



Specifications

Constant Voltage LED Power Supplies IP44/IP65 Series -PGZW, 20W

PAIRUI ELECTRONICS

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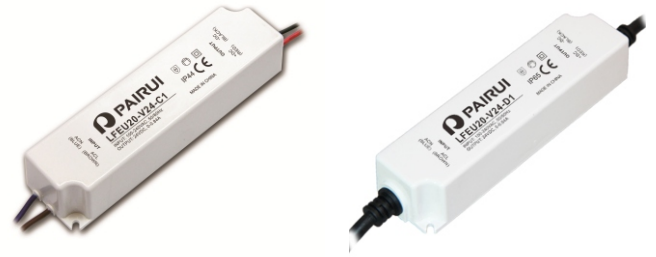
2020

LED Power Supplies for Outdoor Use

PGZW SERIES, 20WATT, IP44/IP65 RATING

Features

- 3 Years Warranty
- Universal Input Voltage Range: 100~240Vac
- Constant Voltage Output Mode
- Waterproof Rating IP44/IP65
- Built-in Active Power Factor Correction
- Class II Power, no FG
- All Round Protections: Short Circuit, Over Voltage, Over Current



Applications

- ✓ Garden Light
- ✓ Cabinet Light
- ✓ Landscape Light
- ✓ Other Indoor and Outdoor used Lights
- ✓ Strip Light

Electrical

| Part Number | Output Power | Output Current | Output Voltage | Efficiency | Certificate |
|--------------------|--------------|----------------|----------------|------------|-------------|
| PGZW020V0012NSFPC1 | 20W | 0-1670mA | 12V | 78% | CE |
| PGZW020V0024NSFPC1 | 20W | 0-840mA | 24V | 80% | CE |
| PGZW020V0036NSFPC1 | 20W | 0-560mA | 36V | 83% | CE |
| PGZW020V0048NSFPC1 | 20W | 0-420mA | 48V | 85% | CE |

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NOTE: IP44: PGZWxxxVxxxxNSFPC1, IP65: PGZWxxxVxxxxNSFPD1

INPUT

| PARAMETER | CONDITIONS | MIN | TYP | MAX | UNITS |
|------------------|------------------------|-----|-----|-----|-------|
| Input frequency | | 47 | | 63 | Hz |
| Input current | Full load, Vin=230Vac | | 0.2 | | A |
| Inrush current | Cold start, Vin=230Vac | | | 50 | A |
| Power factor(PF) | Full load, Vin=230Vac | 0.9 | | | |
| Surge voltage | L-N | | 2 | | KV |

OUTPUT

| PARAMETER | CONDITIONS | MIN | TYP | MAX | UNITS |
|-------------------------|--|-----|-------|-----|-------|
| Output voltage accuracy | | | ±5 | | % |
| Line regulation | Vin from 100Vac to 240Vac | | ±5 | | % |
| Load regulation | Vout from min. to max. | | ±5 | | % |
| Turn-on delay time | Full load, cold start, power on | | 1000 | | ms |
| Ripple | Please refer to below measuring method | | 20%Vo | | mVp-p |
| THD | Output load (Full load) | | 20 | | % |

NOTE: The values are measured at 20MHz of bandwidth by using a 12'' twisted pair-wire terminated with 0.1uF & 47uF parallel capacitor under ambient temperature 25°C at rated input voltage and rated load.

Protection

| | |
|---------------|--|
| Short circuit | In hiccup mode, it will recover automatically after fault condition is removed |
| Over voltage | 110-150% Vout, it will recover automatically after fault condition is removed |
| Over current | In hiccup mode, it will recover automatically after fault condition is removed |

Environment

| PARAMETER | CONDITIONS | MIN | TYP | MAX | UNITS |
|-------------------------------|---|-----|-----|-----|-------|
| Ambient operating temperature | Startup at rated voltage (Derating required) | -25 | | +50 | °C |
| Operating relative humidity | Non condensing | 20 | | 90 | % |
| Storage temperature | Humidity 10 ~ 95% RH | -40 | | +80 | °C |
| Maximum case temperature | Hot-spot on case | | | +75 | °C |
| Lifetime | Full load, 220Vac input, 25°C ambient temperature | 30 | | | Khrs |
| Waterproof rating | Slim wire IP44 Heavy wire IP65 | | | | |
| Dimension(LxWxH) | 121.4 x 35.0 x 26.4mm | | | | |
| Weight | 300g | | | | |

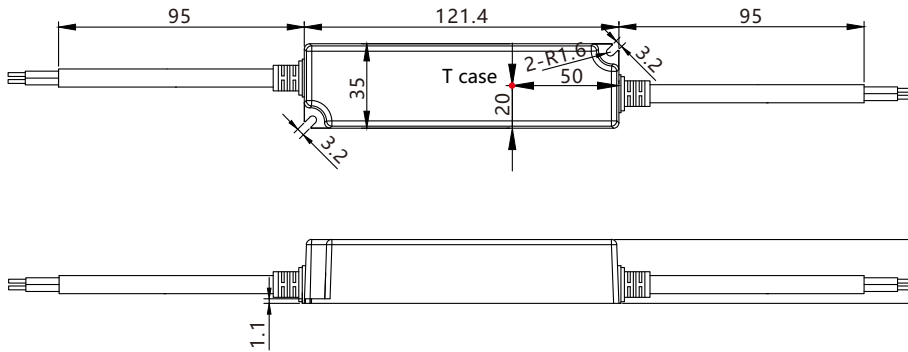
Safety/EMC

| | |
|--------|--|
| Safety | Design refer to UL8750, EN61347, EN61347-2-13 |
| EMC | Compliance to EN55015, FCC Part 15 Class B, EN61000-3-2, EN61000-3-3, EN61000-4-2, 3, 4, 6, 8, 11, EN61547 |

NOTE: Unless otherwise specified, all the above parameters are measured at ambient temperature of 25°C and Vin=100Vac to 240Vac.

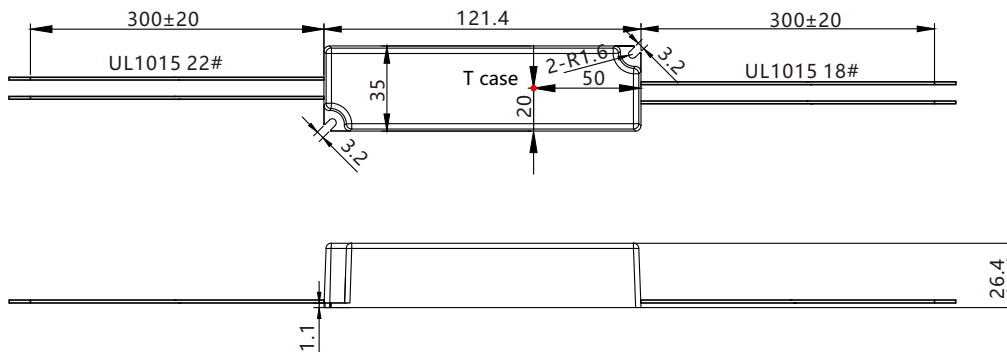
Mechanical

Heavy wires



Unit: mm

Slim wires



Unit: mm

Electrical Curve

