



FEATURES

- ☐ 3 Optional dimming(0-10V / PWM / Resistance)
- ☐ Universal AC input/Full range(100-277VAC)
- ☐ Protections: Short circuit / Overload / Over voltage
- ☐ Built_in active PFC function
- ☐ Fully encapsulated with IP67 level
- □ UL60950 Class 2 power unit, pass LPS
- Cooling by free air convection
- □ 100% full load burn-in test
- High reliability
- ☐ Suitable for LED lighting and moving sign applications
- Compliance to worldwide safety regulations for lighting
- Damp / wet location outdoor application

SPECIFICATION

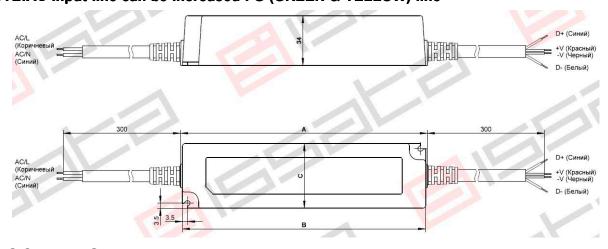
| MODEL | | IS 40DP | IS 40DP | IS 40DP | IS 40DP | IS 40DP | | | | |
|---------------|--------------------------|---|----------------|---------------------|-------------------|-----------------|--|--|--|--|
| | MODEL | -350 | -700 | -1050 | -1400 | -1750 | | | | |
| | DC VOLTAGE | 120V | 60V | 40V | 30V | 24V | | | | |
| | CONSTANT CURRENT | 72~120V | 36∼60V | 24~40V | 18∼30V | 15∼24V | | | | |
| | REGION | 72 120 0 | 00 001 | 24 400 | 10 00 0 | 10 240 | | | | |
| | RATED CURRENT | 350mA | 700mA | 1050mA | 1400mA | 1750mA | | | | |
| | RATED POWER | 42W | 42W | 42W | 42W | 42W | | | | |
| OUTPUT | RIPPLE & NOISE (max.) | 5Vp-p | 3Vp-p | 3Vp-p | 2Vp-p | 2Vp-p | | | | |
| OUIPUI | CURRENT RIPPLE | <15% | <15% | <15% | <20% | <20% | | | | |
| | VOLTAGE TOLERANCE | | ±3.0% | | ±2.0% | | | | | |
| | LINE REGULATION | ±1.0% | | | | | | | | |
| | LOAD REGULATION | | ±2.0% | | | | | | | |
| | SETUP,RISE TIME | 1000ms, 80ms / 230VAC 1000ms, 80ms / 115VAC at full load | | | | | | | | |
| | HOLD UP TIME (Typ.) | 60ms / 230VAC 30ms / 115VAC at full load | | | | | | | | |
| | VOLTAGE RANGE | 100 - 277VAC | | | | | | | | |
| | FREQUENCY RANGE | 47∼63Hz | | | | | | | | |
| | POWER FACTOR | PF>0.95/230VAC PF>0.99/115VAC at full load | | | | | | | | |
| INDUT | | PF≥0.9 at 75 ~ 100% load, 115VAC / 230VAC | | | | | | | | |
| INPUT | EFFICIENCY(Typ.) | 88% | 88% | 88% | 87% | 86% | | | | |
| | AC CURRENT(at full load) | 0.65A / 115VAC | | | | | | | | |
| | INRUSH CURRENT (max.) | COLD START 65A/230VAC | | | | | | | | |
| | LEAKAGE CURRENT | <2mA / 240VAC | | | | | | | | |
| | OVED CURRENT | 95 ~ 108% | | | | | | | | |
| DDATEAT | OVER CURRENT | Protection type: Constant current limiting, recovers automatically after fault condition is removed | | | | | | | | |
| PROTECT ON | SHORT CIRCUIT | Hiccup mode, re | ecovers automa | tically after fault | condition is rem | oved | | | | |
| | OVER VOLTAGE | 150∼180V | 75∼90V | 50∼60V | 37. 5∼45 V | 30 ∼36 V | | | | |
| | OVER VOLIAGE | Protection type : Shut down o/p voltage, Hiccup mode,auto recovery | | | | | | | | |



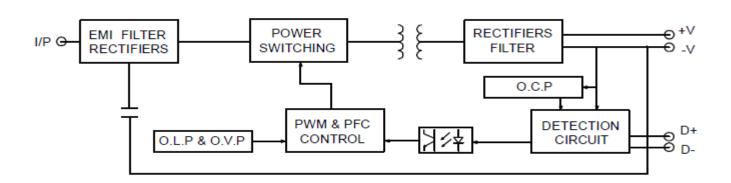
| | WORKING TEMP. | -30 ~ +60℃ @ full load ;+90℃ @ 60% load | | | | | | |
|-------------|----------------------|---|--|--|--|--|--|--|
| | WORKING HUMIDITY | $20{\sim}95\%$ RH non-condensing | | | | | | |
| | STORAGE TEMP., | -40∼80℃, 10∼95% RH | | | | | | |
| | HUMIDITY | | | | | | | |
| ENVIRONMENH | TEMP.COEFFICIENT | ±0.03%/℃ (0∼50℃) | | | | | | |
| | VIBRATION | 10 ~ 500Hz, 5G 12min./1cycle, period for 72min. each along X, Y, Z axes | | | | | | |
| | SAFETY STANDARDS | Design refer to EN61347-1,EN61347-2-13,meet IP67 | | | | | | |
| | | | | | | | | |
| SAFETY | WITHSTAND VOLTAGE | I/P-O/P:3.0KVAC | | | | | | |
| & EMC | ISOLATION RESISTANCE | I/P-O/P:>100M Ohms / 500VDC / 25~70% RH | | | | | | |
| | EMC | Design refer to EN55015,EN61000-3-2,EN61000-3-3,EN61547 | | | | | | |
| | | >400VII.cuma (95°C) | | | | | | |
| MTBF | | ≥400KHours (25°C) | | | | | | |
| Г | DIMENSION | A(150)*C(43)*34mm (L*W*H) | | | | | | |
| | | | | | | | | |

■ MECHANICAL SP97 = ₹5H=CN

NOTE:AC Input line can be increased FG (GREEN & YELLOW) line



BLOCK DIAGRAM

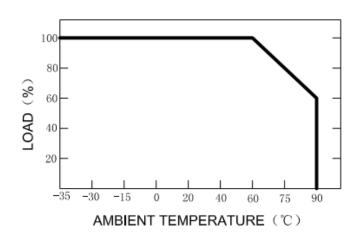


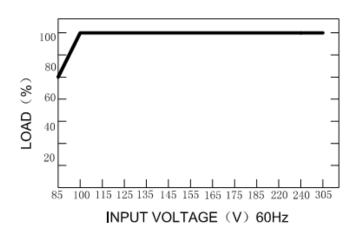


CHARACTERISTIC DIAGRAM

LOAD & TEMPERATURE FEATURE

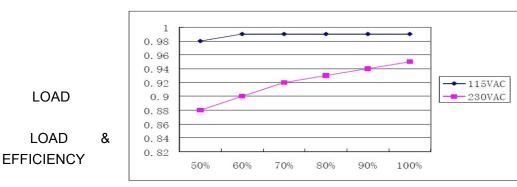
LOAD & AC INPUT VOLTAGE



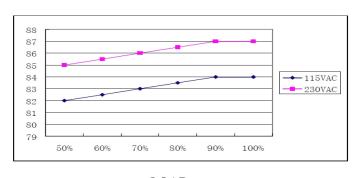


LOAD & POWER FACTOR





Eff.(%)



LOAD

• DIMMER OPERATION

Frequency range: >10KHz





NOTE: Connected a resistor or $0\sim10V$ DC voltage or 10V PWM signal between D+ and D- ,LED Driver can output constant current.

Adjust the value of the resistance value (Typical value)

| Resistor value | 0 | 10K Ω | 20K Ω | 30K Ω | 40K Ω | 50K Ω | 60K Ω | 70K Ω | 80K Ω | 90K Ω | 100K Ω | OPEN |
|----------------|----|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|------|
| LED current | 0% | 10% | 20% | 30% | 40% | 50% | 60% | 70% | 80% | 90% | 100% | 100% |

$0\sim$ 10V DC voltage (Typical value)

| 0~10V | 0V | 1V | 2V | 3V | 4V | 5V | 6V | 7V | 8V | 9V | 10V | OPEN |
|-------------|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|
| LED current | 0% | 10% | 20% | 30% | 40% | 50% | 60% | 70% | 80% | 90% | 100% | 100% |

10V PWM signal (Typical value)

| PWM signal | 0% | 10% | 20% | 30% | 40% | 50% | 60% | 70% | 80% | 90% | 100% | OPEN |
|-------------|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|
| LED current | 0% | 10% | 20% | 30% | 40% | 50% | 60% | 70% | 80% | 90% | 100% | 100% |