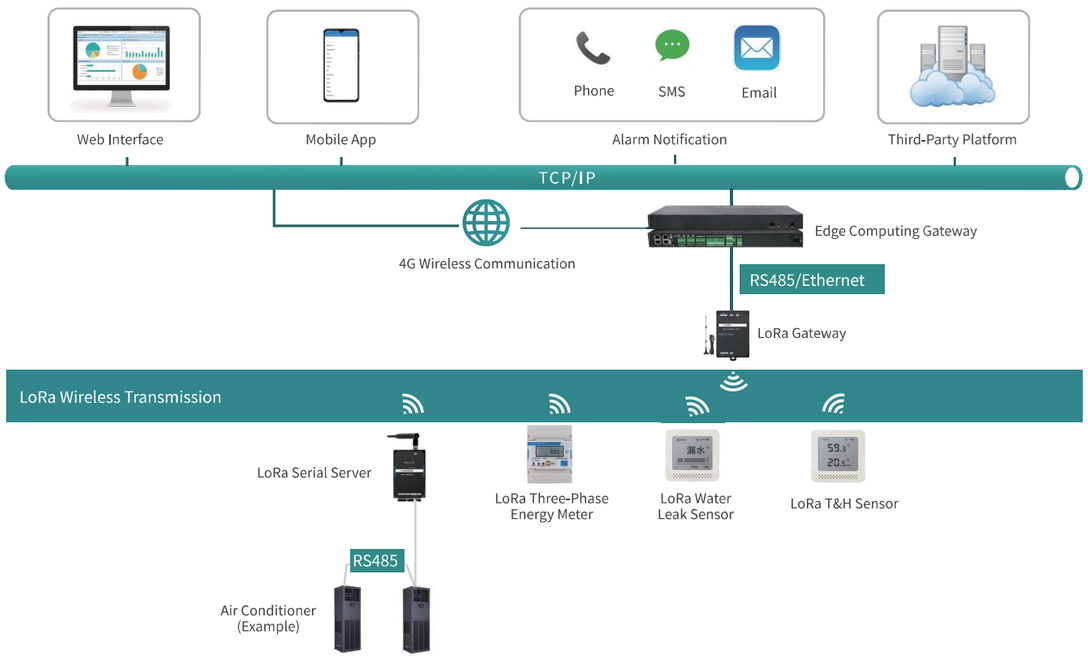
Zenvex AI

LoRa Wireless Series

Zenvex offers a comprehensive range of LoRa-based devices, including temperature and humidity sensors, water leak sensors, I/O modules, LoRa power meters, serial-to-LoRa converters, and LoRa communication gateways.

These products deliver long-range, low-power LoRa communication with strong interference immunity. Designed for flexible integration and easy deployment, they support scalable applications across a wide range of industrial and infrastructure environments.

System Topology



Product Highlights

Device Type	Product Appearance	Function Details
LoRa Gateway (Domestic Version)		Serial Port: 1× RS485 Communication: 1× Ethernet (uplink), 1× RS485 (uplink), WiFi (optional); LoRa (downlink, full frequency band, domestic version) Enclosure: Plastic housing
LoRa Gateway (Global Version)		Serial Port: 1× RS485 Communication: 1× Ethernet (uplink), 1× RS485 (uplink), WiFi (optional); LoRa (downlink, full frequency band, overseas version) Enclosure: Plastic housing
LoRa T&H Sensor (Domestic Version)		Temperature: 1 channel, -10°C to 55°C Humidity: 1 channel, 5%–95% Communication: LoRa Housing: Compact square magnetic mounting Additional: Built-in LCD display
LoRa T&H Sensor (Global Version)		Temperature: 1 channel, -10°C to 55°C Humidity: 1 channel, 5%–95% Communication:LoRa (Global bands: EU 863–868MHz, HK 920–925MHz) Housing: Compact square magnetic mounting Additional: Built-in LCD display
LoRa Non-Locating Water Leak Sensor		Max Leakage Sensing Cable Length: 300 meters Sensitivity: 4 levels Communication: LoRa Mounting: Magnetic
LoRa Serial Server		Interface: 1× RS485/RS232 to 1× LoRa Function: Supports one-to-one or one-to-many transparent data transmission Enclosure: Plastic housing Serial servers can be used in pairs or connected to LoRa gateways
LoRa Serial Server		Interface: 1× RS485 to 1× LoRa wireless (with built-in WiFi for configuration) Function: Supports one-to-one or one-to-many transparent data transmission Enclosure: Compact metal housing Serial servers can be used in pairs or connected to LoRa gateways
LoRa Three-Phase Energy Meter		Function: Real-time measurement of total and phase voltages, currents, active/reactive/apparent power, power factor and more Interface: RS485, LoRa Other: DIN rail mounting

Product Features

Flexible Deployment

Easily adapts and scales to complex network architectures, supporting quick addition or modification of network nodes across diverse application scenarios.

Low Maintenance Cost

Ultra-low power consumption extends battery life, enabling long-term, maintenance-free operation.

Reliable and Secure

LoRa signals are difficult to detect and intercept. Data is collected, processed, and stored locally on private networks, ensuring physical isolation from the internet and protecting against remote intrusion.

Strong Interference Immunity

Advanced spread spectrum modulation provides robust signal integrity, maintaining reliable communication even under high-noise conditions (up to 20 dB noise levels).