

## *Cabinet Controller for Intelligent Lighting Projects*

### **Description**

CH-J105 Smart Lighting Management Centralized Controller is independently developed by our company, which is widely used in the Smart City Street Lighting Projects, Super-highway's Tunnels and the Industrial Lighting such as big scale factory and warehouse Lighting System, control lighting fixtures through the man-machine interface, data acquisition and lamps Monitoring.

Although the Traditional lighting fixtures have widely used in the street lighting, tunnel and high buildings, but there are still a lots of problem exit there: Lifetime, Light Attenuation, Bad Factory Environments etc. which will lead to damage the lamps, moreover, dead plate controlling method, Lighting Scene, the fault points and failure lamps only be found by when the worker inspection there, it can not provide a reliable working data to the controllers on time. For these reasons, we offer this multi-functions smart lighting Centralized Controller: Electric Energy/Data acquisition, Fault Detect, Data Process, Remote Copying Control, Loop Power Control, Dimming, Auto-Running, Temperature Collecting, Sensor Data Acquisition etc.

The device has multiple interfaces, in addition to reserved Industrial Bus RS-485, RS-232, it is also equipped with Industrial Touch Screen Interactive Interface, Ethernet Communication Interface, GPRS Communication Interface, Lighting Control Interface (Power Line Carrier or LoRa Communication Channel) Communication Interface to the Loop Controller and Communication Interface with Sensors (such as Illuminance Sensors). The communication performance of the main communication interface is as follows: the communication distance of the RS-485 Industrial Bus can reach 2 km without Repeater, and the actual measurement in the tunnel can reach 1km.; A 7-level gateway can be set in the scene, and the maximum distance can reach 7km according to

1km of the gateway of each level, and the capacity of the equipment in the gateway is up to 255 units; LoRa Communication Interface, the communication distance can reach 2km without Repeater, the measured distance can reach 1km, and the communication distance can reach 10km in the case of repeater. PLC communication interface, the communication distance can reach 400m without repeater, and with repeater In this case, the communication distance can be up to 4km.

### ***Key Features:***

1. Server Capacity : Whole Country Projects can share one Server, Cloud Based Data Storage
2. Comm. Channels: PLC or LoRa / Hybrid PLC & LoRa with 2G/3G/4G
3. Automatic Switch: Turn On/Off, Dimming according to the Schedule or( Nature Light Intensity or Ambient Brightness--option)
4. Monitor Function: W/V/I/Tempt./Air Quality- PM2.5
5. Sensors Detect : Rain/Fog/Snowy/Cloudy/ Dimming according to the Vehicles Motion Sensor -- (Optional)
6. Max. Controlling: Qty. No limited
7. Wireless Comm.: 2,000m
8. Auto-Reporting: Temperature/ Malfunctions/Loop Power/Leakage/Door Open/Stealing
9. GPS/ Altitude & Latitude set & Sunrise / Warning any Abnormal Cases.

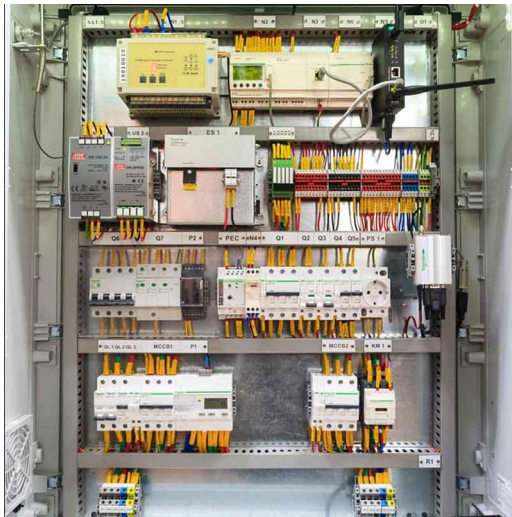
**Centralized Controller Electrical Parameter:**

Item	Rating Range
Maximum Loading Lamp Qty.	400 units(extend to1000 units, option for industry lighting)
Working Voltage	120/240V $\pm 20\%$ ( Max.<420V)
Working Frequency	50Hz - 60Hz
Switching Output	8A (MAX),Over-current Capacity (resistive load)
Insulation withstand voltage	4KV, (RS485 interface and power supply)
Communication Channels	PLC, LoRa, or Hybrid of PLC + LoRa
Maximum Consumption Power	< 3 watts
Remote Control	Group & Individual ON/OFF/Dimming
Latitude & Longitude Switch	Yes
Lighting Sensors	Seamless Fill brightness by Illuminance Sensor + Motion Sensor
Scene Lighting Automatically	Rainy, Cloudy, Fogs, Snowing Days Auto-adjusting
Grid / Lamp Monitoring	V/I/W/PW, Active & Reactive Power, Lamp Tempt., Cabinet Door Status, Air quality PM2.5, Snow, Rain, Fogs etc.
Power Metering	Reporting & Analysis

GPRS Warning		Lamp Failure, Over Temperature/Voltage, Wires Stolen, GPS location the Stealing-electricity on google map.
Statistical Analysis		Luminance Ration, Alarm Statistics, Power Saving Ration, Voltage/Current Fluctuate, Environment Monitor
Protection		Automatic Shut down when Over Tempt. ; Location Stealing & Automatic Calculation of Power Stealing, Wire Stealing Alarm & Location, Decreasing Current Impact
Asset Management		Lower Budget can choose our Asset Managing System
Video Monitoring		CCTV Camera for safer city (option)
EV Charging		Option
Insulation withstand voltage	L/N-PE	1.5KV
	L/N-485/DIM	3.5KV
Surge Protect (L-N L-PE N-PE)		$\pm 8KV$
Static Electricity		$\pm 8KV$
Operating Temperature		$-25^{\circ}C \sim +60^{\circ}C$
Storage and Working Humidity		$\leq 85\%$
IP Rating		IP54

Dimensions	155x110*110mm (L/W/H)
Certifications	CE, ROHS

**Photos for Reference:**



**Final detailed demand Need to confirm by your Owner!**

(Including the CC + Loop controller + Current Contactor + ON/OFF Switch / Surge Protection + Breaker +Smart Power Supply + Cabinet Box + Software)