

IOT GATEWAY

The Rapidise IOT GATEWAY is an Industrial IoT (IIoT) solution designed to enable reliable, real-time data acquisition and machine performance monitoring across industrial environments. It supports multi-protocol communication including MQTT, LTE, GSM, and Wi-Fi, with compatibility for temperature, humidity, vibration, air quality (PM2.5), smoke sensors, and MODBUS RTU devices. With a compact design, flexible power options, and user-friendly configuration, it serves as a robust backbone for smart manufacturing, OEE tracking, and industrial automation deployments.



FEATURES

Single Device with Interchangeable Sensor Probes

Continuous Environmental Monitoring

User-Configurable Thresholds

Local Alerts (LED & Buzzer)

SMS Alerts via LTE

Real-Time Cloud Data Transmission (MQTT)

Technical Specification

SoC	ESP32-S3-WROOM-1	Protocol	MODBUS RTU
CPU	Xtensa® single-/dual-core 32-bit LX7 microprocessor	Cloud Communication	MQTT
Memory	384 KB ROM	Alarm Indication	LED + Buzzer
	512 KB SRAM	SMS Alert	LTE-based SMS on threshold crossing
	Up to 16 MB PSRAM	Threshold Setting	User configurable via onboard keys
Dimensions	172 x 142 x 50.6 mm	RS485	1
LTE	4G	Supply Voltage	DC 12V - 3A
GSM Bands	EGSM900 / DCS1800	Input Type	External DC Adapter
Wi-Fi	802.11n (2.4 GHz), up to 150 Mbps	Operating Temperature	0°C to +85°C
Antenna	On-chip Wi-Fi antenna	Mounting Type	Wall Mount / Panel Mount (if applicable)
	LTE Flex antenna	Enclosure Type	Industrial Housing
SIM Support	1.8V / 3.0V USIM/SIM	Humidity Accuracy	±1% RH @ 25°C
Sensor Type	7Semi Temperature & Humidity Sensor Probe	Display Resolution (Temp)	0.1°C
Sensor Grade	Industrial	Display Resolution(Humidity)	1% RH
Sensor Cable Length	2 Meter	Display Type	20 x 4 Character LCD
Temperature Range	-40°C to 125°C	Backlight	Blue
Humidity Range	0 to 100% RH	Keys	4 Keys (Menu, Up, Down, Enter)
Temperature Accuracy	±0.1°C @ 25°C	RTC	Real-Time Clock module with Date & Time