

Product Catalog



IoT Platform



Massive Facilities



LoRaWAN® Sensors

Agriculture LoRaWAN Sensors

Smart agriculture sensors need to run for seasons, not weeks — on battery, across fields, without cabling. The Particlesensing agriculture line covers LoRaWAN soil moisture and EC probes, PAR/ambient light, wind speed/direction and tipping-bucket rainfall for precision irrigation.



PS-410

AGRICULTURE

LoRaWAN Soil Moisture & EC Probe Kit

MEASUREMENT	Volumetric moisture + EC
PROBE PROFILE	Typical 10–20 cm profile
WIRELESS	LoRaWAN Class A - EU868/US915
BATTERY	Up to 2–3 years at 30-min interval
PROTECTION	IP68 probe ; IP65 node
TEMPERATURE	-20 to +60 C



PS-420

AGRICULTURE

LoRaWAN Ambient Light / PAR Sensor Kit

MEASUREMENT	PAR + ambient lux
PAR RANGE	0–2,000 $\mu\text{mol}/\text{m}^2/\text{s}$ typical
WIRELESS	LoRaWAN Class A - EU868/US915
BATTERY	Up to 3 years at 15-min interval
PROTECTION	IP65 enclosure
MOUNTING	Canopy-height bracket or pole mount



PS-450

AGRICULTURE

LoRaWAN Wind Speed & Direction Sensor Kit

MEASUREMENT	Wind speed + direction
SPEED RANGE	0 - 60 m/s
WIRELESS	LoRaWAN Class A - EU868/US915
BATTERY	Up to 2 years at 10-min interval
PROTECTION	IP65 sensor assembly
MOUNTING	Pole mount 2–10 m recommended



PS-460

AGRICULTURE

LoRaWAN Tipping-Bucket Rain Gauge Kit

PRINCIPLE	Tipping-bucket rainfall
RESOLUTION	0.2 mm per tip typical
ORIFICE	200 cm^2 typical (confirm on quote)
WIRELESS	LoRaWAN Class A - EU868/US915
BATTERY	Up to 3 years at 15-min interval
PROTECTION	IP65 assembly

Facility LoRaWAN Sensors

A water leak detection sensor is the cheapest insurance a plant room can have. LoRaWAN rope and spot probes from Particlesensing cover cable runs, drip trays and tank perimeters; magnetic door contacts add access and cold-room door status — all reporting wirelessly to your existing LoRaWAN network.



PS-210

FACILITY

LoRaWAN Rope Leak Detection Sensor

DETECTION	Conductive rope—wet/dry along cable
ROPE LENGTH	Up to 30 m
WIRELESS	LoRaWAN Class A - EU868/US915
BATTERY	Up to 5 years at 15-min interval
PROTECTION	Node IP65 ; rope wet-rated
TEMPERATURE	-20 °C to +60 °C



PS-211

FACILITY

LoRaWAN Spot Leak Detection Probe

DETECTION	Spot probe - wet/dry
MOUNTING	Freestanding or adhesive base
WIRELESS	LoRaWAN Class A - EU868/US915
BATTERY	Up to 5 years at event-driven reporting
PROTECTION	IP67 probe ; IP65 node
TEMPERATURE	-20 °C to +60 °C



PS-220

FACILITY

LoRaWAN Door / Window Magnetic Contact Sensor Kit

DETECTION	Magnetic reed - open/closed
GAP TOLERANCE	Typical ≤ 15 mm
WIRELESS	LoRaWAN Class A - EU868/US915
BATTERY	Up to 5 years at hourly heartbeats
PROTECTION	IP65 node and contact
TEMPERATURE	-20 °C to +60 °C



PS-240

FACILITY

LoRaWAN Submersible Water Level Sensor Kit

PRINCIPLE	Hydrostatic pressure — submersible
RANGE	0-5 m WC typical
ACCURACY	±0.5 % FS typical
WIRELESS	LoRaWAN Class A - EU868/US915
BATTERY	Up to 3-5 years at 15-min interval
PROTECTION	IP68 sensor - IP65 node

Industrial LoRaWAN Sensors

Industrial IoT sensors pay for themselves in avoided downtime. Particlesensing's industrial line combines LoRaWAN inline flow meters, pipe pressure transmitters and zone rope leak detection for process pipes, utilities, tanks and silos — battery-powered, decoder-ready and factory-tested.

INDUSTRIAL · PIPELINE MONITORING

Flow & Pressure

Battery-powered LoRaWAN nodes report L/min flow and 0–10 bar pressure on utility water, air compressor receivers and process branches — decoder-ready for TTN / ChirpStack, SCADA ingestion via MQTT after LNS decode.



PS-260

LoRaWAN Inline Pipe Flow Meter Kit

Pipe-mounted flow metering for water/process lines, consumption logging, and loss analysis.



MEASUREMENT	Inline volumetric flow
PIPE SIZE	DN15–DN50 typical
OUTPUT	L/min and cumulative m ³ in decoder
WIRELESS	LoRaWAN Class A - EU868/US915
BATTERY	Up to 3 years at 5-min interval
PROTECTION	IP65 node; meter IP68

PS-270

LoRaWAN Pipe Pressure Transmitter Kit

Industrial pressure sensing for pipelines, pump feedback, and network pressure anomalies.



PRINCIPLE	Piezo-resistive pressure transducer
RANGE	0-10 bar typical
ACCURACY	±0.5 % FS typical
WIRELESS	LoRaWAN Class A - EU868/US915
BATTERY	Up to 3 years at 5-min interval
PROTECTION	IP65 node ; sensor IP67

Food Chain LoRaWAN Sensors

Cold room temperature monitoring is a compliance requirement, not a nice-to-have. The food-grade PS-610 needle probe measures product-core temperature for HACCP process checks and cold-room records over LoRaWAN — no wiring, no manual logging.



PS-610 LoRaWAN Food-Grade Needle Temperature Probe Kit

PRODUCT OVERVIEW

- 01 Core-temperature measurement.** Food-grade needle probe measures product-core temperature from -40°C to 200°C typical — cooked product, sauce and batch checks.
- 02 Wireless by design.** LoRaWAN Class A node on EU868 / US915 uplinks $^{\circ}\text{C}$ on a schedule; battery life up to 2 years at scheduled readings.
- 03 Telemetry for HACCP plans.** Factory functional-test records and TTN / ChirpStack decoder maps ship with every kit; your HACCP plan still owns limits and corrective actions.

TECHNICAL SPECIFICATIONS

CATEGORY	Food Chain LoRaWAN Sensors
PRODUCT	PS-610 Food-Grade Needle Temperature Probe Kit
MEASUREMENT	Needle probe — product core $^{\circ}\text{C}$
PROBE MATERIAL	Food-grade stainless (confirm on datasheet)
PROBE RANGE	Probe -40°C to $+200^{\circ}\text{C}$ typical
WIRELESS	LoRaWAN Class A - EU868 / US915
BATTERY	Up to 2 years at scheduled readings
PROTECTION	IP67 probe; IP65 node

ABOUT US

About Q-Vision Technology Limited

- Established in 2019, with its headquarter located in Shenzhen, Guangdong, China
- R&D Centers in Shenzhen, Guangdong and Changsha, Hunan
- ParticleSensing is a trademark owned by Q-Vision for the company's IoT sensor products including LoRaWAN kits for leak, level, flow, pressure, soil, weather and food-grade temperature
- We build decoder-ready kits that report data operators can act on — practical innovation, long-term partnership, and quality without compromise.

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