# 904 RFID/2 LEGIC 13.56MHz proximity R/W modules

**TMC**
SUBSYSTEMS & COMPONENTS

## p/n 904.205.15 - Magstripe output or TTL serial module

## p/n 904.206.15 - RS232 or Wiegand or buffered Clock & Data module.

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| | |
|---|---|
| **Reader technology** | LEGIC SC2560 based proximity read-write interface for ISO15693 & ISO14443A tags |
| **Transponder types** | LEGIC prime (13.56MHz proprietary), advant (ISO15693 and ISO14443A) |
| **Interface** | Electrical: According to model p/n and pins.<br>Data format: According to configuration pins. |
| **Reading range** | About 4 cm with ISO cards. *Don't mount the reader directly on metal surface.* |
| **Visual indication** | Two LEDs (Red and Green) driven by connecting Yellow and Grey wires to GND. |
| **Power supply** | p/n 904.205.15:   5 Vdc. (+/-10%),   150mA typical.<br>p/n 904.206.15:   5 to 18 Vdc,   150mA typical. |
| **Dimensions** | 101 x 44 x 23 mm (outline) |
| **Temperature range** | -25° to +60℃. |
| **Interface Cable** | 300 cm, PVC, 10 wires (904.205.15) or 12 wires, no connector (904.206.15). |

**WARNING**: connect **first** GND blue wire, **then** other connections, leaving **Vdc last one.**

| Configuration Pins → <br> Output Format ↓ | Brown | 2Color wires - 904.206.15 only | | |
|---|---|---|---|---|
| | | **GreyPink** | **BluRed** | **Green (x)** |
| Serial/RS232 | TO GND | 19200,N,8: TO GND<br>38400,N,8: OPEN | OPEN | (RXD) |
| Magstripe – Clk&Data | OPEN | TO GND | OPEN | TO GND |
| Wiegand<br>(904.206.15 only) | OPEN | OPEN | TO GND | TO GND |

| | 904.205.15 | 904.206.15 |
|---|---|---|
| **Blue** | GND | |
| **Red** | Power 5 (+/-0.5) Vdc | |
| **Green** | RXD serial TTL | RXD - RS232   **(x)** |
| **White** | TXD serial TTL / Data | TXD - RS232 |
| **Pink** | Clock | Data0 / Clock |
| **Black** | | Data1 / Data |
| **Yellow** | GREEN LED   OFF = OPEN, ON = TOGND | |
| **Gray** | RED LED   OFF = OPEN, ON = TOGND | |
| **Violet** | Reserved for FW upgrades – do not connect. | |

### Data transmission

Readers are preprogrammed for automatic retrieving and transmission of any of a few common known segments data, or (if known segments are missing) of the UID code always present in all cards. UID is output in Magstripe emulation as binary conversion to a string of 20 decimal figures (10 figures for each 4Bytes/32bits group).  Note: The preprogrammed logical output, is not proper for the Wiegand output. Proper logical output format, in general, can be reprogrammed with the TMC LEGIC configuration utility or CSW2000 program by LEGIC.

**WARNING:** Make all the connections before applying the power supply to the reader. Never connect the configuration pins (Brown, GreyPink or BluRed) to the Vdc.

### Connector - 904.205.15 only

The TTL output version only is supplied with a 8-pin MOLEX connector. It is factory configured for using (as a magnetic emulation reader) with TMC 914.003.20 HotMAX boards. Connection to PROX (and TRAX) terminals is also possible changing the pins order and reducing the connector as shown in the rightmost table.

*Note:* to modify the pin connections or change the connector size, just press a little with a screwdriver into the corresponding rectangular hole and pull the wire at the same time.
Then re-insert it in the required position.

**Output Assignment for TMC MAX**

| | | |
|---|---|---|
| 1 | Blue | GND |
| 2 | Red | Power 5 Vdc |
| 3 | Pink | Clock Output |
| 4 | | |
| 5 | White | Data Output |
| 6 | | |
| 7 | Yellow | GREEN LED |
| 8 | Gray | RED LED |

**Output for TMC PROX & TRAX**

| | | |
|---|---|---|
| 5 | Red | Power 5Vdc |
| 4 | Blue | GND |
| 3 | White | Data Output |
| 2 | Pink | Clock Output |
| 1 | | (n.c.) |
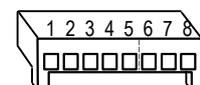
1 2 3 4 5 6 7 8

INSTRUCTIONS FOR FCC ID LABELING
Module type: transmitter 90401-15
FCC-ID: SYL90401-15
This intends to inform you how to specify the FCC ID of our transmitter module 90401-15 on your final product. Based on the Public Notice from FCC, the product into which our transmitter module is installed must display a label referring to the enclosed module. The label should use wording such as "Contains transmitter module FCC ID: SYL90401-15" or "Contains FCC ID: SYL90401-15", any similar wording with the same meaning may be used.

CE

This device only conforms to all the standards of the CE mark if the installation and user instructions contained in this document are followed correctly.