



Class II

Product Features






- Meets medical & I.T.E. safety
- 2 MOPP input to output isolation
- Touch current $\leq 100\mu\text{A}$
- Energy efficiency level VI
- $\leq 0.1\text{W}$ standby power
- Up to 5,000m operating altitude
- Meet USB PD3.0, QC3.0, QC2.0, PPS fast charge agreement
- Fixed pins or convertible heads are optional


Models & Ratings

Model Number	Voltage ^(*1)	Current	Rated Power	Ripple & Noise _{(max)(*2)}	Voltage Tolerance	Line & Load Regulation	Efficiency (Average)	Start Up Delay
UES45LCP-SPC	5.0	0.01-3.00	15.00W	200mVpk-pk	$\pm 5\%$	Line: $\pm 1\%$ Load: $\pm 5\%$	81.38%	$\leq 3\text{s}$
	9.0	0.01-3.00	27.00W	200mVpk-pk	$\pm 5\%$		86.62%	$\leq 3\text{s}$
UES45LCP1-SPC	12.0	0.01-3.00	36.00W	200mVpk-pk	$\pm 5\%$		87.40%	$\leq 3\text{s}$
	15.0	0.01-3.00	45.00W	200mVpk-pk	$\pm 5\%$		87.72%	$\leq 3\text{s}$
	20.0	0.01-2.25	45.00W	200mVpk-pk	$\pm 5\%$		87.72%	$\leq 3\text{s}$

Mechanical Details

Interchangeable AC Plug Options

US/Japan
Europe
UK
Australia
China

Unit: mm

Notes

(*1) 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.

Input

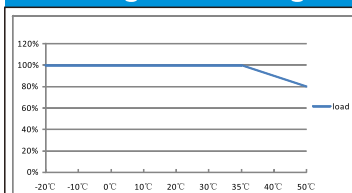
Input Voltage Range	90-264VAC
Frequency Range	47-63Hz
Input Current	1.3A at 90VAC
Inrush Current	130A max at 240VAC cold start
Touch Leakage Current ^(max)	≤ 100µA at 264VAC

Environmental

Operating Temperature	-20°C to 50°C(Refer to the derating curve diagram)
Storage Temperature	-30°C to 60°C
Operating Humidity	10% to 90% RH, non-condensing
Storage Humidity	5% to 95% RH
Operating Altitude	5,000m

General

Dimensions	80.0(L) 57.9(W) 30.0(H)mm
Weight	125g
MTBF	>100,000hrs MIL-HK8K-217 at 25°C
Isolation	4000VAC Input to Output

Derating curve diagram

Protection

Overload	105-130% rated output power, auto recovery
Over Voltage	Min 120% rated output voltage input to reset
Short Circuit	Trip and restart (hiccup mode)

Safety Approvals

Safety Agency / Mark	Medical(Meet)	ITE
CB	IEC60601-1:2005/AmD2:2020	IEC62368-1
UL	ANSI/AAMI ES60601-1:2005/AmD2:2021	UL62368-1
TüV SuD/Mark	CAN/CSA C22.2 NO. 60601-1	CAN/CSA C22.2 NO. 62368-1
RCM	EN60601-1:2006/A2:2021	-
CE	-	AS/NZS 62368.1
CCC	-	EN62368
PSE	-	GB4943.1
NOM	-	J62368
		Nom-001-SCFI-2018

EMC

Emission	Medical	ITE
Conduction	IEC/EN60601-1-2, CISPR 11	EN55032, CISPR 32
Radiation	IEC/EN60601-1-2, CISPR 11	EN55032, CISPR 32
Harmonic Currents	EN61000-3-2, Class A	EN61000-3-2, Class A
Voltage Flicker	EN61000-3-3	EN61000-3-3
Immunity	IEC/EN60601-1-2	En55035, CISPR 35
ESD	IEC61000-4-2	±15KV air, ±8KV contact
Radiated Immunity	IEC61000-4-3	10V/m, 3V/m 80MHz - 2.7GMHz
EFT/Burst	IEC61000-4-4	±2KV on AC port, ±1KV on signal ports
Surge	IEC61000-4-5	±1KV line to line (different mode)
Conducted Immunity	IEC61000-4-6	3Vrms, 6Vrms (0.15MHz-80MHz)
Magnetic Field	IEC61000-4-8	30 A/m
Dips & Interruptions	IEC61000-4-11	0%, 70%, 0% of UT

Others

Dielectric Withstand Voltage	4000VAC input to output
Insulation Resistance	100M Ohms, 500VDC input to output