

# 713-99 MIFARE® ID Reader Module

## Evaluation Kit

### Overview

The 713-99 Evaluation Kit enables an OEM design engineer to understand and evaluate the features of the 713-52 Mifare ID Reader Module before designing the module into their own product. The kit consists of:

- 1 x evaluation board (713-99)
- 1 x Mifare module (713-52)
- 1 x external antenna (can be detached from the evaluation board)
- 1 x design documentation pack on a CD.



### Features

The evaluation board provides the external electronics and connectors required to power up and view the outputs from the module:

- Power requirements: 5-15V dc. Current consumption with module is 120 mA typical.
- 9 way female D-type connector for serial cable link to PC to view RS232 output - use a standard terminal program with comm port set to 9600,n,8,1.
- 3 way connector with inverted outputs - DETECT, CLOCK/DATA0, DATA/DATA1 - use an oscilloscope to view these signals.
- 6 way DIP switch for selecting output mode(SEL1..4), INVERT, and SHUTDOWN.
- 5 way connector for programming the module - factory use only.
- Piezzo sounder.
- External antenna with tuning capacitor connected by RG174 screened cable.
- Typical reading range with this antenna/module combination: 90mm
- RF Frequency: 13.56 MHz.
- Card types supported: MIFARE®.
- See 713-52 Data sheet for description of output modes from the module.