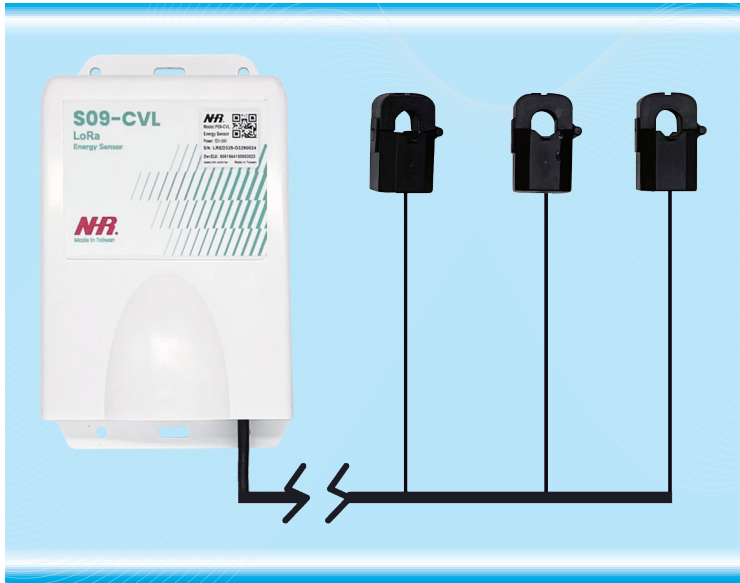# S09-CVL
Energy Sensor

Features & Benefits

- Measuring three(3) electric currents at the same time
- LPWAN data report wirelessly
- Built-in antenna for ease of installation
- Weather-proof for IP67 to sustain under stringent weather
- Built-in memory for alarm out-limit setting for management(Option)
- Firmare upgrade via BLE wireless for ease of maintenance
- Connecting to energy management system for usage optimization

Product description:

NHR S09 Series IOT Energy Meter has two features. First, it can measure energy metering data via current sensors for 3 electric lines, and then it reports the data to the IoT cloud platform through NB-IoT or LoRaWAN signal. The installer can monitor the electric current in real time through monitoring platform or mobile APP.
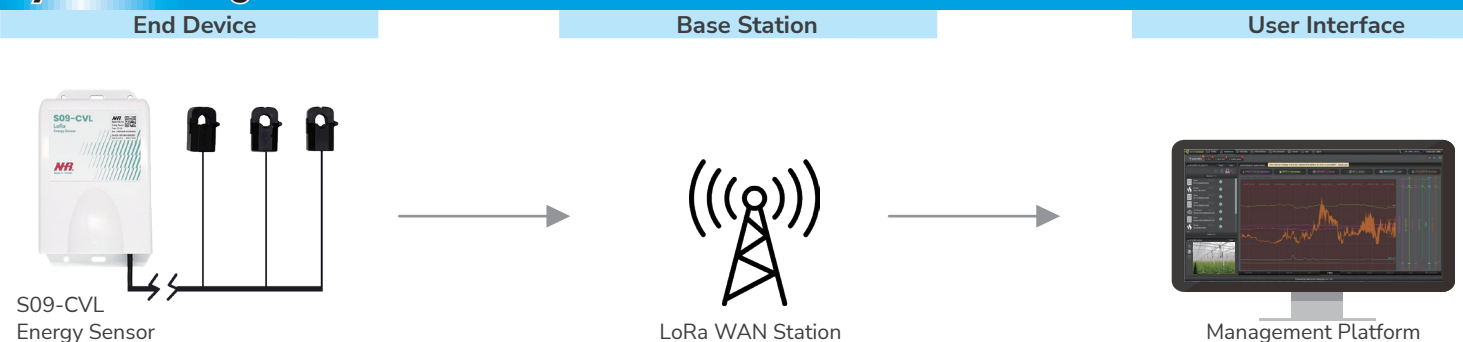
With the energy monitoring tool, the orgainzation is able to tap into the power consumption of the saperate room(s) or area(s) besides the whole floor for energy usage optimization given that the cost of energy is increasing over time. With its 3-in-1 currents measuring, the installer can easily calculate the power consumption of the focal system or devices. On top of the wireless transmission technology, it can connec to operator-grade connectivity, such as NB-IoT with SIM card built-in; or build your own cloud via LoRaWAN together with LoRaWAN gateway deployment.

Specifications

Power Input	Power Adaptor	AC 110~240V(50~60Hz)	Cable Length	Current Sennsor	2-meter(3-wire)	
	Power consumption	7.5W (Peak)		Power Cord	2-meter(Option)	
Sensor Clamp (3-sensor)	Order code: S09-CVL-150	150Aac, Wire-diameter Φ24, 2%	Wireless Communication	LoRaWAN	868/915/923MHZ	
	Order code: S09-CVL-30	30Aac, Wire-diameter Φ10, 2%		NB-IoT	Band-8 / Band-5 / Band-20 / Band-28	
	Order code: S09-CVL-10	10Aac, Wire-diameter Φ10, 2%		BLE	2.4GHz	
	Order code: S09-CVL-2	2.5Aac, Wire-diameter Φ10, 2%		Antenna	Built-in Antenna	
Configuration	Over-the-air BLE	Configure Aac range / Report time / Out-limit	Surroundings	Operating temperature	-25°C~+65°C	
				Storage temperature	-30°C~+70°C	
Sample Rate	500 mS one sample max			Humidity	10°C~80% RH (Non-condensing)	
Report Rate	Configurable: Minutes/Hour via BLE		Installation	Wall-mounted / Din-rail / Pole-mounted		
Alarm Out-limit	Set thhrehold for out-limit alarm report		Dimension	Transmitter (L)11.9 X (W)3.6 X (H)18.6 cm		
Statistics	Energy consumption statistics report (Option)		Weight	Transmitter 304g		
Calibration	Calibration-free					

System Configuration

End Device	Base Station	User Interface

S09-CVL Energy Sensor

LoRa WAN Station

Management Platform

V1.0