

904.103.17 RFID reader

Proximity reader module for passive field energized inductive tau, gs

Power Requirements: 5-13.5 volts regulated DC at 65mA typical with a 12v supply.
A linear regulator is recommended.

Interface: Wiegand Magstripe, 9.6K Baud Serial ASCII (RS232)

Typical Maximum Read in: Range 22cm at 13.5V and 11 cm at 5V with ISO card
ideal conditions:

Frequency: 125Khz standard or 134.2 KHz to special order,

Transponder: Read only

Audio/Visual Indication: Internat LED and Buzzer

Dirnensions: 7.8 x 4.3 x 1.5 cm

Temperature Range: -10 to 60 Deg C

Interface Cable: 90 cm



Connector

The standard module could support different output formats as shown in following pages The 904.103.17 is supplied with a 5-pin MOLEX connector configured for using with TMC 914.003.20 HotMax boards as a magnetic emulation reader to PROX terminals is also possible changing the pins order See PROX manual for pins description

Output Assignment

Red	Power 5 - 1 3.5 Volt
Black	Power GND
White	Clock Output (Magstripe, Wiegand) 4k7 pull up
Green	Data Output (RS232, Magstripe & Wiegand) 4K7 pull up
Orange	Card Present Output 4K7 pull up
Yellow	Program Input 4K7 pull up
Blue	NC
Brown	NC

Output Format

The output format can be customer programmed. The available formats are Wiegand, Magnetic Emulation, Clock Data and Serial ASCII (RS232).

Wiegand

Red	Power +V
Black	Ground 0V
White	Data
Yellow	connect to white (Data0 Clock output)

Magstripe

Red	Power +V
Black	Ground 0V
Green	Data
White	Clock(Strobe)
Orange	Card Present
Yellow	Connect to Orange

Serial ASCII (RS232)

Red	Power +V
Black	Ground 0V
Green	Tx Data
Yellow	No connection

Data Structure (Serial ASCII)

Baud Rate: 9600, N, 8,1

STX(02 HEX) DATA CR LF ETX (03 Hex)

The start character is factory defined as an 'STX' (02 HEX). The CR\LF characters serve to bring the received screen text back to The left hand side and on the line below after the data bytes have been sent. The `ETS` (03 HEX) character denotes the end of the current transmission.

Data Structure (Magstripe emulation ABA Track 2)

Speed : Simulated to 40 IPS (Inch per second)

10 LEADING ZEROS SS DATA ES LRC10 TRAILING ZEROS

The leading zeros prepare the receiving unit to accept the data. SS is the Start Sentinel consisting of 11010. ES is the End Sentinel consisting of 11111. LRC is the Longitudinal Redundancy Check character. Lastly The there follows trailing zeros.

PROGRAMMING THE OUTPUT FORMAT

The programming input may be connected in the following ways to choose between the available output formats.

- | | |
|-------------------------|---------------------------------------|
| 1) Serial ASCII | Leave Program Input Open Circuit |
| 2) Wiegand | Connect Program Input to Clock Output |
| 3) Clock Data** | Connect Program Input to Data Output |
| 4) Magnetic Emulation | Connect Program Input to Card Present |
| 5) Customer Interface** | Connect to Zero Volts |