



## **Specifications**

## **Microwave Transceiver**

Type : Integrated transmitter and receiver with dual 4 patch antenna

Operating frequency : 24GHz (K-Band)Single balanced mixer : 50MHz bandwidth

EIRP output power : 15dBm
Beam aperture : 80 / 34
16bit radar data acquisition System

## **Software**

• Graphically configurable frequency and peak detection

• Time domain display(scope) with trigger and filter functions

· Real time capture and display of signal at background along with current acquired signal

Speed display : Display in km/Hr, m/s, KHz

• Volts/div : 20mV/div ~ 3V/div

• Display : Peak to peak level display

• Time Base :  $0.5 \text{mS/div} \sim 10 \text{ms/div} (\text{real time})$ 

• Trigger : Manual

Storage mode : Streaming to standard save filesFFT : Real time with cursor measurement

- FFT Power spectrum display from 5Hz  $\sim$  20 KHz

## **Experiments**

- Introduction to Doppler Radar
- Study of Doppler Shift and How it is being used in various applications
- To find out the time period and frequency of pendulum
- To measure the speed of fan in RPM
- To measure the frequency of peizo electric buzzer
- To find out the accuracy of the radar using tuning fork
- To detect the transformer HUM and its frequency

Note: Specifications are subject to change.