

# SLC810 Smart Street Lighting Controller

## I: Introduction

SLC810 intelligent light controller is the 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 Mal-function warning, temperature-detect, etc, functions, to get most stability system.

SLC810 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 Industry Grade, for longer life time and higher reliability.

Compact design to install in the Street Light enclosures, simple and easy installing.

## II: Electrical Specifications

Dimming Output Current	< 20mA
Working Voltage	120/240V
Relay Control Voltage	220V
Electrostatic	> 8KV
Surge Immunity	>4KV
Power Consume	< 2W

### Climatic Conditions:

Normal Working Temperature	- 25°C ~ + 60°C
Limited Working Temperature	- 40°C ~ + 80°C
Storage and Transportation Temp. Range	- 40°C ~ + 80°C
Storage and Operating Humidity Range	≤85%

## III: Functions 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. Mal-Functions Report

Individual Light Controller is detected work status and mal-functions 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.
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,  $-90^{\circ}\text{C} \sim +99^{\circ}\text{C}$ , temperature warning range is settable. It is un-normal temperature if over the warning temperature range.

## IV: Remarks

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

