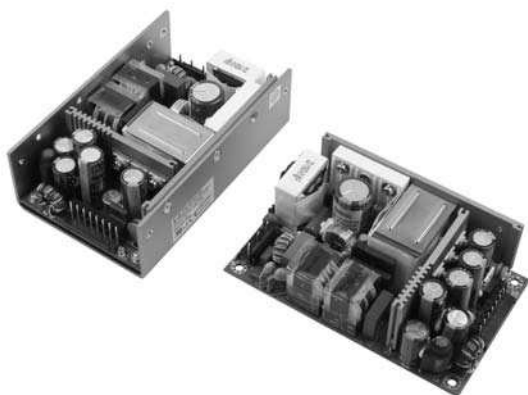


150 Watts SDU Series



- Medical Approvals
- 3.2" x 5" Footprint
- Fits 1U Applications
- High Efficiency
- 12 V & 24 V Outputs
- U-Channel or Open Frame Versions
- 3 Year Warranty

Specification

Input

Input Voltage	• 90-264 VAC
Input Frequency	• 47-63 Hz
Input Current	• 2.0 A at 90 VAC, 1 A at 230 VAC
Inrush Current	• Max 100 A at 230 VAC, cold start 25 °C
Power Factor	• >0.9 at >40% load
No Load Input Power	• <1 W
Earth Leakage Current	• <250 µA at 264 VAC
Input Protection	• F5 A / 350 V internal in line fuse

Output

Output Voltage	• See table
Output Voltage Trim	• ±10%
Initial Set Accuracy	• ±1%
Minimum Load	• No minimum load required
Start Up Delay	• 3.0 s max at 120 VAC
Start Up Rise Time	• 30 ms typical
Hold Up Time	• 20 ms min at full load, 120 VAC
Line Regulation	• ±0.5%
Load Regulation	• ±2%
Over/Undershoot	• 3% max
Transient Response	• 4% max deviation, recovery to within 1% in 500 µs for a 50% load change
Ripple & Noise	• 1% pk-pk, 20 MHz bandwidth
Overvoltage Protection	• 112-130% Vnom with auto recovery
Overload Protection	• 110-185%
Short Circuit Protection	• Trip & restart (hiccup mode), auto recovery
Temperature Coefficient	• 0.04% /°C

General

Efficiency	• Typically 87%
Isolation	• 4000 VAC Input to Output 1500 VAC Input to Ground 1000 VDC Output to Ground
Protection Level	• Primary to secondary: 2 x MOPP Primary to earth: 1 x MOPP
Switching Frequency	• 65 kHz PFC typical, 55 kHz - 65 kHz PWM typical at full load
Power Density	• 8.4 W/in ³
MTBF	• 110 kHrs to MIL-HDBK-217F at 25 °C, GB

Environmental

Operating Temperature	• 0 °C to +70 °C, derate at 2.5%/ °C from +50 °C to +70 °C
Storage Temperature	• -20 °C to +85 °C
Operating Humidity	• 5-90%, non-condensing
Storage Humidity	• 5-95%, non-condensing
Cooling	• Convection-cooled
Operating Altitude	• 3000 m
Vibration	• 5-50 Hz, acceleration 7.35 m/s ² on X, Y and Z axis

EMC & Safety

Emissions	• EN55011 Level B conducted & radiated
Harmonic Currents	• EN61000-3-2 class A EN61000-3-2 class C for loads ≥40%
Voltage Flicker	• EN61000-4-2, level 3 Perf Criteria A
ESD Immunity	• EN61000-3-3
Radiated Immunity	• EN61000-4-3, 3 V/m Perf Criteria A
EFT/Burst	• EN61000-4-4, level 2 Perf Criteria A
Surge	• EN61000-4-5, installation class 3, Perf Criteria A
Conducted Immunity	• EN61000-4-6, 3V Perf Criteria A
Dips & Interruptions	• EN61000-4-11, 30% 500 ms, 60% 100 ms, 100% 10 ms, 100% 5000 ms Perf Criteria A, A, A, B high line, A, B, A, B low line. See note 5
Safety Approvals	• ANSI AMMI ES60601-1:2005, CSA C22-2 No 60601-1:08, EN60601-1:2006

