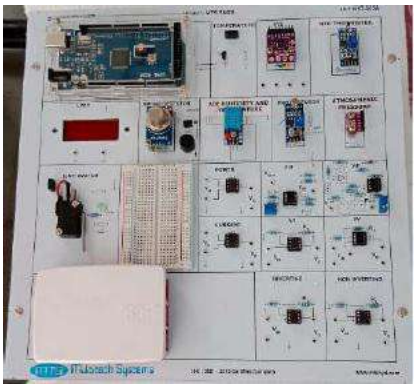
SENSOR TRAINER KIT



SPECIFICATIONS:

* IoT enabled Android based 7” Graphical touch LCD with inbuilt Controller
* DAQ for acquiring analog data and software for viewing the output waveforms with USB storage and HDMI output.
* Ethernet port to connect real world.
* Inverting, Non – Inverting, Power, Current, Instrumentation and Differential Amplifier, F to V, V to F, I to V, V to I Converter, High Pass and Low Pass Filter, Buffer, LED, Buzzer, LED Bar Graph, Touch Switch

Sensors On board:
* RTD,
* NTC Thermistor,
* LM35,
* Photovoltic,
* Air humidity and Temperature,
* Gas (Smoke),
* Air Quality,
* Atmospheric Pressure,
* Limit switch,
* Capacitive displacement

* Arduino programming
* Sockets for sensors and actuators interface
* Signal test points
* All sensors are mounted on Integrated PCB & having aesthetic flow of Mimic diagram depicting the functionality of the trainer
* User friendly modular setup.
* We provide T3 (Train The Trainer) program

WIRELESS COMMUNICATION MODULES

SPECIFICATIONS:

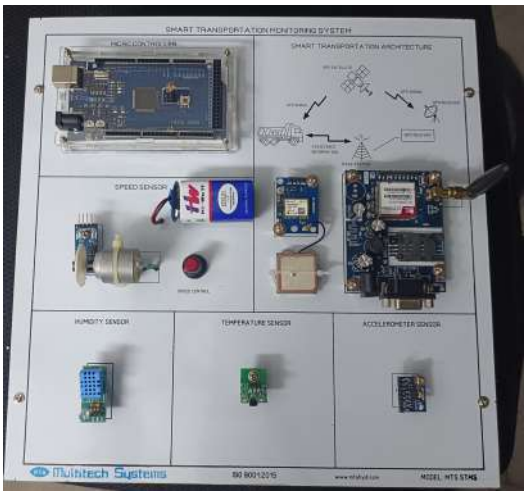
* Core 8051 MCU clocked at 11.0592 MHz,
* Ready to run programmer to support family of controllers AT89C51/52
* DC Power Supplies +12V, -12V, +5V & -5V
* Breadboard to make circuits,
* Detailed learning content through simulation Software

Sensors On Board:
* RFID Card Reader ,
* Finger Print,
* Zigbee,
* GPS,
* GSM,
* Bluetooth and
* WiFi

* Arduino programming
* Sockets for sensors and actuators interface
* Signal test points
* All sensors are mounted on Integrated PCB & having aesthetic flow of Mimic diagram depicting the functionality of the trainer
* User friendly modular setup.
* We provide T3 (Train The Trainer) program

IOT SMART TECHNICIAN

SMART TRANSPORTATION



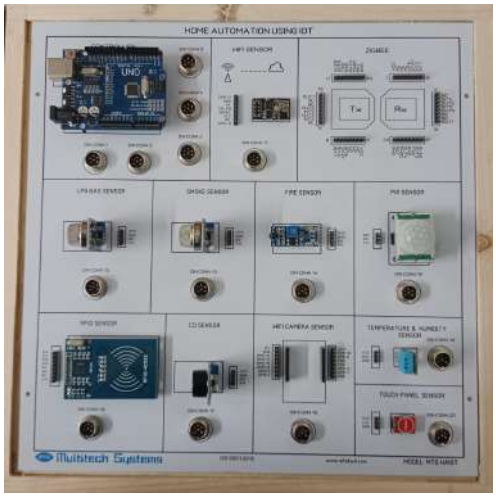
SPECIFICATIONS:

* Processor : 32 Bit, Modem : Quad-Band 850/900/1800/1900MHz
* GPS Frequency : 1575.45 MHZ
* Input Supply : 12V DC
* Front End : Zend Framework
* Back End : mySQL
* OS : Windows compatable

Sensors On board:
* Speed Sensor
* Temperature Sensor
* Humidity Sensor
* Accelorometer Sensor
* GPS Sensor
* GSM Sensor

* Arduino programming
* Sockets for sensors and actuators interface
* Signal test points
* User friendly modular setup.
* All sensors are mounted on Integrated PCB & having aesthetic flow of Mimic diagram depicting the functionality of the trainer
* We provide T3 (Train The Trainer) program

SMART BUILDING



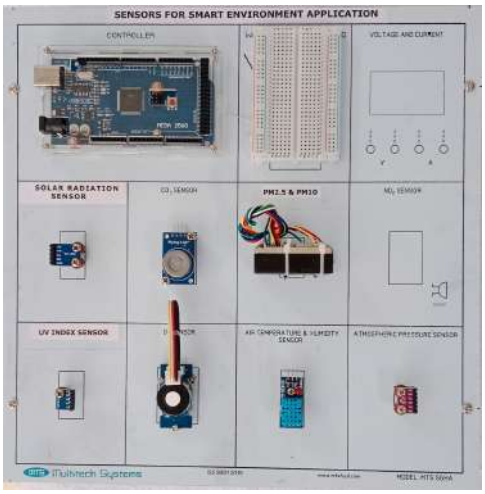
SPECIFICATIONS:

* Smart Capacitive Touch Switch Board with 3
* Light controls,
* 1 humming free FAN control,
* 116A AC control,
* 3 IR Channels for controlling
* IR appliances,
* 8 Capacitive Touch Buttons,
* 2 Digital Sensor Inputs,
* 1 Digital Output

Sensors On board:
* CCTV Camera ,
* Motion Sensor
* RFID,
* Smoke,
* Fire,
* LPG Gas,
* Air Quality,
* Ambient Temperature & Humidity,
* CO2,
* Light,
* Relays,
* Hooter,
* Touch Panel

* All sensors are mounted on Integrated PCB & having aesthetic flow of Mimic diagram depicting the functionality of the trainer
* We provide T3 (Train The Trainer) program

SMART ENVIRONMENT

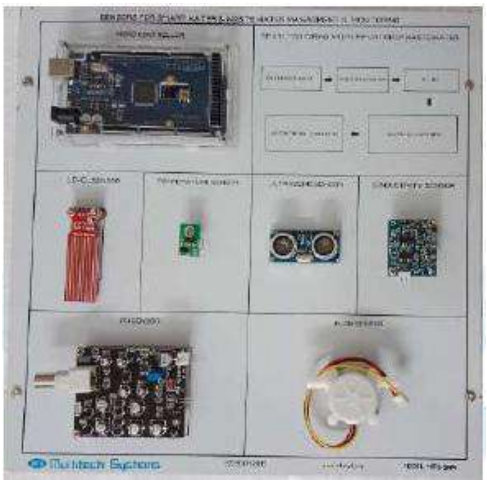


SPECIFICATIONS:

* Arduino software compatible hardware.
* CO2 Sensor,PM2.5 & PM10
* O2 Sensor , UV Index Sensor
* Air temperature & Humidity Sensor
* Atmospheric Pressure Sensor
* Sockets for sensors and actuators interface.
* Signal test points
* All sensors are mounted on Integrated PCB & having aesthetic flow of Mimic diagram depicting the functionality of the trainer
* User friendly modular setup.
* We provide T3 (Train The Trainer) program

Sensors On Board:
* CO2 Sensor
* PM2.5 & PM10
* O2 Sensor
* UV Index Sensor
* Air temperature & Humidity Sensor
* Atmospheric Pressure Sensor

SMART WATER & WASTE WATER MANAGEMENT



SPECIFICATIONS:

* Arduino software compatible hardware.
* Conductivity sensor, PH sensor, Level sensor and Flow sensor.
* Ultrasonic sensor & Temperature sensor & PH sensor Arduino programming.
* Sockets for sensors and actuators interface.
* Signal test points
* All sensors are mounted on Integrated PCB & having aesthetic flow of Mimic diagram depicting the functionality of the trainer
* User friendly modular setup.
* We provide T3 (Train The Trainer) program

Sensors On Board:
* Level Sensor
* Ultrasonic Sensor
* Conductivity Sensor
* Flow Sensor
* PH Sensor
* Temperature Sensor

IOT EXPLORER

SPECIFICATIONS:

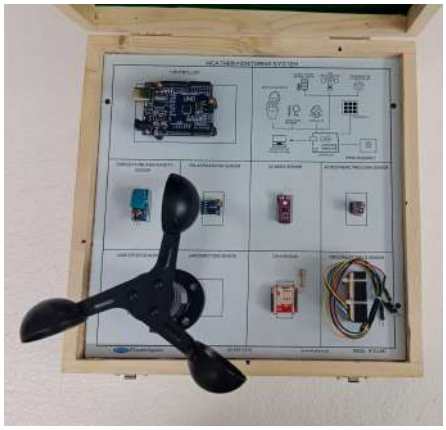
* Arduino software compatible hardware.
* Raspberry software compatible hardware.
* Sockets for sensors and actuators interface.
* Signal test points
* All sensors are mounted on Integrated PCB
* User friendly modular setup.
* We provide T3 (Train The Trainer) program

Sensors On Board:
* Air Quality Sensor
* Photo Sensor
* Soil Moisture Sensor
* Bluetooth Sensor
* Temperature & Humidity Sensor
* PIR Sensor
* Zigbee communication

* GSM IoT Gateway - Quad-Band 850/900/1800/1900 MHz - GPRS multi-slot class, Control via AT commands. Explore physical and application layer protocols like RS232, RS485, GSM, Ethernet and MQTT, CoAP, HTTP, FTP. Cloud/server configuration includes HTML, Java, php and mySQL.

* IoT Node: Wireless 2.4GHz Zigbee, 5 Analog Inputs and at least 3 Digital Outputs, At least one I2C Channel, support OTA. Online Cloud/Server Services

WEATHER MONITORING SYSTEM



SPECIFICATIONS:

* Arduino software compatible hardware.
* Sockets for sensors and actuators interface.
* Signal test points
* All sensors are mounted on Integrated PCB
* User friendly modular setup.
* We provide T3(TrainThe Trainer)program
* Temperature Range : -10°C to 90°C

* Relative Humidity Operating Range 0 to 95%
* Wind Speed Sensor Speed : 0 to 20m/S

Sensors On Board:
* Temperature & Humidity Sensor
* Solar Radiation Sensor
* UV Index Sensor
* Atmospheric Pressure Sensor
* Wind Speed Sensor
* Wind Direction Sensor
* GSM Sensor
* Air Quality Sensor PM 2.5

SENSORS AND ACTUATOR FOR IRRIGATION APPLICATION

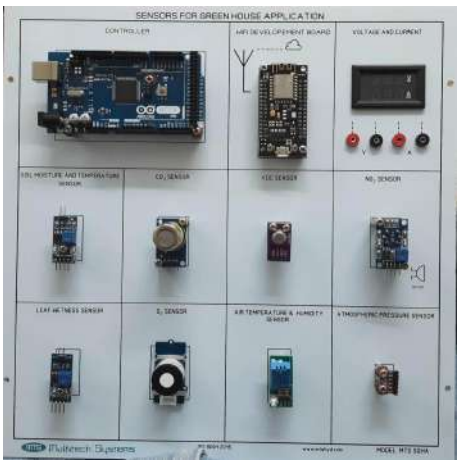
SPECIFICATIONS:

* Arduino software compatible hardware.
• USB connectivity for personal computer (PC) interface.
• Arduino programming.
• Sockets for sensors and actuators interface.
• Signal test points
* All sensors should be mounted on Integrated PCB & having aesthetic flow of Mimic diagram depicting the functionality of the trainer
* User friendly modular setup.
* We provide T3 (Train The Trainer) program

Sensors On Board:
* Capacitive Soil Moisture &
* Temperature,
* Leaf Wetness,
* Solar Radiation(0- 2000mw/m2),
* Thermal Imager

Actuators :
* Sprinklers,
* Relay
* Flow Sensor

SENSORS FOR GREEN HOUSE APPLICATION



SPECIFICATIONS:

Arduino software compatible hardware. .

CO2, O2, VOC, NO2 Sensors
Soil Moisture, NO2, Leaf Wetness, Solar & UV Index Soil Moisture, Leaf Wetness, Solar radiation
• USB connectivity for personal computer (PC)
• Arduino programming.
• Sockets for sensors and actuators interface.
• Signal test points
* All sensors are mounted on Integrated PCB & having aesthetic flow of Mimic diagram depicting the functionality of the trainer
* User friendly modular setup.
* •We provide T3 (Train The Trainer) program

Sensors On Board:
* CO2 Sensor
* O2 Sensor
* VOC Sensor
* NO2 Sensor
* Soil Moisture Sensor
* Leaf Wetness Sensor
* Solar Radiation
* UV Index

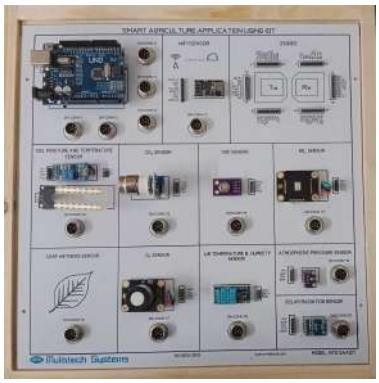
IOT SMART TECHNICIAN

SOLAR PV MODULE ANALYSER

SPECIFICATIONS:

* Micro-controller Based with 16X2 LCD,
* PC Interface
* Mains & battery operated.
* Capable to measure Open Circuit Voltage and Short Circuit Current Maximum Voltage and Current at Maximum Power
* DCV Range 0-50V,
* DCA Range 10A

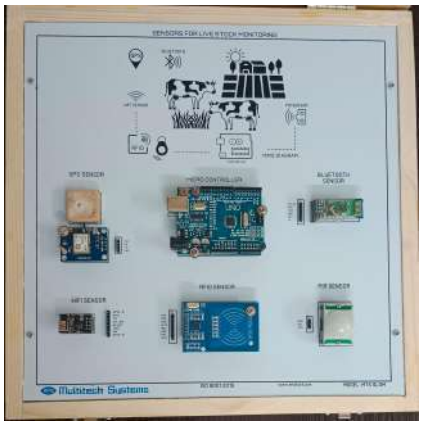
IOT BASED SMART AGRICULTURE



SPECIFICATIONS:

* Arduino programming.
• Sockets for sensors and actuators interface.
• Signal test points
* •All sensors should be mounted on Integrated PCB & having aesthetic flow of Mimic diagram depicting the functionality of the trainer
* •User friendly modular setup.
* Sensors: WiFi,Zigbee modeule,Soil Moisture, CO2,O2,VOC,NO2,O2,Pressure,Leaf Wetness

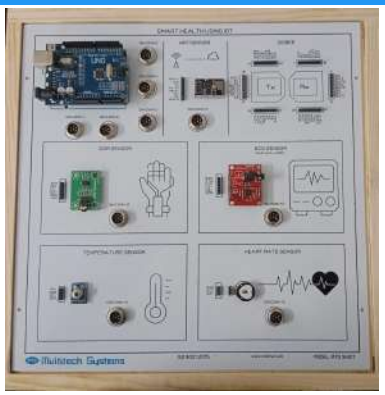
SENSORS FOR LIVESTOCK MONITORING



SPECIFICATIONS:

* Arduino programming.
• Sockets for sensors and actuators interface.
• Signal test points
* •All sensors should be mounted on Integrated PCB & having aesthetic flow of Mimic diagram depicting the functionality of the trainer
* •User friendly modular setup.
* Sensors: GPS Sensor , Bluetooth Sensor
• RFID & PIR Sensor WiFi Sensor

IOT BASED SMART HEALTH CARE



SPECIFICATIONS:

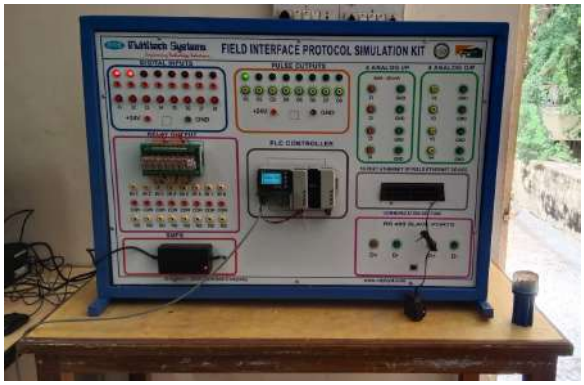
* Arduino programming.
• Sockets for sensors and actuators interface.
• Signal test points
* •All sensors should be mounted on Integrated PCB & having aesthetic flow of Mimic diagram depicting the functionality of the trainer
* •User friendly modular setup.
* Sensors: GSR,ECG,Temperature,Heart rate

IT WORKBENCH FOR COMPUTER & HARDWARE

SPECIFICATIONS:

* The bench comprises with Computer Hardware Training System
* LAN Training System with Wireless LAN as well to study Peer to Peer, STAR, RING Topology
* 2 Layer Switch
* POE Switch
* Wi-Fi LAN card
* IP Camera
* Energy meter
* DSO , DMM

FIELD INTERFACE PROTOCOL SIMULATION KIT



SPECIFICATIONS:

* Ethernet Devices with Isolated Supply and port
  - 8 DI/O, 4 AI/O, 8 Relay
  - 4 RS485 Slave ports, 1 Ethernet Port – Qty 4
* 16 Port Ethernet Switch for networking of field ethernet devices
* SMPS to power up multiple ethernet based field simulation devices

IOT DATA ACQUISITION SYSTEM

SPECIFICATIONS:

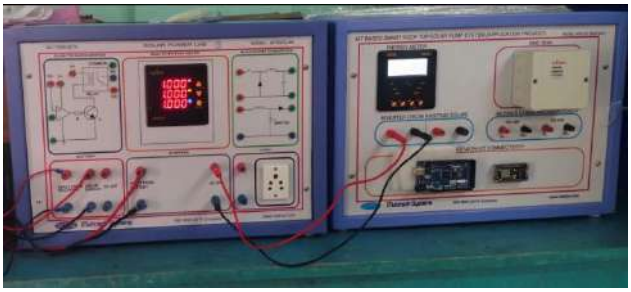
* 8 DI/O, 4 AI/O, 4 Relay
* Ethernet IOT DAQ, WiFi IoT DAQ,
* Cellular (GSM / GPRS)
* MODBUS RTU to MODBUS TCP
* 24 VDC Isolated Power Supply,
* 4 Isolated MODBUS RTU
* Serial to Ethernet, Serial to Wi-Fi, Serial to GPRS

IOT EDGE COMPUTING DEVICE

SPECIFICATIONS:

* 24 VDC Isolated Power Supply,
* 4 MODBUS RTU Master,
* 32 GB Built in SD Card,
* 1 Wi-Fi Port, 1 Ethernet Port, 1 GPRS Port,
* 4 Analog Inputs (0.1% FSR),
* 8 Pulse Inputs (up to 1 kHz),
* 8 Digital Inputs,
* 4 Relay Outputs

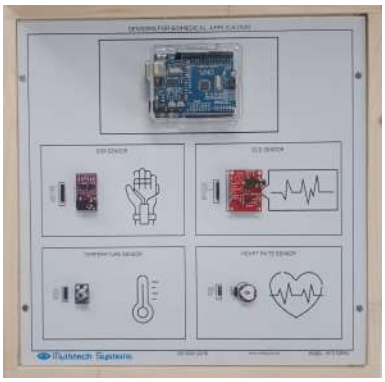
SOLAR POWER LAB



SPECIFICATIONS:

* Solar PV Modules.
* Open Circuit Voltage Voc 10V,
* Short Circuit Current ISC
* Maximum Power Voltage: 8.80V,
* Batteries
* Voltage 6V, 4Ah.
* Dusk to Dawn Sensing,
* LCD for Voltage and Current.

SENSORS FOR BIO MEDICAL APPLICATION

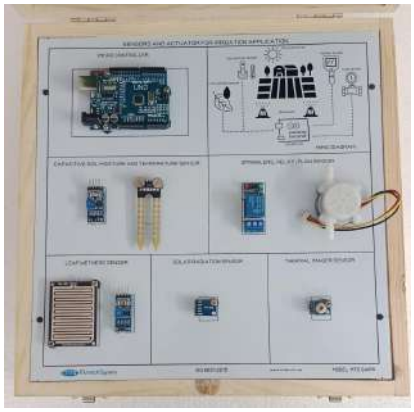


SPECIFICATIONS:

* Arduino software compatible hardware
* All sensors are mounted on PCB

Sensors On Board:
* GSR Sensor
* ECG Sensor
* Temperature Sensor
* Heart rate Sensor

SENSORS AND ACTUATORS FOR IRRIGATION APPLICATION



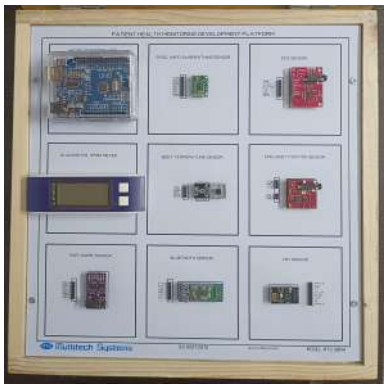
SPECIFICATIONS:

* Arduino Programming

Sensors On Board:
* Capacitive Soil Moisture &
* Temperature,
* Leaf Wetness,
* Solar Radiation(0- 2000mw/m2),
* Thermal Imager

* Actuators :Sprinklers, Relay, Flow sensor

PATIENT HEALTH MONITOR

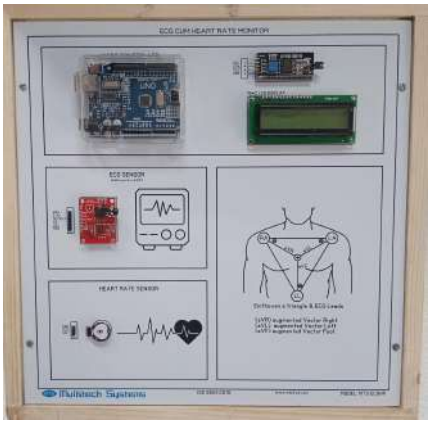


SPECIFICATIONS:

* Arduino software compatible hardware
* All sensors are mounted on PCB

Sensors On Board:
* GSR Sensor
* ECG Sensor
* Body Temperature Sensor
* Glucometer
* EMG Sensor , SPO2 Sensor

ECG CUM HEART RATE MONITOR

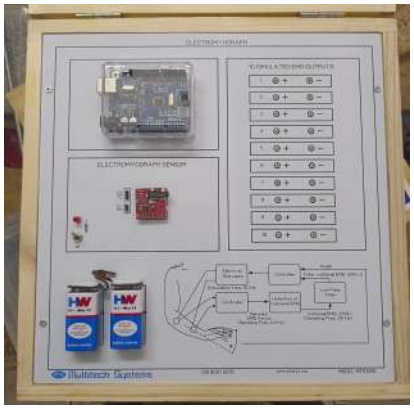


SPECIFICATIONS:

* Arduino software compatible hardware
* All Sensors are mounted on PCB
* 16 x 2 LCD Display

Sensors On Board:
* ECG Sensor
* Heart rate Sensor

ELECTROMYOGRAPH

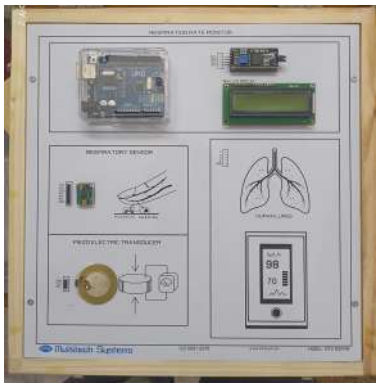


SPECIFICATIONS:

* Arduino software compatible hardware
* All Sensors are mounted on PCB
* 10 simulated EMG Outputs

Sensors On Board:
* EMG Sensor

RESPIRATION RATE MONITOR

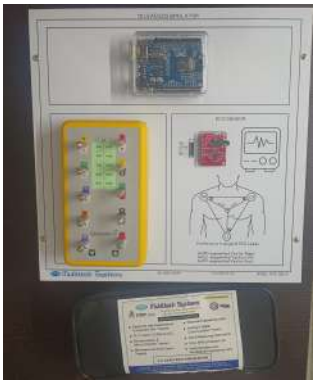


SPECIFICATIONS:

* Arduino software compatible hardware
* All Sensors are mounted on PCB
* 16 x 2 LCD Display

Sensors On Board:
* Respiratory Sensor
* Piezoelectric transducer

12 LEAD ECG SIMULATOR



SPECIFICATIONS:

* Arduino software compatible hardware
* All Sensors are mounted on PCB
* 12 Lead Simulator

Sensors On Board:
* ECG Sensor