



## All-Round Sensing, Wireless Connectivity

### R900CD01 Series

#### DC Current & Voltage Measurement

NETVOX is proud to introduce the **R900CD01 Series** LoRaWAN Multifunctional DC Current/Voltage Sensor – an all-in-one solution integrating multi-parameter detection and smart control. Designed to deliver comprehensive, long-range IoT monitoring across diverse scenarios.



It supports flexible configuration of **2 current channels, 2 voltage channels**, or **1 current + 1 voltage channel**, along with **1 or 2 NTC inputs** and **1 dry contact**.

## Key Features

- Dual-Channel DC Current/Voltage Precision Monitoring**

It supports precise collection of 2 independent DC current/voltage signals, featuring high precision and fast response.



- Dual-Channel NTC Cable Temperature Monitoring**

Integrated with NTC temperature sensors, it can synchronously capture cable temperature changes while monitoring DC current/voltage, effectively preventing cable overheating risks caused by overload, poor contact, line aging, etc.



- **Dry Contact Output for Intelligent Linkage**

Equipped with 1 dry contact (DO) output interface, local current, voltage, and temperature readings can be linked to trigger the local **DO dry contact output** for intelligent control.



- **Built-in Light Sensor for Enhanced Environmental Perception (Optional)**

The device is equipped with a built-in light sensor, which can real-time collect ambient light intensity data, suitable for scenarios such as smart lighting control, outdoor DC equipment operation and maintenance assistance.



## See, Hear, and Link

The combination of **R900CD01 + R603 + WA08A** forms a complete loop of **Monitoring** → **Alert** → **Visualization** → **Control**. It provides a reliable, low-power LoRa-based monitoring solution to make every watt of solar energy safer and more efficient.



When the R900CD01 Series detects current exceeding or falling below their thresholds...



**See**

Capture and send image of objects.



**Hear**

Sound custom alarm to notify people.



**3rd-party device**



**Linkage**

Get 3rd-party device connected

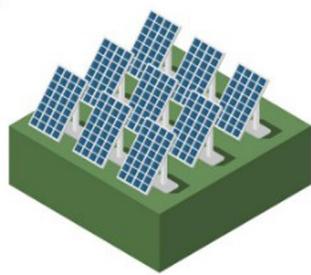
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## Application Scenarios

### New Energy Power Generation and Energy Storage Systems

#### Application Area:

- Industrial and commercial energy storage power stations
- Household energy storage cabinets
- PV DC combiner areas
- energy storage battery compartments



#### Monitoring Items:

- DC current/voltage (PV module output, energy storage battery charging/discharging circuit, combiner box branch parameters)
- Cable and battery pack temperature
- Internal light intensity of the compartment

#### Triggered Actions:

**R603** Alarm + **WA08A** Snapshot Upload + **DO** cut-off for protection

### Electric Vehicles and Charging Pile Facilities



#### Application Area:

- Vehicle DC charging stations
- Electric forklift charging areas
- Low-speed electric vehicle maintenance stations
- Outdoor DC charging pile clusters

#### Monitoring Items:

- DC current/voltage (fast charging pile output, forklift charging circuits)
- Charging cable/connector temperature
- Outdoor ambient light

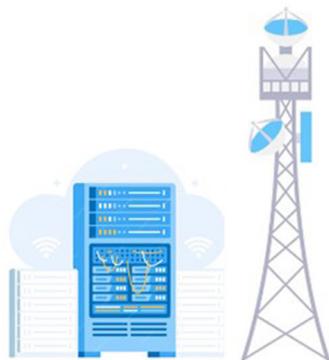
#### Triggered Actions:

**APP** alert + **WA08A** Image record + **DO** cut-off for protection

### Communication Base Stations & Data Centers

#### Application Area:

- Base station computer rooms
- DC power distribution areas of data centers
- UPS DC power rooms
- outdoor DC equipment cabinets of base stations



#### Monitoring Items:

- DC current/voltage (48V communication power supply, UPS DC circuit, main-standby power switchover parameters)
- Power cable and equipment terminal temperature

#### Triggered Actions:

Early warning + **WA08A** Image record + Data upload