

Technical Specification

IoT based development kit

Facility for Arduino and Raspberry Pi daughter board :

- IoT dashboard, to display data with mobile app Wireless Lora-based graphical display with battery operated.
- Advance IOT based development kit with Arduino, Raspberry pi, GSM, Bluetooth, and Wi-Fi with sensor boards like temp/ humidity , ultrasonic, motions on board PC interface with software



Sensor training kit with Arduino

- Advanced sensor training kit with Arduino and a wide range of sensors, signal conditioner, and graphical touch LCD with sensors.

Technical Specifications:-

- On board test & and measuring points in each section.
- +5V, +12V, -5V power, Digital voltmeter.
- Block description printed on system.
- On Board Relay, Amplifier for various voltage amplifier
- On Board I/P DB9 socket for LVDT Cell.
- Onboard function generator.
- Test points to measure LVDT O/P with or without an amplifier. Range -20 mm
- Onboard sections for various sensors like Thermocouple, Thermistor, RTD, and Lm35.
- Onboard strain gauge sections using cantilever Beam type I/P method by hanging weight, Half bridge circuit.



Technical Specification

Sensor training kit with Arduino

- The op-amp is based on two different amplifiers, with each testing & measuring point.
- +5V/ +12V operated smoke sensor, Buzzer alarm for indication. Provision to measure O/P on banana sockets.
- Measurement of motor speed by proximity sensor. Variable potentiometer to vary speed.
- LCD display to show speed in RPM.
- Optional:- USB/PC Interface/GUI display. Experiments:-
- To study the components/parts of the sensor trainer
- To Study the Characteristics of LVDT.
- To Study the Characteristics of Temp. LM35, RTD & thermocouple Sensor.
- To Study the Characteristics of strain gauge sensors.
- To Study the Characteristics of Load Cell sen. or
- To Study the Characteristics of Smoke Sensor.
- To Study the Characteristics of Speed sensor.

IOT kit with ESP-32 Wi-Fi

- IOT kits with ESP32 Wi-Fi with temperature and humidity sensors etc. onboard 16x2 LCD display with 4 wire i2c modules for LCD driving, 2600mh battery, 1x4 keypad on board buzzer RTC, EPROM with onboard GSM Module and cloud connectivity.

