

# 714-52 REV3 mifare® ID Reader with Selectable Outputs Shortform Data Sheet

## Specifications

Power requirements: 5.0-13.6V dc. Current consumption is 100 mA typical.

RF Frequency: 13.56 MHz.

Card types supported: mifare® Std, mifare® Ultralight, mifare® DESFire, mifare® Plus S/X. NTAG2XX.

Contactless interface as per specification: ISO/IEC 14443 Type A.

Output formats supported: Wiegand (44-bit, 34-bit, and 26-bit), Mag Stripe emulation, Clock/Data, RS232 (9600,n,8,1) EIA and TTL levels.

Continuous (while tag in the field) or single transmission.

Typical reading range: 50mm when input voltage is 12V. 30mm when input voltage is 5V.

3 LEDs (GREEN, RED, YELLOW).

Sounder emits a 60ms beep at 4 kHz when a transponder is read. In addition sounder operates while SOUND input is pulled low.

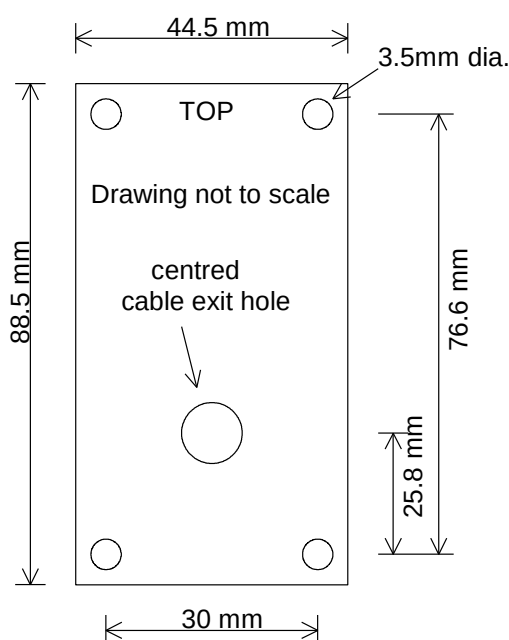
Operating temperature range: -20°C - +60°C.

10 way cable: 1m long

Weight: 90 grams.

Dimensions: reader 89 x 45 x 16 mm, optional spacer plate 89 x 45 x 7 mm

## Physical Dimensions and Mounting Details



If the spacer plate is used the reader cable may be brought out of one of four exit points on the spacer: top, bottom, left or right. This enables the cable to be run on the surface of the wall. If no spacer plate is used a minimum hole size of 6.5mm must be drilled in the wall at the cable exit position as shown above to allow the cable to exit perpendicular to the reader.

The optional spacer plate may also be used when mounting the reader on a metal surface to reduce the negative effects of metal on the read range.

## Connections

The table below details the function of each wire:

Colour	Name	Function
GREY	PRESENT	Pulses low when an RFID tag is detected. It stays low while the module output is active.
WHITE	CLOCK/DATA0/TX	Outputs RFID tag code in selected format.
BROWN	DATA/DATA1	Outputs RFID tag code in selected format.
YELLOW	YEL-LED	Controls Yellow LED in LED Mode 1.
ORANGE	RED-LED	Controls Red LED in LED Mode 1.
GREEN	GRN-LED	Controls Green LED in LED Mode 1 and both Red and Green LEDs in LED Mode 2.
BLUE	SOUND	Controls Sounder
PURPLE	RS-232	RS-232 output
RED	+VDC	Connect +5V - +13.6V from power supply.
BLACK	0V	Connect 0V from power supply.

Note: LED and SOUND inputs are active low. The input is internally pulled high and may be pulled low by an open collector transistor or driven low by the output of a 5V CMOS or TTL gate.

## Output Mode Selection

SW 1	SW 2	SW 3	SW 4	Output Format
ON	ON	ON	ON	Inhibit - turn off coil
ON	ON	ON	OFF	RS232 - 24 bit
ON	ON	OFF	ON	RS232 - 32 bit
ON	ON	OFF	OFF	RS232 - 56 bit
ON	OFF	ON	ON	Unused
ON	OFF	ON	OFF	Unused
ON	OFF	OFF	ON	Unused
ON	OFF	OFF	OFF	Gen-Scan clock/data - 32 bit
OFF	ON	ON	ON	Fast Mag Stripe - 40 bit
OFF	ON	ON	OFF	Mag Stripe - 24 bit
OFF	ON	OFF	ON	Mag Stripe - 32 bit
OFF	ON	OFF	OFF	Mag Stripe - 40 bit
OFF	OFF	ON	ON	Basic Clock/Data - 56 bit
OFF	OFF	ON	OFF	Wiegand - 26 bit
OFF	OFF	OFF	ON	Wiegand - 34 bit
OFF	OFF	OFF	OFF	Wiegand - 44 bit

## LED Mode Table

Mode #	SW 5	LED Mode
1	ON	3 Individual LEDs each controlled by their own input
2	OFF	RED/GREEN with single control line (GRN-LED). When the GRN-LED input is floating or pulled high, the RED led is on and the GREEN led is off. When the GRN-LED input is pulled low (connected to 0V) the GREEN led is on and the RED led is off. The YELLOW led is always off.

## Continuous/Single Transmission Mode Table

Mode	SW 6	Operation
Continuous	ON	While a tag is in the reader's field the reader will continuously transmit the code in the format chosen by DIP switches 1-4. The repetition period is dependent on the format chosen but varies between 65ms and 230ms.
Single	OFF	Single transmission when tag is brought into the field. Tag must be removed from field for at least 1 second before a read of this tag is possible again.