



Purchase Code: 100.049

# AP-09 RFID Reader

The AP-09 is part of AcuProx Reader product line for access control. It is indicated for Applications that use cards and tags operating at 125 kHz. Dimensions with reduced readings reaches up to 15 cm, ideal for indoor use in controlling, turnstiles and other equipment.

## • Features

The AP-09 is a reader of small dimensions, but with great reading performance, with range up to 15 cm with cards and tags AcuProx line. Due to its size, is indicated mainly for internal use in several controllers, clocks, turnstiles and other similar equipment in Applications access control. Allows three communication interfaces: RS-232 TTL, Wiegand 26 bits and ABA TK2. Thus, the Reading Module AP-09 is a smart and simple solution for most Applications for radio frequency identification.

## • Data Formats

### Serial ASCII (TTL RS-232)

Baud rate: 9600 bps, no parity, 8 data bits, 1 stop bit.

|              |                             |             |             |              |
|--------------|-----------------------------|-------------|-------------|--------------|
| STX (02 HEX) | DATA (10 ASCII CHARACTERES) | CR (0D HEX) | LF (0A HEX) | ETX (03 HEX) |
|--------------|-----------------------------|-------------|-------------|--------------|

### Emulação Magstripe (ABA Track 2)

Velocidade: simulada a 40 IPS (polegadas por segundo)

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

### Wiegand (26 bits)

|                            |   |   |   |   |   |   |   |   |   |    |    |    |                           |    |    |    |    |    |    |    |    |    |    |    |    |
|----------------------------|---|---|---|---|---|---|---|---|---|----|----|----|---------------------------|----|----|----|----|----|----|----|----|----|----|----|----|
| 0                          | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13                        | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| P                          | S | S | S | S | S | S | S | S | C | C  | C  | C  | C                         | C  | C  | C  | C  | C  | C  | C  | C  | C  | C  | C  | P  |
|                            | E | E | E | E | E | E | E | E | E | E  | E  | E  | O                         | O  | O  | O  | O  | O  | O  | O  | O  | O  | O  | O  |    |
| Summed for even Parity (E) |   |   |   |   |   |   |   |   |   |    |    |    | Summed for odd Parity (O) |    |    |    |    |    |    |    |    |    |    |    |    |

## • Technical Specifications

|                          |   |
|--------------------------|---|
| Power                    | 5 to 13,5 VDC, typically with 12V DC  |
| Consumption              | 60 mA @ 12 VDC  |
| Communication Interfaces | Wiegand 26 bits, Magstripe (ABA TK2), Baud Serial ASCII (TTL RS-232)  |
| Reading Range*           | Up to 9 cm, with an AcuProx Card ISO<br>Up to 12 cm, with an AcuProx Card<br>Up to 15 cm, with an AcuProx Card HP |
| Frequency of operation   | LF - 125 kHz  |
| Modulation               | ASK   |
| Protocol                 | ISO 11784/85  |
| Transponder              | Only reading cards and tags AcuProx   |
| Dimensions               | 78 x 43 x 29 mm   |
| Weight                   | 80 g  |
| Operating Temperature    | -25° to 65°C  |
| Protection degree        | Not apply. (OEM Module)   |
| Installation             | Embedded in equipment   |

\* Considering power regulated and stabilized 12V DC installation electromagnetic noise-free environment and without the presence of metal surfaces near the reader source.

## • Dimensions [mm]

