



RFID Application Demonstrator  
01 RFID Security System  
02 RFID Toll Tax

RFID Trainer is a versatile training system for laboratories. It consists of many experiments to understand the basics of the Technology.

RFID is the abbreviated form of Radio Frequency Identification. RFID means storing and retrieving data through Electromagnetic Transmission to a RF compatible circuit. RFID Technology can be viewed as a new generation of Technology that replaces barcodes. However it is a core Technology with much wider range of applications in logistics, traffic, security, monitoring application etc.

It is a passive RFID system, working on 13.56 MHz Frequency range and supports multi protocols. Our system has a RFID reader module with an antenna and some RFID tag cards which support different protocols and each has different U.I.D (Unique Identification) number. The trainer kit consists of a reader chip for reading the tag and a microcontroller for processing the data. The transceiver chip is a reader chip which supports ISO/IEC 14443A, 14443B, 15693 standards. Tags contain different Ics for different protocols.

#### Technical Specifications:

<b>Operating Frequency</b>	: 13.56 MHz
<b>Modulation Type</b>	: ASK
<b>Operating Range</b>	: Less than 10 cm
<b>Protocol Support</b>	: ISO 14443A ISO 14443B ISO 15693
<b>Application Software</b>	: This programme helps the students to understand the attendance records by using RFID technology
<b>Supply Voltage</b>	: 3.3 V for controller and Reader, 5 V for LCD display
<b>Micro Controller</b>	: 89C51 ED2 with 256 KByte RAM and 64 KByte ROM
<b>Antenna</b>	: Inductively coupled coil type
<b>Power Supply</b>	: 230 V $\pm$ 10%, 50 Hz
<b>Fuse</b>	: 250 mA

- Highly integrated analog circuitry to Demodulate,
- Decode and Respond
- 3.56 MHz multi protocol support
- Provided with LCD and software
- RS-232 Interface
- On board LED Indication
- On board Buzzer indication
- On board Antenna
- Provided with application program software
- Test points are provided to observe the signals



Operational software window



Application software window

Note: Specifications are subject to change.

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