

IOT Trainer Kits

- Klartech : IoT Experience Kit :



■ Development Boards:

- ESP32 (Inbuild Wi-Fi and Bluetooth)
- Arduino Uno (ATmega328P Development Board)
- Raspberry Pi Pico (RP2040 Cortex-M0+ Development Board)
- STM32 (Arm Cortex-M3 LQFP 48 pins Development Board)

■ Outputs & Actuators:

- RGB LED – (2Nos – On-Board)
- User Push Button– (2Nos – On-Board)
- Relay – (2Nos – On-Board)
- Buzzer – (1Nos – On-Board)
- 10K Potentiometer – (1Nos – On-Board)
- 1.8" TFT Display
- Extra GPIO & Power Pins to Interface External Sensors
- Multi - Sensors:
 - 3-Axis Accelerometer Sensor Module – (1Nos – System on Module) MPU6050
 - Barometric Pressure Sensor – (1Nos – System on Module) BMP180
 - Temperature and Humidity Sensor Module – (1Nos – System on Module) DHT11

■ Communication Protocols:

- LoRa SX1276 RFM95W Module (System on Module)
- GSM : 4G Module
- RS485 Module (System on Module)
- INA219 Current Sensor

- **Klartech : IoT Pro Kit (RPi + ESP32) :**



▪ **Development Boards :**

- ESP32 (Inbuild Wi-Fi and Bluetooth)
- Raspberry Pi 4 B Module 4GB RAM and 32GB SD Card (OS Pre Loaded)

▪ **Outputs & Actuators:**

- RGB LED – (1Nos – On-Board)
- User Push Button– (3Nos – On-Board)
- Relay – (2Nos – On-Board)
- Buzzer – (1Nos – On-Board)
- 10K Potentiometer – (1Nos – On-Board)
- Seven Segment Module
- 1.8 inch TFT Display – (1Nos – On-Board)
- Extra GPIO & Power Pins to Interface External Sensors

▪ **Multi - Sensors:**

- 3-Axis Accelerometer Sensor Module ADXL345
- Barometric Pressure Sensor BMP180
- Temperature and Humidity Sensor Module DHT11
- MQ135 GAS Sensor
- Ultrasonic Sensor
- Touch Sensor
- LDR Sensor
- IR Sensor
- Air Quality Sensor MQ135