

Product Features

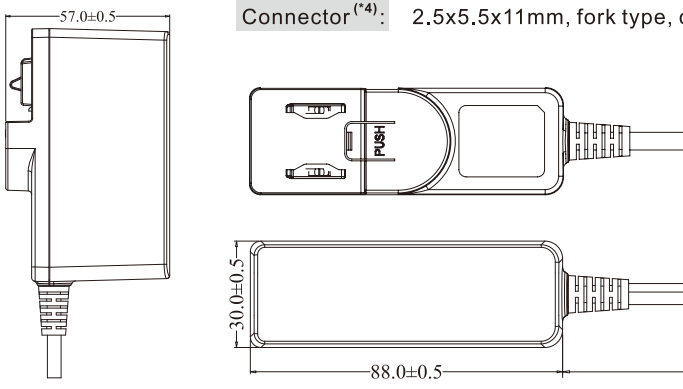
- Medical & ITE safety approvals
- 2 MOPP input to output isolation
- Suitable for medical equipment up to class BF^(^)
- Low leakage current : $\leq 10\mu\text{A}$ (8.1-14V), $\leq 50\mu\text{A}$ (6.1-8V&14.1-24V)
- DOE efficiency level VI
- CoC V5 Tier 2(2016)
- $\leq 0.075\text{W}$ standby power
- 7V to 52V outputs, up to 24W
- Up to 5,000m operating altitude
- Interchangeable AC plugs



Models & Ratings

Model Number	Voltage ^(*1) (V)	Current (A)	Rated Power	Ripple & Noise (max)(^(*2))	Voltage Tolerance	Line & Load Regulation	Efficiency (Average)	Start Up Delay
UES24LCP-XXXXXXSPA UES24LCP-XXXXXXSPA-OP	6.1-7.0	0.01-3.00	21W	120mVpk-pk	±5%	Line: ±1% Load: ±5%	86.2%	≤3s
	7.1-8.0	0.01-2.62	21W	120mVpk-pk	±5%		86.2%	≤3s
	8.1-9.0	0.01-2.33	21W	150mVpk-pk	±5%		86.2%	≤3s
	9.1-10.0	0.01-2.10	21W	150mVpk-pk	±5%		86.2%	≤3s
	10.1-11.0	0.01-2.18	24W	150mVpk-pk	±5%		87.0%	≤3s
	11.1-12.0	0.01-2.00	24W	150mVpk-pk	±5%		87.0%	≤3s
	12.1-13.0	0.01-1.84	24W	200mVpk-pk	±5%		87.0%	≤3s
	13.1-14.0	0.01-1.71	24W	200mVpk-pk	±5%		87.0%	≤3s
	14.1-15.0	0.01-1.60	24W	200mVpk-pk	±5%		87.0%	≤3s
	15.1-16.0	0.01-1.50	24W	200mVpk-pk	±5%		87.0%	≤3s
	16.1-17.0	0.01-1.41	24W	200mVpk-pk	±5%		87.0%	≤3s
	17.1-18.0	0.01-1.33	24W	200mVpk-pk	±5%		87.0%	≤3s
	18.1-19.0	0.01-1.26	24W	200mVpk-pk	±5%		87.0%	≤3s
	19.1-20.0	0.01-1.20	24W	240mVpk-pk	±5%		87.0%	≤3s
	20.1-21.0	0.01-1.14	24W	240mVpk-pk	±5%		87.0%	≤3s
	21.1-22.0	0.01-1.09	24W	240mVpk-pk	±5%		87.0%	≤3s
	22.0-23.0	0.01-1.04	24W	240mVpk-pk	±5%		87.0%	≤3s
	23.1-24.0	0.01-1.00	24W	240mVpk-pk	±5%		87.0%	≤3s
	45.1-46.0	0.01-0.52	24W	300mVpk-pk	±5%		87.0%	≤3s
	46.1-47.0	0.01-0.51	24W	300mVpk-pk	±5%		87.0%	≤3s
	47.1-48.0	0.01-0.50	24W	300mVpk-pk	±5%		87.0%	≤3s
	48.1-49.0	0.01-0.49	24W	300mVpk-pk	±5%		87.0%	≤3s
	49.1-50.0	0.01-0.48	24W	300mVpk-pk	±5%		87.0%	≤3s
	50.1-51.0	0.01-0.47	24W	300mVpk-pk	±5%		87.0%	≤3s
	51.1-52.0	0.01-0.46	24W	300mVpk-pk	±5%		87.0%	≤3s

Mechanical Details



DC Cable^(*3): UL2468 18AWG 1,500mm

Connector^(*4): 2.5x5.5x11mm, fork type, centre "+"

Interchangeable AC Plug Options^(*5)







US/Japan Europe UK Australia China

Unit: mm

Notes

(*1, 3, 4, 5) Other options are available, please contact our sales representative for details.

(*2) Measured at output connector with 20MHz bandwidth and 0.1uF ceramic in parallel with 10uF electrolytic capacitors

(^) Power supplies are not medical equipment (applied parts), medical product manufacturers shall take responsibility for further evaluation of class B/BF/CF compliance of their end product.

Input

Input Voltage Range	90-264VAC
Frequency Range	47-63Hz
Input Current	0.5A at 90VAC
Inrush Current	70A max at 240VAC cold start
Touch Leakage Current ^(max)	≤50μA at 264VAC

Environmental

Operating Temperature	0°C to 40°C
Storage Temperature	-20°C to 60°C
Operating Humidity	10% to 90% RH, non-condensing
Storage Humidity	5% to 90% RH
Operating Altitude	5,000m

General

Dimensions	88(L)x30(W)x57(H)mm
Weight	170g
MTBF	>100,000hrs MIL-HDBK-217 at 25°C
Isolation	4,000VAC Input to Output

Protection

Overload	110-200% rated output power, auto recovery
Over Voltage	120-150% rated output voltage input to reset
Short Circuit	Trip and restart (hiccup mode)

Safety Approvals

Safety Agency / Mark	Medical	ITE
CB	IEC60601-1	IEC60950-1
UL	ANSI/AAMI ES60601-1	UL60950-1 UL62368
TUV	CAN/CSA C22.2 NO. 60601-1	CAN/CSA C22.2 NO. 60950-1
RCM	EN60601-1	EN60950-1
	-	AS/NZS 60950.1

EMC

Emissions	Medical	ITE
Conducted	IEC/EN 60601-1-2, CISPR 11	EN55022, CISPR 22
Radiated	IEC/EN 60601-1-2, CISPR 11	EN55022, CISPR 22
Harmonic Currents	EN61000-3-2, Class A	EN61000-3-2, Class A
Voltage Flicker	EN61000-3-3	EN61000-3-3
Immunity	IEC/EN 60601-1-2	EN55024, CISPR 24
ESD	EN61000-4-2	±15kV air, ±8kV contact
Radiated Immunity	EN61000-4-3	10V/m, 3V/m 80MHz - 2.7GHz
EFT/Burst	EN61000-4-4	±2kV on AC port, ±1kV on signal ports
Surge	EN61000-4-5	±1KV line to line (diff mode)
Conducted Immunity	EN61000-4-6	3Vrms, 6Vrms (0.15MHz-80MHz)
Magnetic Field	EN61000-4-8	30 A/m
Dips & Interruptions	EN61000-4-11	0%, 70%, 0% of UT

Others

Dielectric Withstand Voltage	5,656VDC input to output
Insulation Resistance	10M Ohms, 500VDC input to output