

....a total solution for Educational Lab Trainers

ACT-15 GPS TRAINER



A **GPS** tracking unit is a device that uses the <u>Global Positioning System</u> to determine the precise location of a vehicle, person, or other asset to which it is attached and to record the position of the asset at regular intervals. A GPS tracker essentially contains GPS module to receive the GPS signal and calculate the coordinates.

Specifications

- L1 Frequency, C/A code, 51-channel High Sensitivity: Up to -158 dBm tracking, superior urban performances
- Position Accuracy: < 3m CEP (50%) without SA (horizontal)
- Cold Start is Under 36 seconds (Typical)
- Warm Start is Under 34 seconds (Typical)
- Hot Start is Under 1 second (Typical)
- Max. Update Rate: 5Hz (Default: 1 Hz)
- Pin header Connection for easy to assemble.
- Low Power Consumption: 55mA @ acquisition, 40mA @ tracking
- 9600 baud rate Serial Transmission
- Built in RS232 Level Converter (MAX232) provided in 9 Pin D type connector.
- Windows based software support GPS Status, Signal Level, Sky chart constellation of SV,
- All interconnections are made using 2mm banana Patch cords.
- Test points are provided to analyze signals at various points.

- All ICS are mounted on IC Sockets.
- Bare board Tested Glass Epoxy SMOBC PCB is used.
- In-Built Power Supply of +3.3V/1A with Power ON indication.
- Attractive ABS Plastic Enclosure.
- Set of 2mm Patch cords for interconnections
- Normal operation temperature: -20 °C to +55 °C.
- Input Voltage: 230V AC.
- User's Manual

List of experiments

- Introduction to GPS, software installation.
- Getting started with GPS training system.
- Satellite signal strength indication using SNR plot.
- Study of satellite azimuth and elevation window using sky plot.
- Geographical location with (GMT/IST) with navigation window.
- To study geographical position using survey plotting.
- Study of NEMA received sentences using trace window.

Note: Specifications can be altered without notice in our constant efforts for improvement.