

Solar energy, wireless networks, and sensor solutions

SRPC2 Series

Outdoor sensor network system supporting monitoring, weather observation, agriculture, and more

- Waterproof Case
- Equipped with a solar panel, ideal for monitoring in areas without power sources
- Supports various wireless technologies (LTE, Wi-Fi, LoRaWAN, specific low-power wireless, etc.)
- Communicates between multiple SRPC2 units via low-power wireless to aggregate data in one location
- Interfaces compatible with analog, serial, and contact inputs
- Compatible with cloud services like AWS and Azure
- Expandable with up to two solar panels and four batteries (3.2V 44Ah)
- Can also be used as a solar power source (with scheduling function)

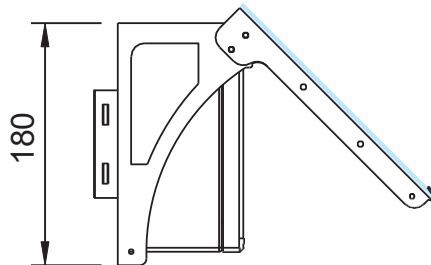
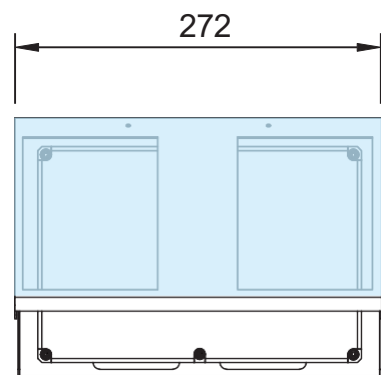
Compact Waterproof
Approx. 2 kg

Without charging
Approx. 10 days Power

LTE
Various ultra-small wireless devices Compatible

Various Sensors
can be connected

External dimensions;



Electrical Specifications;

Wireless I/F	LTE, Wi-Fi (for configuration), TS03 (315 MHz band), TS92 (920 MHz band), TS02E (429 MHz band), TS2410 (2.4 GHz band), LoRaWAN, BLE, GPS, etc.
Input terminals (4 ports)	Analog (voltage/current), Serial (RS-232C/RS-485/UART), I/O, etc.
Operating temperature	-20 to 70°C (no Condensation)
Current consumption	Average 40mA (excluding sensors, external devices, etc.)
Mass	Approx. 2 kg (including solar panel and rechargeable battery)
Rechargeable battery	Lithium iron phosphate 3.2V 11Ah (expandable up to 4 units)
Solar Panel	9W (expandable to 2 panels)
Waterproof Resin Case	160mm × 240mm × 91mm ※ Excluding protrusions
Continuous Operating Time	250 hours without charging (when fully charged, with an average current consumption of 40mA)



Wired/Wireless Sensor Connection

Features interfaces such as analog, serial, and contact input/output (Switchable via solder jumper or settings). Can be equipped with a micro-sized wireless module for wireless data retrieval.



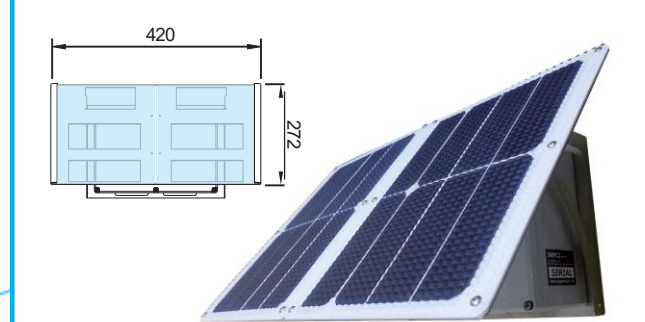
LiFePO4 Battery

The rechargeable battery uses a 3.2V 11Ah LiFePO4 battery. This battery with a long service life maintains over 80% of its capacity even after 3,300 charge/discharge cycles.



High-capacity types can also be produced

Up to two additional solar panels and four additional batteries can be added as needed. Can also be used as a solar power source (with scheduling function).



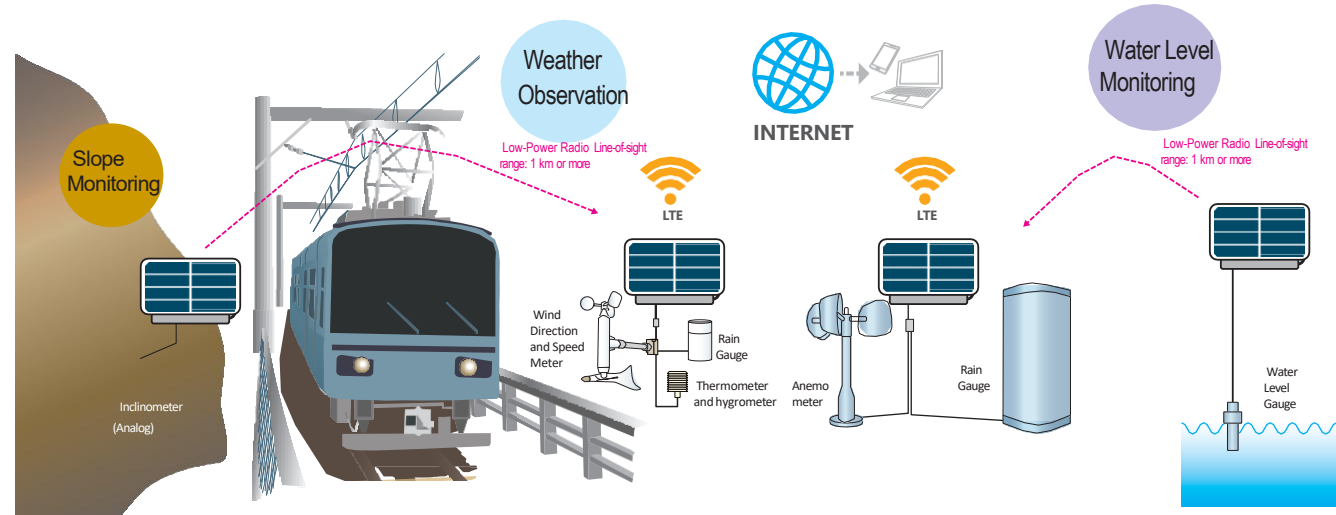
SRPC Case studies



Weather observation

Operating in Hokkaido, Kanagawa Prefecture, Shizuoka Prefecture, Kagawa Prefecture, Ehime Prefecture, Fukuoka Prefecture, Miyazaki Prefecture, Kumamoto Prefecture, and other locations!

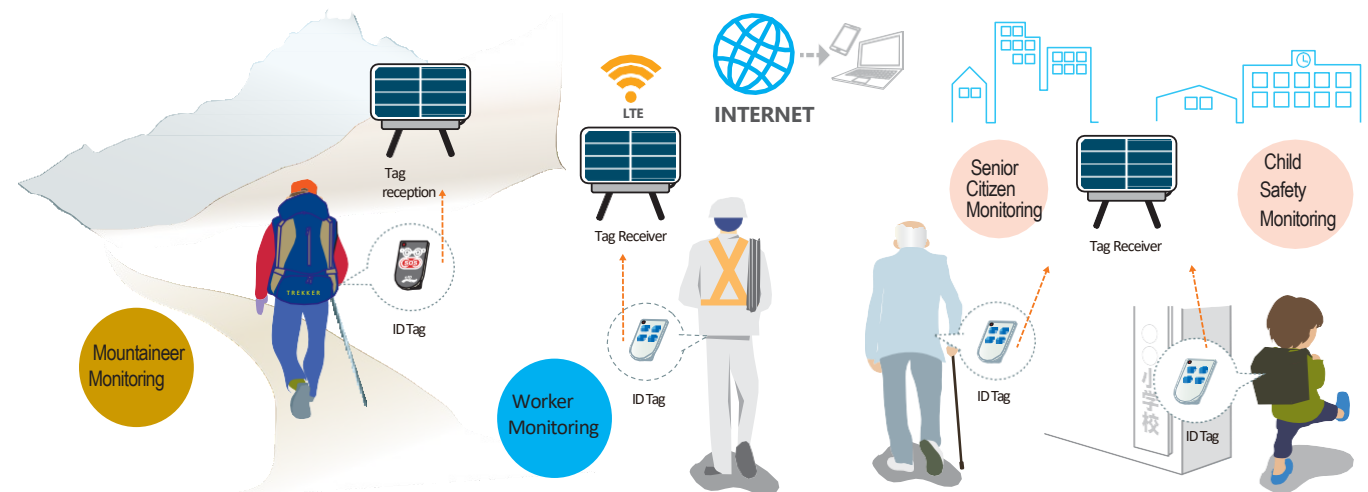
Collects sensor data such as wind direction/speed, temperature/humidity, and rainfall. Enables real-time monitoring of remote locations, aiding weather observation and disaster prevention. It is also used for heatstroke prevention measures in outdoor settings such as construction sites.



Tracking System

Monitoring workers, children, and hikers in Kumamoto Prefecture, Oita Prefecture, Saitama Prefecture, Nepal, and more!

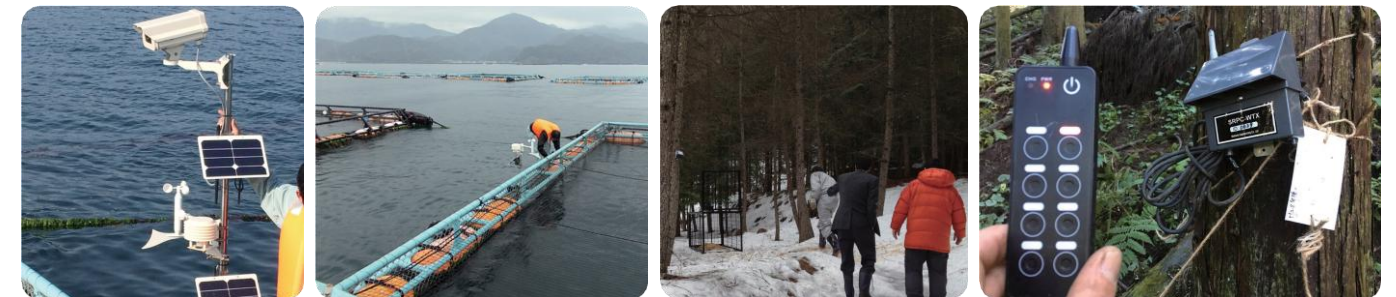
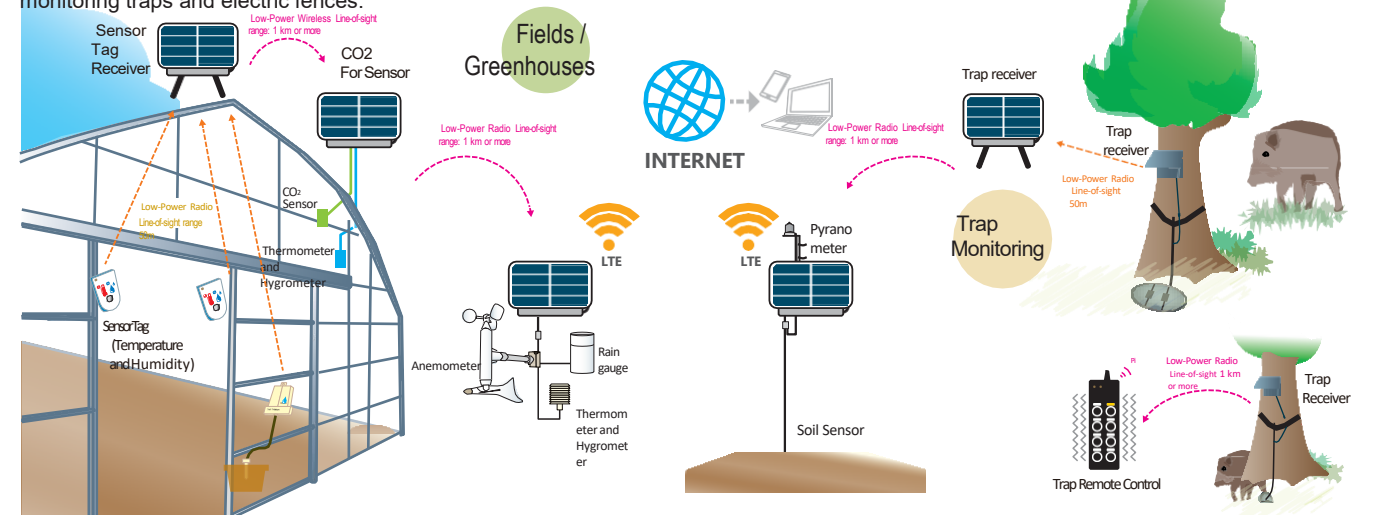
Receives signals from ID tags carried by people. SRPC tag receivers are placed at key locations such as entrance gates to monitor the location and movements of tag-carrying individuals, including construction site workers, children, the elderly, and hikers.



Agricultural support

Operating in Tochigi Prefecture, Tokyo, Kanagawa Prefecture, Nagano Prefecture, Fukui Prefecture, Ishikawa Prefecture, Shizuoka Prefecture, Miyazaki Prefecture, Kumamoto Prefecture, and more!

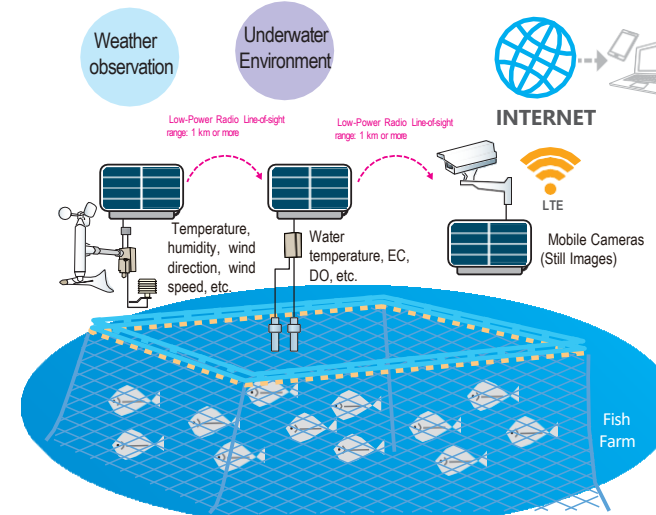
Aggregates sensor data such as temperature, humidity, solar radiation, wind direction/speed, and rainfall to monitor environments like greenhouses and fields. Temperature and wind speed thresholds can be set to automatically turn contact terminals on/off based on conditions. It is also used for wildlife damage prevention, such as monitoring traps and electric fences.



Fish farming

We monitor weather and underwater conditions at fish farms. We also use mobile cameras for visual confirmation.

Monitoring in Miyazaki Prefecture! Monitoring!



I/O Control

Controls up to 4 I/O points via a closed system of one transmitter and one receiver. The ACK function allows the transmitter to confirm communication success or failure, enabling status monitoring.

