#        |              |                              |
| 1           | +5 VDD       | +5 VDD                       |
| 2           | TXD          | D-                           |
| 3           | RXD          | D+                           |
| 4           | GND          | GND                          |
| 5           | SHIELD       | SHIELD                       |
| 6           | -            |                              |
| 7           | -            |                              |
| 8           | -            |                              |

<sup>✓</sup> We welcome OEM inquiries

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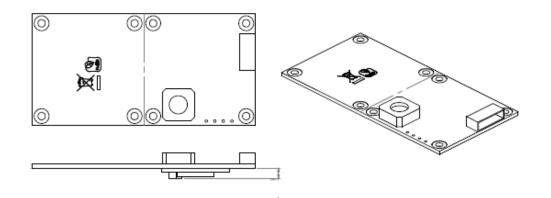
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Custom device programming available

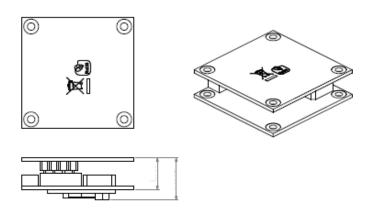


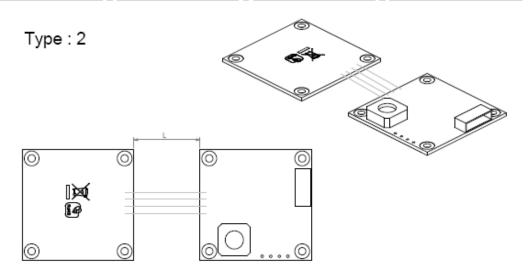
## Appendix A

Type: 0



Type: 1





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集佳股份有限公司 GIGA-TMS INC.

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### **Federal Communication Commission Interference Statement**

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 in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. 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 of the following measures:

- Reorient or 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.

#### **FCC Caution:**

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this 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.

The module must be installed in RFID Multi-ISO Protocol Modules.

### **IMPORTANT NOTE:**

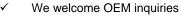
In the event that these conditions can not be met (for example certain laptop configurations or co-location with another transmitter), then the FCC authorization is no longer considered valid and the FCC ID can not be used on the final product. In these circumstances, the OEM integrator will be responsible for re-evaluating the end product (including the transmitter) and obtaining a separate FCC authorization.

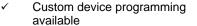
### **End Product Labeling**

The final end product must be labeled in a visible area with the following: "Contains FCC ID: WXAMP30".

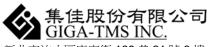
### **Manual Information to the End User**

The OEM integrator has to be aware not to provide information to the end user regarding how to install or remove this RF module in the user's manual of the end product which integrates this module.





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