



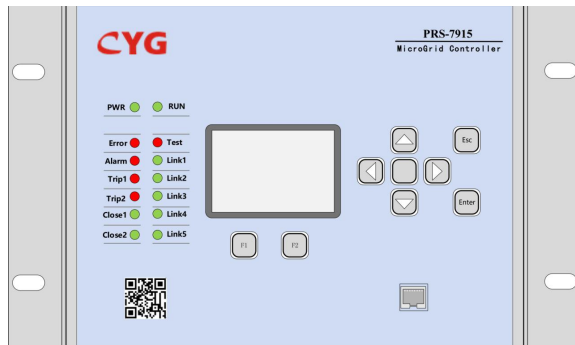
PRRS-7915



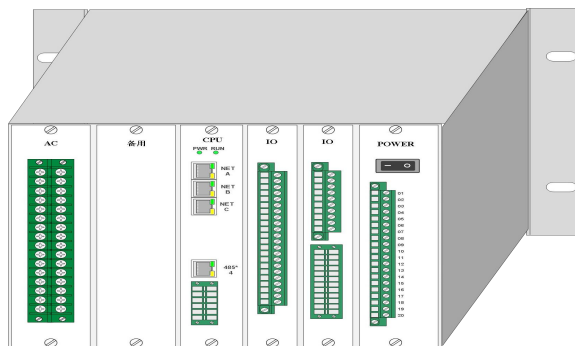
General Application

PRRS-7915 Microgrid Coordination Control Device is suitable for microgrid systems containing distributed generation sources. It achieves coordinated control among multiple micro-sources, loads, and the grid within the microgrid, ensuring economical and stable operation.

The device can be applied to AC microgrids of various voltage levels (0.4~35kV), DC microgrids, and hybrid AC/DC microgrids.



❖ Front Panel



❖ Rear Panel

Feature

Item	Parameter
Performance	IEC 61850 Standard-Based Design, Next-Generation Bus-Structured Hardware Platform
Hardware	Modularized hardware design, flexibly configurable, easy extension
Interface	The human machine interface (HMI) with a small control module (a 9-key keypad and 14 LED indicators)
Communication	Ethernet network, RS-485 serial ports. Communication protocol optional: IEC 61850, 101, 104, 103, Modbus.
Time Synchronization	SNTP and IRIG-B
Analog	Constantly measures and calculates voltage, current, power and frequency.
Recording	All protection operations, input status changes, self-diagnostics/device anomalies, operational/control actions, and fault waveforms

Protection Functions

Item	Parameter
Information collection	Upload information to the monitoring system through the communication system and also receive control commands from the monitoring system
Local and remote maintenance	Standard RS232, RS485, and Ethernet communication interfaces, enabling local and remote operations such as program replacement, parameter modification, and setting value downloads
Control	Grid-Connected/Islanded Control Grid-Connected Regulation Off-grid regulation Grid-connected and off-grid switching control Black start
Relay Protection	Overcurrent Protection Reverse power protection Islanding protection Frequency and Voltage Emergency Control Operation Status Monitoring
Data storage and upload	No fewer than 256 sequence of events records, 128 remote and local operation records, and 128 device exception records The device supports data concentration and forwarding

Protection Specifications

Mechanical and Environmental Parameters

Ingress protection rating of enclosure	Front panel: ≥IP40 Side panels, top/bottom plates: ≥IP30 Back panel: ≥IP20
Normal operating temperature range	-40°C~55°C
Maximum rate of change of ambient temperature	1°C/min
Relative humidity	5%~100%
Maximum absolute humidity	35g/m ³
Atmospheric pressure	70kPa~106kPa
Altitude	< 3000m
Mean Time Between Failures (MTBF)	≥50000h

Rated Electrical Parameters

Operate current	±1.0% of the set value or $\pm 0.005 \times I_n$
Blocking voltage	±1.0% of the set value or $\pm 0.005 \times U_n$
Reset time	≤45ms
Reset ratio	Typically 96%(±3%), Or ()(±3%)
Tolerance of operating time at instantaneous time mode without directional and voltage control element	≤25 ms at $I=2 \times I_{start}$ value
Tolerance of operating time at definite time mode	±1.0% of the set value or ±40 ms
Tolerance of operating time at inverse time mode	±5.0% of the theoretical value or ±40 ms, Start value multiples in range of 1.2...20 when $I > I_n$, Start value multiples in range of 2...20 when $I \leq I_n$.
Transient overreach accuracy (Only for Indonesia)	<10%
Transient accuracy overshoot	≤40ms

Protection Specifications

AC Sampling

Precision of AC voltage/current sampling	Level 0.5
Precision of DC voltage sampling	Level 0.5
Frequency sampling precision	<±0.002Hz
Sampling accuracy of active power, reactive power and power factor	Level 0.5
fault current input range	0~20I _n ; Precision of 10I _n : ≤±3%

Switch Value Input

Rated input voltage:	DC24V
SOE resolution:	< 2 ms
Software stabilization time:	0-60000 ms, configurable

Switch Value Output

Output type	NO contact
Max. operating voltage	10A/ AC250V, 10A /DC30V
Hold time	Configurable