



IP22 Class II (V)

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
- $\leq 0.075\text{W}$ standby power
- 5V-24V outputs, up to 18W
- Up to 5,000m operating altitude
- Interchangeable AC plugs



Models & Parameters

Model Number	Voltage ^(*) (V)	Current (A)	Rated Power	Ripple & Noise (max)	Voltage Tolerance	Line & Load Regulation	Efficiency (Average)	Start Up Delay
UES18LCP4-XXXXXXSPA	5.0-6.0	0.01-3.00	18.00W	200mVpk-pk	$\pm 6\%$	Line: $\pm 1\%$ Load: $\pm 5\%$	81.84% ^(*)	$\leq 3\text{s}$
	6.1-7.0	0.01-2.00	14.00W	200mVpk-pk	$\pm 5\%$		83.36%	$\leq 3\text{s}$
	7.1-8.0	0.01-2.00	16.00W	200mVpk-pk	$\pm 5\%$		84.21%	$\leq 3\text{s}$
	8.1-9.0	0.01-2.00	18.00W	200mVpk-pk	$\pm 5\%$		84.91%	$\leq 3\text{s}$
	9.1-10.0	0.01-1.80	18.00W	200mVpk-pk	$\pm 5\%$		84.97%	$\leq 3\text{s}$
	10.1-11.0	0.01-1.65	18.00W	200mVpk-pk	$\pm 5\%$		84.96%	$\leq 3\text{s}$
	11.1-12.0	0.01-1.50	18.00W	200mVpk-pk	$\pm 5\%$		85.05%	$\leq 3\text{s}$
	12.1-13.0	0.01-1.40	18.00W	200mVpk-pk	$\pm 5\%$		85.14%	$\leq 3\text{s}$
	13.1-14.0	0.01-1.30	18.00W	200mVpk-pk	$\pm 5\%$		85.17%	$\leq 3\text{s}$
	14.1-15.0	0.01-1.20	18.00W	200mVpk-pk	$\pm 5\%$		85.14%	$\leq 3\text{s}$
	15.1-16.0	0.01-1.13	18.00W	200mVpk-pk	$\pm 5\%$		85.18%	$\leq 3\text{s}$
	16.1-17.0	0.01-1.10	18.00W	200mVpk-pk	$\pm 5\%$		85.37%	$\leq 3\text{s}$
	17.1-18.0	0.01-1.05	18.00W	200mVpk-pk	$\pm 5\%$		85.19%	$\leq 3\text{s}$
	18.1-19.0	0.01-0.95	18.00W	200mVpk-pk	$\pm 5\%$		85.22%	$\leq 3\text{s}$
	19.1-20.0	0.01-0.90	18.00W	200mVpk-pk	$\pm 5\%$		85.22%	$\leq 3\text{s}$
	20.1-21.0	0.01-0.86	18.00W	200mVpk-pk	$\pm 5\%$		85.25%	$\leq 3\text{s}$
	21.1-22.0	0.01-0.82	18.00W	200mVpk-pk	$\pm 5\%$		85.25%	$\leq 3\text{s}$
	22.1-23.0	0.01-0.80	18.00W	200mVpk-pk	$\pm 5\%$		85.36%	$\leq 3\text{s}$
23.1-24.0	0.01-0.75	18.00W	200mVpk-pk	$\pm 5\%$	85.26%	$\leq 3\text{s}$		

Mechanical Details

Interchangeable AC Plug Options^(*)

US/JP EU UK AU CN

DC cable and connector can be customized.

Unit: mm

Notes
 (*1, 3) Other options are available, please contact our sales representative for details.
 (*2) 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) 33.5(W) 58.5(H)mm
Weight	160g
MTBF	>100,000hrs MIL-HDBK-217 at 25°C

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	ITE
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
FCC	-	FCC PART 15

EMC

Emission	Medical	ITE
Conduction	IEC/EN60601-1-2, CISPR 11	EN55032, CISPR32
Radiation	IEC/EN60601-1-2, 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/EN60601-1-2	EN55024, CISPR 24
ESD	IEC61000-4-2	±15KV air, ±8KV contact
Radiated Immunity	IEC61000-4-3	10V/m, 3V/m 80MHz - 2700MHz
EFT/Burst	IEC61000-4-4	±2KV on AC port, ±1KV on signal ports
Surge	IEC61000-4-5	±2KV 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	5,656VDC input to output
Insulation Resistance	10M Ohms, 500VDC input to output