

EMS Coordination Controller

WL-CC-1000

Application scenarios

The WL-CC-1000 monitors the voltage, frequency, and power at the grid connection point, accepts control commands from dispatching and electrochemical energy storage power station monitoring systems, and provides unified and rapid coordinated control of the entire power station's PCS (Power Control System), enabling functions such as primary frequency regulation and dynamic reactive power and voltage regulation. Installed in the energy storage power station, the coordinated controller significantly improves its performance in primary frequency regulation, source-grid-load interaction, and dynamic reactive power and voltage response, ensuring the safe and stable operation of the power grid. As the command center of the energy storage system, the coordinated controller is the core equipment of the power station, responsible for power coordination control and information exchange.

Product Introduction

The WL-CC-1000 Coordinator Controller is a flexible and customizable multi-functional control device. It can be customized with corresponding control logic according to the actual application environment requirements. It has a wide range of applications and can be used as a coordinator controller for new energy stations (photovoltaic, wind power, energy storage).



KeTop Certification

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System parameters

- Quad-core 64-bit Cortex -A55 CPU, clock speed 1.4 GHz (Up to 1.8 GHz)
- Onboard 1 GB DDR4 memory, 8 GB onboard eMMC storage
- Supports Linux and the domestic Kylin operating system
- IEC 104, Modbus TCP The protocol supports access from more than 300 slave stations
- GOOSE The protocol supports more than 128 PCs. Device access
- Supports dual-network configuration requirements
- Supports redundant configuration, with a switching latency of ≤ 100 ms
- Support Comtrade waveform recording, CSV waveform recording, TXT waveform recording
- Support probe installation monitoring
- Supports execution of 5 or more periodic tasks, with a minimum task period of 1 ms
- Supports automatic SOE recording with an error ≤ 1 ms
- Supports system equipment fault alarms and log queries
- The sampling frequency for voltage and current is 4.8 kHz

Structural parameters

Chassis structure	Aluminum alloy, providing excellent shock and impact resistance
Surface treatment	Brushed
Color	Silver-white
Weight	≤ 10 kg
Size	48.26 × 17.7 × 27.8cm (Width × Height × Depth)
Heat dissipation method	Fanless design

Other

Operating temperature	-40°C ~ 70°C
Operating humidity	$\leq 95\%$ RH (No condensation)
Maximum absolute humidity	35g/m ³
Atmospheric pressure	70kPa ~ 106kPa
The chassis protection performance	Protection level shall not be lower than the IP20 level requirements specified in GB/T4208