

SL POWER SLE36X SERIES

36 Watts Single Output External Power Adapters







LEAN

Advanced Energy's SL Power SLE36X series of wall plug AC-DC power adapters feature both medical and ITE safety approvals. It meets Department of Energy Level VI and European Code of Conduct V5 Tier 2 Directive efficiency standards.

SPECIAL FEATURES

- IP22 ingress protection
- Medical and ITE safeties
- Available in interchangeable AC plugs
- 2 x MOPP input to output isolation
- Suitable for medical equipment up to class BF
- Low leakage current less than 100 μA
- Overvoltage, overcurrent and short circuit protection
- EU CoC V5 Tier 2 compliant
- DoE Efficiency level VI
- < 0.1 W standby power
- Up to 5000 m operating altitude

SAFETY

CB Medical: IEC 60601-1
 ANSI/AAMI ES 60601-1
 ITE: IEC 62368-1,

■ UL Medical: CAN/CSA C22.2.

No. 60601-1

ITE: CAN/CSA C22.2

No. 62368-1

UL 62368-1

■ TUV Medical: EN 60601-1 ITE: EN 62368-1

■ CCC GB4943

■ CE CE marking

■ UKCA UKCA marking

AT A GLANCE

Total Power

36 Watts

Input Voltage

80 to 264 VAC

of Outputs

Single



ELECTRICAL SPECIFICATIONS

Input				
Input Voltage Range	80 to 264 VAC			
Frequency	47 to 63 Hz			
Input Current	≤ 1.0 A @ 80 VAC			
Inrush Current	70 A @ 240 VAC cold start			
Touch Leakage Current	\leq 100 μ A @ 264 VAC, 50 Hz			
Isolation Safety Rating	Input to output: 4,000 VAC (2 x MOPP)			
Dielectric Withstand Voltage	Input to output: 5,656 VDC, 1 minute			
Insulation Resistance	Input to output: 100 Mohms, 500 VDC			
Output				
Output Voltage	9.0 V, 12.0 V, 24.0 V, 36.0 V			
Voltage Regulation	±5%			
Start-up Delay	≤ 3 s			
Hold-up Time	16 ms minimum at 115/230 VAC			
Overvoltage Protection	120% to 180% (9 V), 120% to 150% (12 V), 110% to 150% (24 V), 110% to 150% (36 V), auto-recovery while the overvoltage is removed			
Overcurrent Protection	110% to 170% rated current, hiccup mode, auto-recovery while the overcurrent is removed			
Short Circuit Protection	Auto-recovery while the short is removed			

RELIABILITY

MTBF	> 300,000 hours MIL-HDBK-217 at 25°C

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	-10 to +45°C ambient			
Storage Temperature	-25 to +70°C			
Operating Humidity	10% to 90% RH, non-condensing			
Storage Humidity	5% to 90% RH			
Operating Altitude	5,000 m			
Storage Altitude	9,000 m			
Operating Vibration	10 to 300 Hz at 0.3 decades/min, 1.0 G acceleration, 30 mins for each of 3 axis			
Storage Vibration	10 to 300 Hz at 0.3 decades/min, 3.0 G acceleration, 30 mins for each of 3 axis			
Shock	100 cm height, 13 mm thick hardwood drop, 3 surfaces each once, non operating			
Weight	210 g			
Dimension	90.5 x 33.5 x 58.5 mm			
Packing Quantity Individual box: 48 pcs. per carton. Each carton approx. 10 kg net weight				



EMC/EMI COMPLIANCE

Item	Standard	Criteria		
Conducted Emissions	EN/IEC 60601-1-2	Criterion B		
Radiated Emissions	EN/IEC 60601-1-2	Criterion B		
Electro-Static Discharge (ESD)	EN 61000-4-2, EN 55024:2010, IEC 60601-1-2:2014, ±15 kV air, ±8 kV contact	Criterion A		
Radiated Immunity	EN 61000-4-3, EN 55024:2010, IEC 60601-1-2:2014, 80 MHz to 2700 MHz	3 V/m, Criterion A, home healthcare environment 10 V/m, Criterion A, professional healthcare facility environment		
Electrical Fast Transients (EFT)	EN 61000-4-4, EN 55024:2010, IEC 60601-1-2:2014, ±2 kV on AC input power port	Criterion A		
Surge	EN 61000-4-5, EN 55024:2010, IEC 60601-1-2:2014, ±1 kV line to line, ±2 kV line to ground on input power lines	Criterion A		
Conducted Immunity	EN 61000-4-6, EN 55024:2010, IEC 60601-1-2:2014, 0.15 MHz to 80 MHz	3 Vrms, Criterion A 6 Vrms, Criterion A		
Voltage Dips/Interruptions	EN 61000-4-11, EN 55024:2010, IEC 60601-1-2:2014, 0% reduction for 0.5 period at 0°, 45°, 90°, 135°, 180°, 225°, 270°, 315°. 0% reduction for 1 period and 70% reduction for 25/30 period, single phase at 0°	Int: 100% 5,000 ms, Criterion B Dip: 30% 500 ms, Criterion A Dip: 100% 20 ms, Criterion B Dip: 100% 10 ms, Criterion A		
Magnetic Field Immunity	EN 61000-4-8, 30 A/m	Criterion A		
Harmonic	EN 61000-3-2	Class A		

ORDERING INFORMATION - SLE36X SERIES

Model Number ^{3,4,5}	Maximum Power	Output Voltage ¹	Maximum Load	Ripple & Noise ²	Line Regulation	Load Regulation	Efficiency (Average)
SLE36X0903B01	36.0 W	9.0 V	4.0 A	120 mV pk-pk	± 1%	± 5%	87.40%
SLE36X1203B01	36.0 W	12.0 V	3.0 A	200 mV pk-pk	± 1%	± 5%	87.40%
SLE36X2403B01	36.0 W	24.0 V	1.5 A	200 mV pk-pk	± 1%	± 5%	87.40%
SLE36X3603B01	36.0 W	36.0 V	1.0 A	300 mV pk-pk	± 1%	± 5%	87.40%

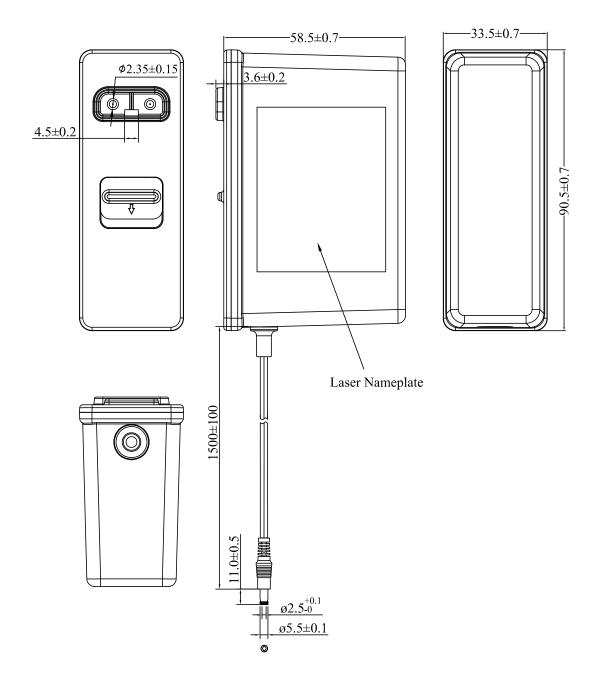
Note:

- 1. Other output voltages in the range of 9 V through 36 V are available, contact our sales reprentative for details.
- 2. Measured at output connector with 20 MHz bandwidth and 0.1 μF ceramic in parallel with 10 μF electrolytic capacitors.
- 3. "B" in the model number (SLE36X0903B01) indicates interchangeable blade model.
- 4. "03" in the model number indicates 2.5 x 5.5 x 9.5 mm straight barrel type connector. Other output connector options are available, please contact our sales representative for details.
- $5. \ Power \ supply \ is \ not \ fitted \ with \ the \ AC \ blade, this \ is \ to \ be \ ordered \ separately. \ See \ outline \ drawing \ below \ for \ details.$
- 6. Power supplies are not medical equipment (applied parts), medical product manufacturers take responsibility for further evaluation of class B/BF/CF compliance of the end product.



MECHANICAL DRAWINGS

Wall Plug Outline Dimension (unit: mm)



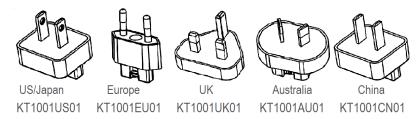
MECHANICAL DRAWINGS

Case Material: PC. Class 94V-0

Output Cord: UL2468m, 18AWG, black, 1.5 m

Output DC Plug: $2.5 \times 5.5 \times 9.5$ mm, "H" plug

Interchangeable AC Plug Options*:



^{*:} Blades sold separately, use "KT" numbers above for ordering.







For international contact information, visit advancedenergy.com.

powersales@aei.com (Sales Support) productsupport.ep@aei.com (Technical Support) +1 888 412 7832

ABOUT ADVANCED ENERGY

Advanced Energy (AE) has devoted more than three decades to perfecting power for its global customers. AE designs and manufactures highly engineered, precision power conversion, measurement and control solutions for mission-critical applications and processes.

Our products enable customer innovation in complex applications for a wide range of industries including semiconductor equipment, industrial, manufacturing, telecommunications, data center computing, and medical. With deep applications know-how and responsive service and support across the globe, we build collaborative partnerships to meet rapid technological developments, propel growth for our customers, and innovate the future of power.

PRECISION | POWER | PERFORMANCE | TRUST

Specifications are subject to change without notice. Not responsible for errors or omissions. ©2023 Advanced Energy Industries, Inc. All rights reserved. Advanced Energy® and AE® are U.S. trademarks of Advanced Energy Industries, Inc.