



# LED Lighting Surge Protector Datasheet

## ZYS-P20SD

### SPECIFICATION FOR APPROVAL

Supplier Name : Shenzhen Zhongyuan Technology Co., Ltd.

Supplier Part Number : ZYS-P20SD

Supplier Material Code : 101-1021120101

Supplier Warranty : Five Years Warranty

Packaging Method : 20PCS/Box ,16Box/CTN ,320PCS/CTN

Special Requirements : \_\_\_\_\_

#### Product Parameters:

| Input Voltage | Lightning Protection    | IP Rating | Connection Mode   | Certificate |
|---------------|-------------------------|-----------|-------------------|-------------|
| 100-277Vac    | L-N:20KV<br>L/N-PE:20KV | IP67      | Serial Connection | TUV/CB/CE   |

Please send back confirmation letter to our company after sign and stamp.

| Customer sign and stamp |  | Supplier sign and stamp |              |
|-------------------------|--|-------------------------|--------------|
| Admit                   |  | Formulate               | Chen Yangkun |
| Verify                  |  | Verify                  | Tang Wenhao  |
| Approval                |  | Approval                | Jie Wang     |



### Overview

ZYS-P20SD series surge protector is a transient over-voltage protection device specially used for outdoor LED lighting system. It is mainly composed of protection varistor and gas discharge tube device. It can be installed in LED lamp or perpetual lamp and connected with LED power driver to provide reliable surge protection. It can effectively prolong the service life of lamps and improve the stability of lamps. The protection device must be metal oxide varistor type MOV (Metal Oxide Varistor).


### Features

- ◆ Applicable to class I or II lamps
- ◆ Built in protection mode: L-N, L-PE, N-PE
- ◆ Built in thermal separation function for higher security
- ◆ Serial isolation design, excellent protection performance
- ◆ Excellent surge resistance and very low residual voltage
- ◆ CCC 1\*1.0mm<sup>2</sup> electronic wire
- ◆ Small and convenient for embedded installation
- ◆ IP67 dust proof and waterproof grade

### Application

- ◆ Digital Signage
- ◆ Traffic Lighting
- ◆ Flood Lighting
- ◆ Tunnel Lighting
- ◆ Street lighting
- ◆ Wall Lamp
- ◆ Road Lighting
- ◆ Parking Lighting
- ◆ AC-LED Lighting

### Agency Approvals

| Agency   | Standard            | Agency File Number |
|--|---------------------|--------------------|
|  | EN61643-11:2012+All | R50600620          |
| <b>CB</b>  | IEC 61643-11:2011   | HU-004562          |
| <b>CE</b>  | IEC 61643-11:2011   | CN23GGVB 001       |

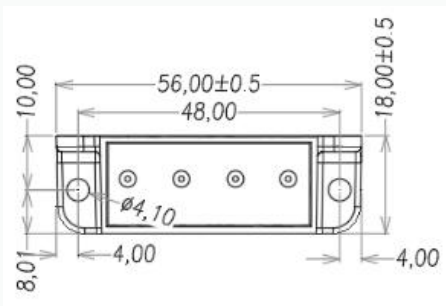
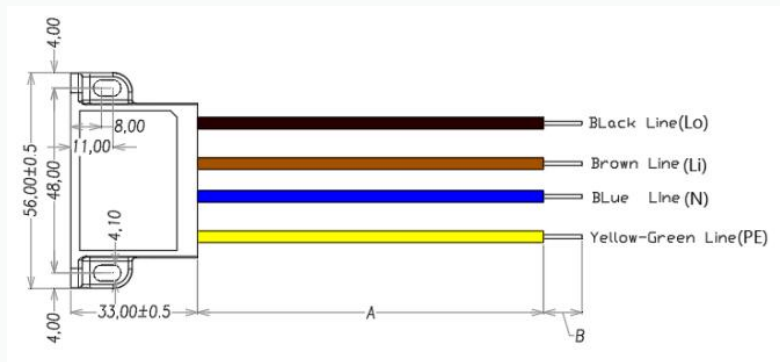
### Parameters

| Part Number  | ZYS-P20SD                       |
|--|---------------------------------|
| Rated working voltage/Un (VAC)                       | 100-277V                        |
| Maximum continuous working voltage/MCOV/Uc (VAC) (1) | 350V U <sub>c(N-PE)</sub> =255V |
| Rated load current/IL(A)                             | 8A                              |
| Nominal discharge current/In(kA)(2)                  | 10KA                            |
| Maximum Discharge Current/Imax (kA) (3)              | 20KA                            |
| Surge Impulse Voltage/Uoc (KV)                       | 20KV                            |
| Voltage Protection Level/Up(V)(4)                    | L-N/L-G/PE,N-G/PE≤1.8KV         |
| Power Supply System                                  | TN                              |
| Waterproof grade                                     | IP67                            |
| Work environment                                     | -40°C~+85°C                     |
| IEC 61643-11B test classification                    | Type 2and Type 3                |

### Notes

- (1) Maximum continuous working voltage MCOV/UC(VAC): The maximum continuous working voltage continuously applied to the SPD line end
- (2) Nominal discharge current (In) (kA): The measured value of SPD withstand capability; the measured value of 15 pulses using 8/20us current waveform.
- (3) Maximum discharge current (max) (kA): The maximum discharge current is the measured value of the SPD's maximum withstand capability, and the measured value of 2 pulses using 8/20us current waveform
- (4) Voltage protection level/Up: IEC61643-11 voltage protection level, the maximum residual voltage measured value of the nominal discharge current (In) under continuous application of 8/20u pulses, is the maximum voltage measured value after one round

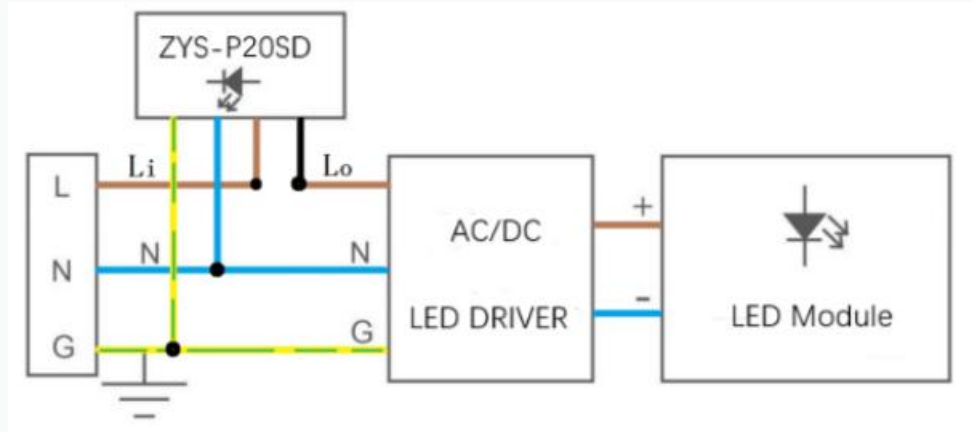
### Dimension



| Cable                          | A             | B           |
|--------------------------------|---------------|-------------|
| <b>VDE 1*1.0mm<sup>2</sup></b> | <b>110±10</b> | <b>10±1</b> |

Note: The tolerance of the external dimensions of the rubber shell is uniformly  $\pm 0.5\text{mm}$ , and the tolerance of the fixed hole spacing and hole diameter is uniformly  $\pm 0.2\text{mm}$ ;

### Diagram



### Packaging Method

|              |            |               |                     |    |        |
|--------------|------------|---------------|---------------------|----|--------|
| Size (L*W*H) |            | 455*364*225mm |                     | NW | 16.6KG |
| QTY          | 320PCS/CTN | Packing       | 20PCS/Box*16box/CTN | GW | 17.3KG |

