



FSP065 Series

FEATURES

- Compact size 129 × 51 × 31 mm
- Certified Medical Safety IEC 60601-1
- Meet Energy Efficiency DOE Level VI
- No Load Power Consumption $\leq 0.21W$
- High altitude 5000M operation
- Meet EN55011 and FCC Class B
- Over Temperature Protection
 - Both Class-I & Class-II design are provided

SAFETY STANDARD APPROVAL



DESCRIPTION

The series of AC/DC switching power supplies can deliver 65 watts continuous output power. High efficiency & compact dimension with an IEC320/C8 or IEC320/C6 inlet to mate with interchangeable cord for world-wide use. All models meet EN55011 and FCC class B emission limits.

INPUT SPECIFICATIONS

| | |
|------------------|--|
| Input voltage: | 90-264 VAC |
| Input frequency: | 47-63 Hz |
| Input current: | < 1.8 A (rms) / 115 VAC < 0.9 A (rms) / 230 VAC |
| Touch current: | < 100 μA / 264 VAC, 60 Hz |

OUTPUT SPECIFICATIONS

| | |
|-------------------------|---|
| Output voltage/current: | See rating chart |
| Total output power: | 65W |
| Protection: | |
| Over voltage: | The power supply will shut down while over-voltage happened. |
| Short circuit: | Output can be short-circuited without damage, and will recover automatically after short-circuit condition is removed. |
| Over current: | Output current shall be limited between 200% max load and auto recovery or latch protection. |
| Over temperature: | The power supply will shut down while over-temperature happened. It will shutdown operation after the fault condition is removed. |

ENVIRONMENTAL SPECIFICATIONS

| | |
|-----------------------|-------------------------|
| Operating temperature | 0°C~+40°C |
| Storage temperature | -20°C~+85°C |
| Operating humidity | 5~95% RH non-condensing |
| Storage humidity | 5~95% RH non-condensing |

GENERAL SPECIFICATIONS

| | |
|--------------------------------|--|
| Efficiency: | 87% min. |
| Hold-up time: | 8 ms minimum at 115Vac/60Hz |
| Line regulation: | $\pm 1\%$ maximum at full load |
| Inrush current: | 60 A @ 115 VAC or 140 A @ 230 VAC, at 25°C cold start |
| Operating altitude: | 5000 meters |
| Withstand voltage: | 4000 VAC from input to output (2 MOPP) |
| MTBF: | 150,000 hours at full load at 25°C ambient, calculated per MIL-HDBK-217F |
| EMC Performance (IEC60601-1-2) | |
| EN55011: | Class B conducted, class B radiated |
| FCC: | Class B conducted, class B radiated |
| VCCI: | Class B conducted, class B radiated |
| EN61000-3-2: | Harmonic distortion, Class A |
| EN61000-3-3: | Line flicker |
| EN61000-4-2: | ESD, ± 15 KV air and ± 8 KV contact |
| EN61000-4-3: | Radiated immunity, 3 V/m |
| EN61000-4-4: | Fast transient/burst, ± 2 KV |
| EN61000-4-5: | Surge, ± 1 KV diff., ± 2 KV com. |
| EN61000-4-6: | Conducted immunity, 3 Vrms |
| EN61000-4-8: | Magnetic field immunity, 3 A/m |
| EN61000-4-11: | Voltage dip immunity, 30% reduction for 500 ms, 60% reduction for 100 ms, and >95% reduction for 10 ms |

OUTPUT VOLTAGE/CURRENT RATING CHART

| Model | | Output | | | | | | Average Active Efficiency (typical) @ 115 / 230 VAC |
|--------------|--------------|---------|--------------|--------------|-----------|----------------|------------|---|
| Class-I | Class-II | Voltage | Min. Current | Max. Current | Tolerance | Ripple & Noise | Max. Power | |
| FSP065-DHBM1 | FSP065-DHCM1 | 12 V | 0 A | 5.42 A | ±5% | 120 mV | 65W | 87% |
| FSP065-DGBM1 | FSP065-DGCM1 | 15 V | 0 A | 4.33 A | ±5% | 150 mV | 65W | 87% |
| | FSP065-DDCM1 | 18 V | 0 A | 3.62 A | ±5% | 180 mV | 65W | 87% |
| FSP065-DBBM1 | FSP065-DBCM1 | 19 V | 0 A | 3.43 A | ±5% | 190 mV | 65W | 87% |
| | FSP065-DACM1 | 24 V | 0 A | 2.71 A | ±5% | 240 mV | 65W | 87% |

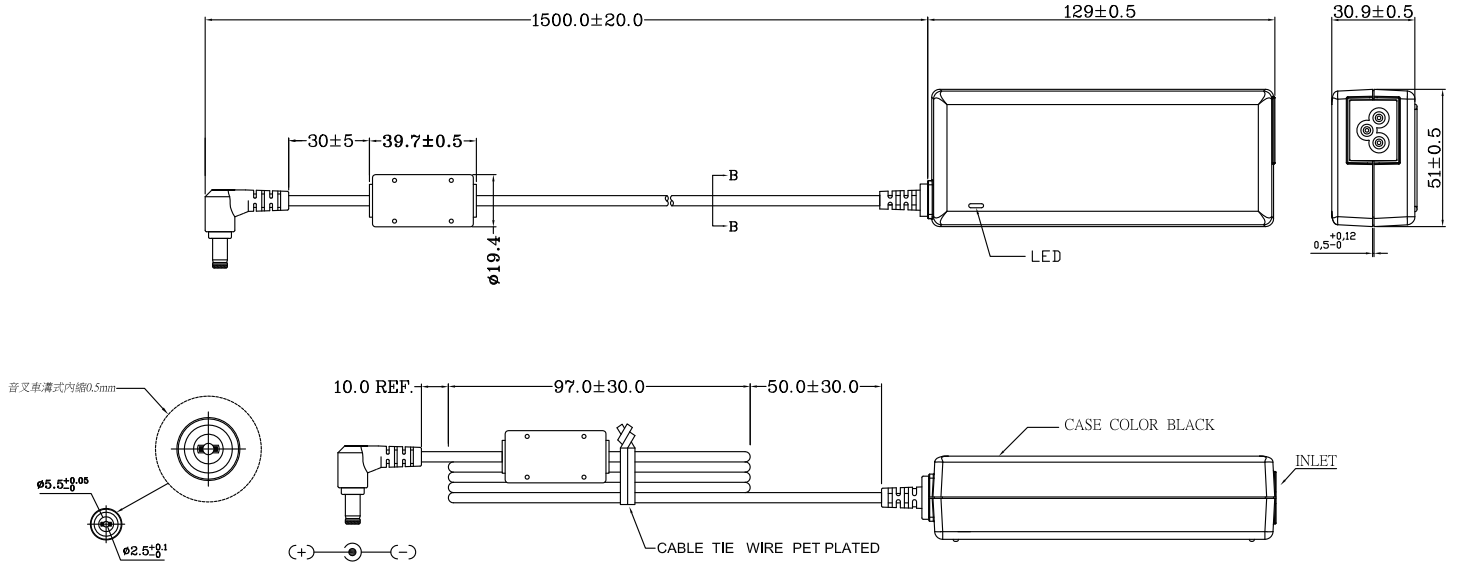
NOTES:

1. Class-I models are equipped with IEC 320/C6 inlet, and Class-II models with IEC 320/C8 inlet

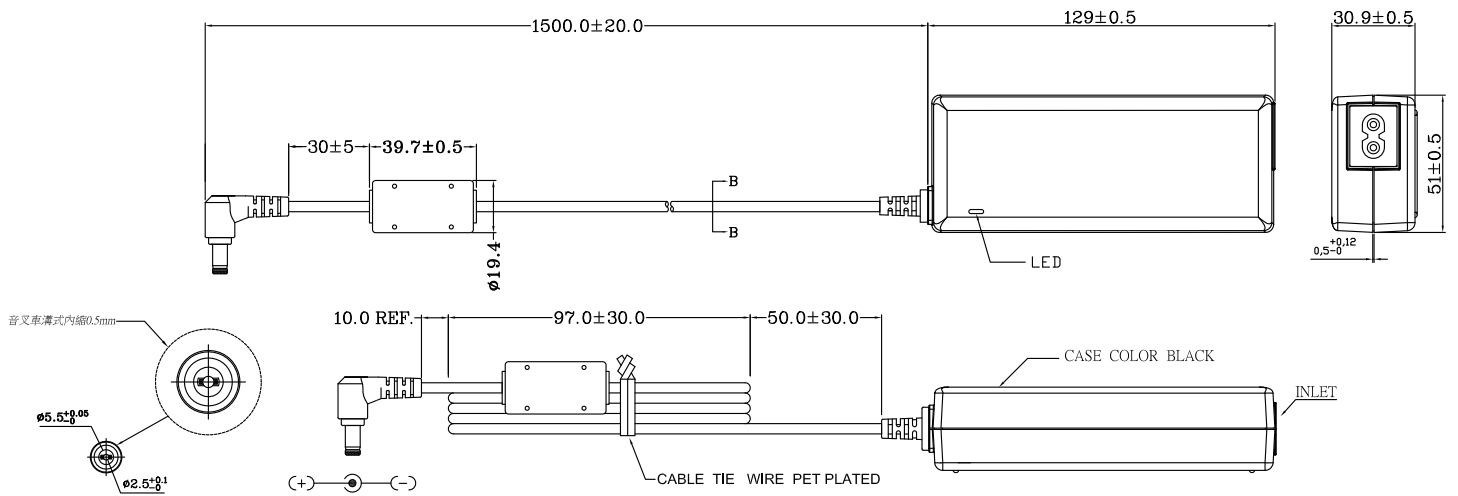
2. Ripple and noise measurements shall be made with an oscilloscope of at least 20MHz bandwidth. Output shall be bypassed at the connector with a 0.1µF ceramic disk capacitor and a 10µF electrolytic capacitor to simulate system loading.

MECHANICAL SPECIFICATIONS

Class I IEC 320/C6 AC Inlet



Class II IEC 320/C8 AC Inlet



NOTES:

1. Dimensions shown in mm