



IP22 Class II (VI)

Product Features

- Medical & ITE safety approvals
- 2 MOPP input to output isolation
- Low leakage current $\leq 100\mu\text{A}$
- DOE efficiency level VI
- CoC V5 Tier 2(2016)
- $\leq 0.075\text{W}$ standby power
- 5V to 24V outputs, up to 18W
- Up to 5,000m operating altitude
- Interchangeable AC plugs



Models & Ratings

Model Number	Voltage ^(*) (V)	Current (A)	Rated Power	Ripple & Noise (max) ^(*)	Voltage Tolerance	Line & Load Regulation	Efficiency (Average)	Start Up Delay
UES18LCP4-XXXXYYSPA	5.0-6.0	0.01-3.00	18W	200mVpk-pk	$\pm 6\%$	Line: $\pm 1\%$ Load: $\pm 5\%$	81.84% ^(*)	$\leq 3\text{s}$
	6.1-7.0	0.01-2.00	14W	200mVpk-pk	$\pm 5\%$		83.36%	$\leq 3\text{s}$
	7.1-8.0	0.01-2.00	16W	200mVpk-pk	$\pm 5\%$		84.21%	$\leq 3\text{s}$
	8.1-9.0	0.01-2.00	18W	200mVpk-pk	$\pm 5\%$		84.91%	$\leq 3\text{s}$
	9.1-10.0	0.01-1.80	18W	200mVpk-pk	$\pm 5\%$		84.97%	$\leq 3\text{s}$
	10.1-11.0	0.01-1.65	18W	200mVpk-pk	$\pm 5\%$		84.96%	$\leq 3\text{s}$
	11.1-12.0	0.01-1.50	18W	200mVpk-pk	$\pm 5\%$		85.05%	$\leq 3\text{s}$
	12.1-13.0	0.01-1.40	18W	200mVpk-pk	$\pm 5\%$		85.14%	$\leq 3\text{s}$
	13.1-14.0	0.01-1.30	18W	200mVpk-pk	$\pm 5\%$		85.17%	$\leq 3\text{s}$
	14.1-15.0	0.01-1.20	18W	200mVpk-pk	$\pm 5\%$		85.14%	$\leq 3\text{s}$
	15.1-16.0	0.01-1.13	18W	200mVpk-pk	$\pm 5\%$		85.18%	$\leq 3\text{s}$
	16.1-17.0	0.01-1.10	18W	200mVpk-pk	$\pm 5\%$		85.37%	$\leq 3\text{s}$
	17.1-18.0	0.01-1.00	18W	200mVpk-pk	$\pm 5\%$		85.19%	$\leq 3\text{s}$
	18.1-19.0	0.01-0.95	18W	200mVpk-pk	$\pm 5\%$		85.22%	$\leq 3\text{s}$
	19.1-20.0	0.01-0.90	18W	200mVpk-pk	$\pm 5\%$		85.22%	$\leq 3\text{s}$
	20.1-21.0	0.01-0.86	18W	200mVpk-pk	$\pm 5\%$		85.25%	$\leq 3\text{s}$
	21.1-22.0	0.01-0.82	18W	200mVpk-pk	$\pm 5\%$		85.25%	$\leq 3\text{s}$
22.1-23.0	0.01-0.80	18W	200mVpk-pk	$\pm 5\%$	85.36%	$\leq 3\text{s}$		
23.1-24.0	0.01-0.75	18W	200mVpk-pk	$\pm 5\%$	85.26%	$\leq 3\text{s}$		

Mechanical Details

Interchangeable AC Plug Options ^(*)

US/Japan Europe UK Australia China

DC Cable ^(*): UL2468 18AWG 1,800mm

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

Unit: mm

Notes

- (*1, 4, 5, 6) 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.
- (*3) Meets energy efficiency level V only.

Input

Input Voltage Range	80-264VAC
Frequency Range	47-63Hz
Input Current	0.5A at 90VAC
Inrush Current	70A max at 240VAC cold start
Touch Leakage Current ^(max)	≤100μA at 264VAC

Environmental

Operating Temperature	0°C to 45°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	90.5(L)x33.5(W)x58.5(H)mm
Weight	160g
MTBF	>100,000hrs MIL-HDBK-217 at 25°C
Isolation	4,000VAC Input to Output

Protection

Overload	120-150% 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(Meet)	ITE(Meet)
CB	IEC60601-1 / IEC60601-1-11	IEC62368-1
UL	ANSI/AAMI ES60601-1 / 60601-1-11 CAN/CSA-C22.2 NO. 60601-1	UL62368
TüV Rheinland/Mark	EN60601-1 / EN60601-1-11	-
TüV Rheinland/GS	-	EN62368-1
CE	-	EN62368
CCC	-	GB4943.1
PSE	-	J62368
KC	-	K60950-1
RCM	-	AS/NES62368

EMC

Emissions	Medical	ITE
Conducted	IEC/EN 60601-1-2, CISPR 11	EN55032, CISPR32
Radiated	IEC/EN 60601-1-2, CISPR 11	EN55032, CISPR32
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 - 2700MHz
EFT/Burst	EN61000-4-4	±2kV on AC port, ±1kV on signal ports
Surge	EN61000-4-5	±2KV line to line (different 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	100M Ohms, 500VDC input to output