



50~60W AC-DC Single Output Desktop

SPU50 series



■ Features :

- 3 pole AC inlet IEC320-C14
- Class I power (with earth pin)
- Full output 5~48V safety approval
- Protections: Short circuit/ Over load/ Over voltage
- Fix switching frequency and regulation
- LED indicator for power on
- Fully enclosed plastic case
- Topology: PWM 3882 circuit
- Approvals: UL/ CUL / TUV / CB / CE
- 1 year warranty

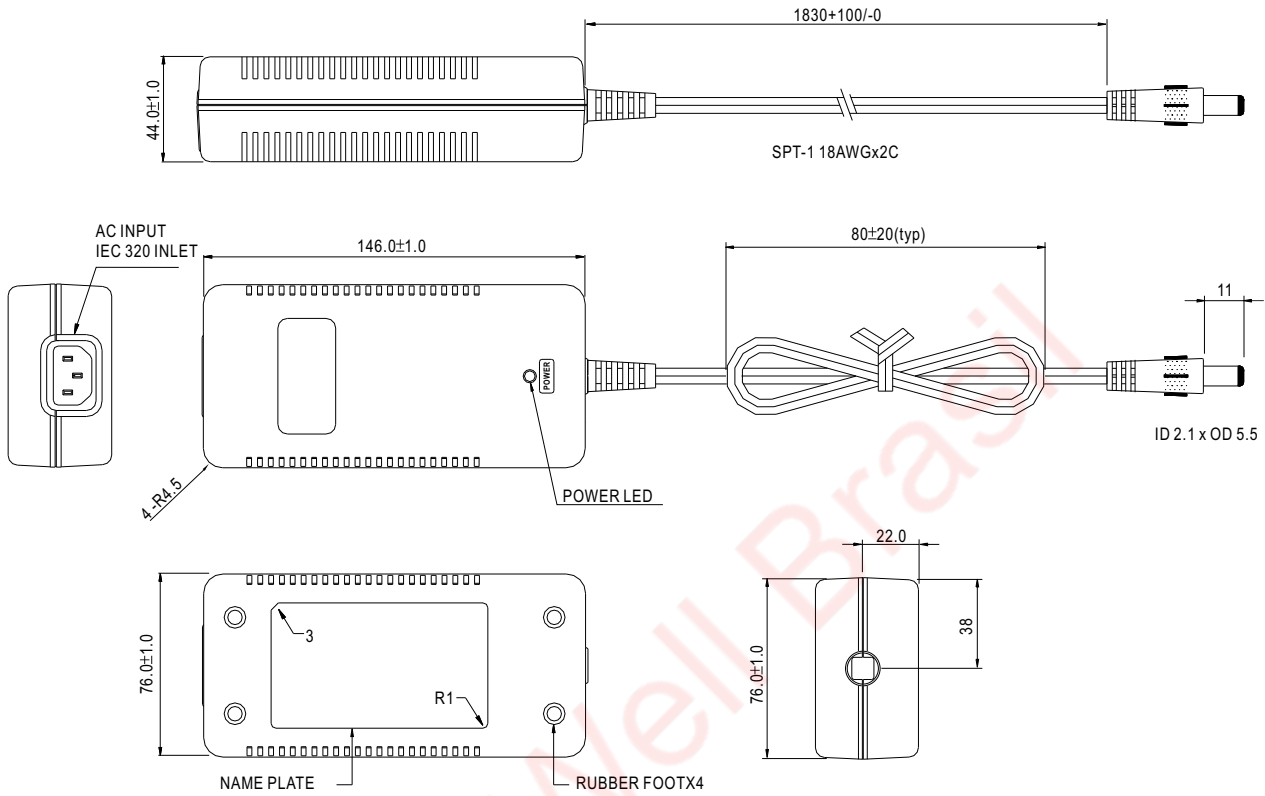


SPECIFICATION

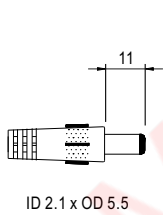
| ORDER NO. | SPU50-1 | SPU50-2 | SPU50-3 | SPU50-4 | SPU50-5 | SPU50-6 | SPU50-8 | SPU50-9 | | |
|---------------------------------------|---|---|---|---------|----------|-----------|--|-----------|-----------|--|
| OUTPUT | SAFETY MODEL NO. | SPU50-1 | SPU50-2 | SPU50-3 | SPU50-4 | SPU50-5 | SPU50-6 | SPU50-8 | SPU50-9 | |
| | DC VOLTAGE <small>Note.2</small> | 5V | 10V | 12V | 15V | 18V | 24V | 36V | 48V | |
| | RATED CURRENT | 10A | 5.85A | 5A | 4A | 3.33A | 2.5A | 1.66A | 1.25A | |
| | CURRENT RANGE | 0~ 10A | 0 ~ 5.85A | 0 ~ 5A | 0 ~ 4A | 0 ~ 3.33A | 0 ~2.5A | 0 ~ 1.66A | 0 ~ 1.25A | |
| | RATED POWER | 50W | 58.5W | 60W | 60W | 60W | 60W | 60W | 60W | |
| | RIPPLE & NOISE (max.) <small>Note.3</small> | 50mVp-p | 70mVp-p | 80mVp-p | 100mVp-p | 120mVp-p | 120mVp-p | 150mVp-p | 150mVp-p | |
| | VOLTAGE ADJ. RANGE | Fixed | | | | | | | | |
| | VOLTAGE TOLERANCE <small>Note.4</small> | ±5.0% | ±4.0% | ±3.0% | ±3.0% | ±3.0% | ±2.0% | ±2.0% | ±2.0% | |
| | LINE REGULATION <small>Note.5</small> | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | |
| | LOAD REGULATION <small>Note.6</small> | ±4.5% | ±3.5% | ±2.5% | ±2.5% | ±2.5% | ±1.5% | ±1.5% | ±1.5% | |
| SETUP, RISE, HOLD TIME | 800ms, 50ms, 16ms at full load | | | | | | | | | |
| INPUT | VOLTAGE RANGE | 90 ~ 264VAC 135~370VDC | | | | | | | | |
| | FREQUENCY RANGE | 47~63Hz | | | | | | | | |
| | EFFICIENCY (Typ.) | 69% | 75% | 77% | 80% | 78% | 80% | 82% | 83% | |
| | AC CURRENT | 1.6A / 100VAC | | | | | | | | |
| | INRUSH CURRENT (max.) | 60A / 230VAC | | | | | | | | |
| | LEAKAGE CURRENT(max.) | 0.75mA / 240VAC | | | | | | | | |
| PROTECTION | OVER LOAD | 110~160% rated output power Protection type : Hiccup mode, recovers automatically after fault condition is removed | | | | | | | | |
| | OVER VOLTAGE | 105~145% of rated output voltage Protection type : Shut down o/p voltage, re-power on to recover | | | | | | | | |
| ENVIRONMENT | WORKING TEMP. | 0~+40°C (Refer to output load derating curve) | | | | | | | | |
| | WORKING HUMIDITY | 20%~90% RH non-condensing | | | | | | | | |
| | STORAGE TEMP., HUMIDITY | -20~+85°C, 10~95% RH | | | | | | | | |
| | TEMP. COEFFICIENT | ±0.03% / °C (0~50°C) | | | | | | | | |
| | VIBRATION | 10~500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes | | | | | | | | |
| SAFETY & EMC <small>(Note. 7)</small> | SAFETY STANDARDS | UL1950, TUV EN60950 Approved | | | | | | | | |
| | WITHSTAND VOLTAGE | I/P-O/P:3KVAC, I/P-FG:1.5KVAC | | | | | | | | |
| | ISOLATION RESISTANCE | I/P-O/P,I/P-FG:100M Ohms / 500VDC | | | | | | | | |
| | EMI CONDUCTION & RADIATION | Compliance to EN55022(CISPR22) class B | | | | | | | | |
| OTHERS | EMS IMMUNITY | Compliance to IEC801-2,3,4, Light industry level, criteria A | | | | | | | | |
| | MTBF | 100K hrs min. MIL-HDBK-217F (25°C) | | | | | | | | |
| | DIMENSION | 146*76*44mm (L*W*H) | | | | | | | | |
| | PACKING | 0.7kg ; 25pcs/ 20kg / CARTON | | | | | | | | |
| CONNECTOR | PLUG | Standard type 2.1φ * 5.5φ * 11mm, center positive for stock ; Other type available by customer requested | | | | | | | | |
| | CABLE | Standard type | 120cm of Awm2464, 18Awg*4c for +5V output for stock | | | | 180cm of SPT-1, 18Awg*2c for 10~48V output for stock | | | Other type available by customer requested |
| NOTE | 1.All parameters are specified at 230VAC input, rated load, 25°C 70% RH. Ambient. 2.DC voltage: The output voltage set at point measure by plug terminal & 50% load. 3.Ripple & noise are measured at 20MHz by using a 12" twisted pair terminated with a 0.1uf & 47uf capacitor. 4.Tolerance: includes set up tolerance, line regulation, load regulation. 5.Line regulation is measured from low line to high line at rated load. 6.Load regulation is measured from 0% to 100% rated load. 7.The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives. | | | | | | | | | |

Mechanical Specification

Unit:mm

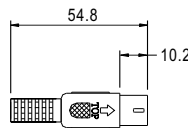


Plug Assignment



Standard plug: P2J (option)

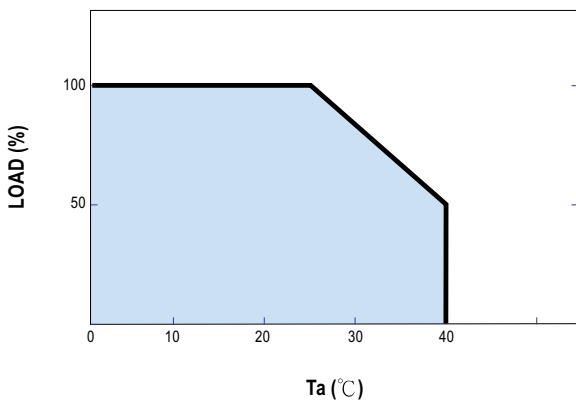
| P2J | |
|--------|--------|
| P/N | OUTPUT |
| CENTER | + |



Standard plug: R1B (option)

| PIN NO | OUTPUT |
|--------|--------|
| 1 | COM |
| 2 | COM |
| 3 | +Vout |
| 4 | COM |
| 5 | +Vout |

Derating Curve



Static Characteristics

