

# SLC813 Smart Street Lighting Controller

(2700K ~ 6000K CCT Auto-Changing)

## I: Introduction

SLC813 intelligent light controller is an important part of the Intelligent Lighting Management System, which is PWM digital brightness adjusting technology, 0%~100% brightness dimming, to use PLC (Power Line Communication) technology, which is the most stable technology and not any interference, with Malfunction warning, temperature-detect, etc, to warranty most stability system.

SLC813 intelligent light controller use Digital Processing Sampling Technique and SMT process, according to the Lighting Management's Actual Application design and manufacturing it. All of the components are Industrial Grade, for longer life time and higher reliability.

Dimming and CCT Adjust methods include: Remote Controlling and Automatic Controlling

Remote controlling and color temperature(CCT) adjustment refers to: remote artificial intervention, dimming and CCT changing commands according to user requirement – after receiving the command, the management terminal will maintain the control state. When the management terminal is powered on or 24 hours later, it will recovers to automatically operating(0–24 hours can be set, and the default is not resumed), the management terminal is restored to automatic state to avoid the intervention operator forgetting; the maintenance state can be lifted immediately by the "recovery auto-run" command.

Automatic control of lighting and coloring refers to: Manage the terminal according to the set timetable and corresponding light adjustment, color adjustment value, and automatically control the illuminance and color temperature effect of the lamp daily.

Dual Colors Temperature Solutions: 2700K ~ 4500K/6000K Automatic

Changing by Weather Sensor

Our Dual Colors Temperature LED street lighting will be perfect solution for the heavy snowing area, serious fog & rains roads, they will be automatically changing the CCT from( from example 4500/6000k to 2700k) nature white-Daylight/cool white to Warm white color by the intelligent sensors when detecting of dense fog, rainstorm or snowing.

Moreover our Intelligent street lighting system is a core element for the smart city platform, with maximum power saving rate up to 80% than traditional high pressure sodium lamps and the metal halide lamps by dimming on-demand lighting brightness to the whole city, and at least more of 30% power saving than normal led street lamps without the smart lighting control & management system, and extend the lamps service lifetime dramatically by dimming to minimum safety illumination at midnight.

## II: Electrical Specifications

Dimming Output Current	< 20mA
Working Voltage	120/240V
Relay Control Voltage	220V
Electrostatic	> 8KV
Surge Immunity	>4KV
Power Consume	< 2W
Normal Working Temperature	- 25℃ ~ + 60℃
Limited Working Temperature	- 40℃ ~ + 80℃
Storage and Transportation Temp. Range	- 40℃ ~ + 80℃
Storage and Operating Humidity Range	≤85%

## III: Key Features

### 1. Controlling Functions

- 1). Light Controller will Control individual LED Light by PLC (Power Line Communication), On/Off, 0%~100% dimming under the Centralize Controller/Sub-Controller.
- 2). Figure out local Sunset, Sunrise time by Longitude and Latitude to ON/OFF the Driver
- 3). ON/OFF, Dimming Automatically by Programmed Schedule, 6 Schedules per day, or more. Every schedule has a dimming range, 0%~100%, 0% means OFF work. The schedule must be incremental mode. That is to say, next period must be later of previous, otherwise, this period and all of later will not valid.

### 2. Malfunctions Report

Individual Light Controller is detected work status and malfunctions by Centralize Controller any time, feedback the real-time failure to it.

### 3. Communication Function

PLC Port: Remote Control and Read the Individual Light Controller' s Setting Parameter, Working Parameter by PLC( LoRa, RS-485 option on other models).

### 4. AC Sampling

Built-in Electric Energy Metering Chip on the Individual Lamp Controller, it will collect LED Light' s: Current, Voltage, Active Power, Power Factor.

Judge if the LED Light is failure or not by according to the Current and Power.

### 5. Temperature Detect

To detect LED Light Interior working temperature, - 90℃ ~ + 99℃, temperature warning range is settable. It is un-normal temperature if over the warning temperature range.

## IV: Cautions:

1. Max. Dimmable Drivers control Qty: 5 units and **Must < 400W**
2. Prohibit 5pcs or more drivers to connect on ONE Light Controller, Relay Switch lifetime will be shorten if Capacitor releases electricity during power off moment.
3. Max. Controlling Power Range: < 400W
4. Installing position should be: Solid, Fireproof, no-vibration. There have to be a protection box if it is duty or easier damage to the light controller.
5. Must be strictly according to the Wiring Diagram during installing, poor contact or too slim cable will generate heating and damage.

## V: Dimensions & Wiring Diagram



### Smart LED Street Lighting Hybrid Color Temperature 2700K~4500K

