

**GIGA-TMS INC.**

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Proximity Reader GP20

| | |
|-----------------------------|---|
| Power Requirements | 5~13.5 Volts regulated DC @ 65 mA typical with a 12V supply. A linear regulator is recommended. |
| Output Interface | Wiegand , Magstripe , 9600 Baud Serial ASCII(RS232) |
| Typical Maximum Read | Range 20cm with ISO card |
| Frequency | 125KHz standard |
| Broadcast Power | Less than 0.5mW |
| Bandwidth | 5KHz |
| Modulation | ASK |
| Dimensions | 7.8 × 4.3 × 1.5cm |
| Temperature Range | -10 to 60 Deg C |

Output Assignment

| | |
|---------------|---|
| Red | Power + VDC |
| Black | Ground |
| White | Magstripe clock & Wiegand1, with internal 4K7 pull up |
| Green | RS232 data, Magstripe data & Wiegand0, with internal 4K7pull up (pull up only for Wiegand and Magstripe) |
| Orange | Card Present Output with internal 4K7 pull up |
| Yellow | Program Input |
| Blue | No Connection |
| Brown | No Connection |

Output Format

The output format can be customer programmed. The available formats are Wiegand ,
 Magstripe and Serial ASCII (RS232)。

| Wiegand | | Magstripe | | Serial ASCII | |
|----------------|------------------|------------------|-------------------|---------------------|---------------|
| Red | Power +V | Red | Power +V | Red | Power +V |
| Black | Ground | Black | Ground | Black | Ground |
| White | Data1 | Green | Data | Green | TX Data |
| Green | Data0 | White | Clock(Strobe) | Yellow | No Connection |
| Yellow | Connect to White | Orange | Card Present | White | No Connection |
| Orange | No Connection | Yellow | Connect to Orange | Orange | No Connection |

Data Structure

Serial ASCII(RS-232)Baud Rate: 9600, No parity, 8 data dits,1stop bit

| | | | | |
|-------------|--------------------------|----|----|-------------|
| STX(02 HEX) | DATA(10 HEX CHARACTERS) | CR | LF | ETX(03 HEX) |
|-------------|--------------------------|----|----|-------------|

Magstripe Emulation:(ABA Track 2)

Speed : Simulated to 40 IPS (Inch per Second)

| | | | | | |
|------------------|----|------------------|----|-----|-------------------|
| 10 LEADING ZEROS | SS | DATA (14 DIGITS) | ES | LRC | 10 TRAILING ZEROS |
|------------------|----|------------------|----|-----|-------------------|

Wiegand :(Format-26 Bit)