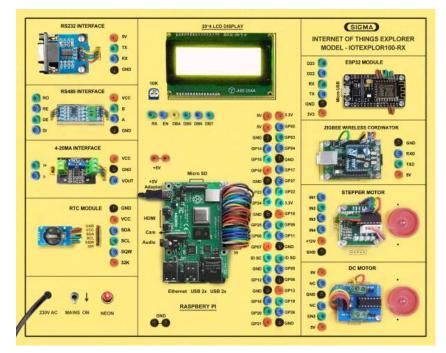


SMART PARKING IOT TRAINER - TRANSMITTER AND RECEIVER

(SIGMA) () RS 1 GND (EN SENSOR FOR SMART ENVIRONMENT AO APPLICATION - TRANSMITTER 084 SMARTENVIRON100TX C Des R, HUMDITY & 0 000 SDSO11-PM25 PM10 SENSOR () HD 204 G 087 E. 20'4 LCD DISPLAY 10K 0 I, :0 () 1 -6 G 2 -6 6 2 006 006 -00 () 2 () 2 vee ATMOSPHEREC 000 .0 6 2 GND 100 SCL (D) ș SDA 0 8 -@ 000 VCC O2 SENSOR 10 SOLAR RADIATION SENSOR GND -**B** 3 BCL ÷@ . 6 -0 0 0HD D23 D22 D22 D22 RX TX GND ARDUINO ESP32 MODULE Cast O 20 Ø State of the state 10 🖲 🤤 . ARF O GND 0-0-0 +5V 8-88 1 0 Ð 3V3 NEON MAINS ON

MODEL-SMARTPARKIOT100

Transmitter



Receiver

A. Main Specs

- 1. Following Parts and Modules are assembled on Single PCB of size 18 Inch x 15 Inch.
- 2. The complete circuit diagram is screen printed on component side of the PCB with circuit and Parts at the same place.
- 3. The PCB with components on front side is fitted in elegant wooden box having lock and key arrangement.
- 4. Modules and Parts should be removable without desodlering for easy repair / replacement
- 5. The acrylic cover is fitted on PCB to safeguard main parts.

B. Transmitter Node Section

- 1. Arduino Uno R3
- 1. CCTV IP Camera
- 2. PIR Motion Sensor
- 3. RFID Reader/Writer Sensor
- 4. 2 Channel Relays
- 5. Hooter
- 6. Magnetic Hall Sensor
- 7. Ultrasonic Sensor
- 8. Alexa Voice Control
- 1. Zigbee IoT Gateway
- 2. Wifi IOT Gateway ESP32
- 3. GSM IoT Gateway
- 4. Bluetooth IOT Gateway
- 5. LoraWAN IOT Gateway LA66
- 1. 20 X 4 LCD Display

C. Receiver Base Station Section

- 1. Raspberry Microcontroller Board Pi-4, 2 GB RAM, 64 GB Storage
- 2. 20 X 4 LCD Display
- 3. 5V, 2 Channel Relay
- 4. Audio Buzzer
- 5. Bluetooth Gateway
- 6. Zigbee IoT Gateway
- 7. Wifi IOT Gateway ESP32
- 8. LoraWAN IOT Gateway LA66

D. EXPERIMENTS

- 1. To explain theory of Raspberry Board, Arduino Board and All sensors and Parts
- 2. To measure all Sensors data
- 3. Smart Dashboard for Remote Monitoring and Analysis
- 4. To send Sensors data from Transmitter Node to Base Receiver using Bluetooth Gateway
- 5. To send Sensors data from Transmitter Node to Base Receiver using Zigbee Gateway
- 6. To send Sensors data from Transmitter Node to Base Receiver using Wifi Gateway
- 7. To send Sensors data from Transmitter Node to Base Receiver using LoRaWAN Gateway
- 8. To send Sensors data to Mobile using GSM Gateway by SMS
- 9. To send Sensors data to Mobile using Mobile App
- 10. To send Sensors data to Website Cloud page
- 11. To send Sensors data to MySQL Cloud Server and store them
- 12. To send Sensors data to Local Host Server and Store them on website html page
- To send Sensors data from Transmitter Node to TTN LoRaWAN Cloud Server using LoRaWAN Gateway

E. Accessories

- 1. All Cables and Adaptors
- 2. Pen Drive
- 3. E-Books for IOT Subject
- 4. Mp4 Video for IOT Subject
- 5. Online Cloud/Server Services
- 6. Live Training at College
- 7. After Sale Training support

- : 16 GB with All Codes and Soft copy of Manual
- : 100 Nos. in PDF Format
- : 100 Nos
- : For 2 Years on Cloud Server
- : For 2 Days for 4 Hours per Day
- : By Online Zoom Meeting or By Whatsapp Video Call