

IP42 CLASS I & II (VII)

Product Features

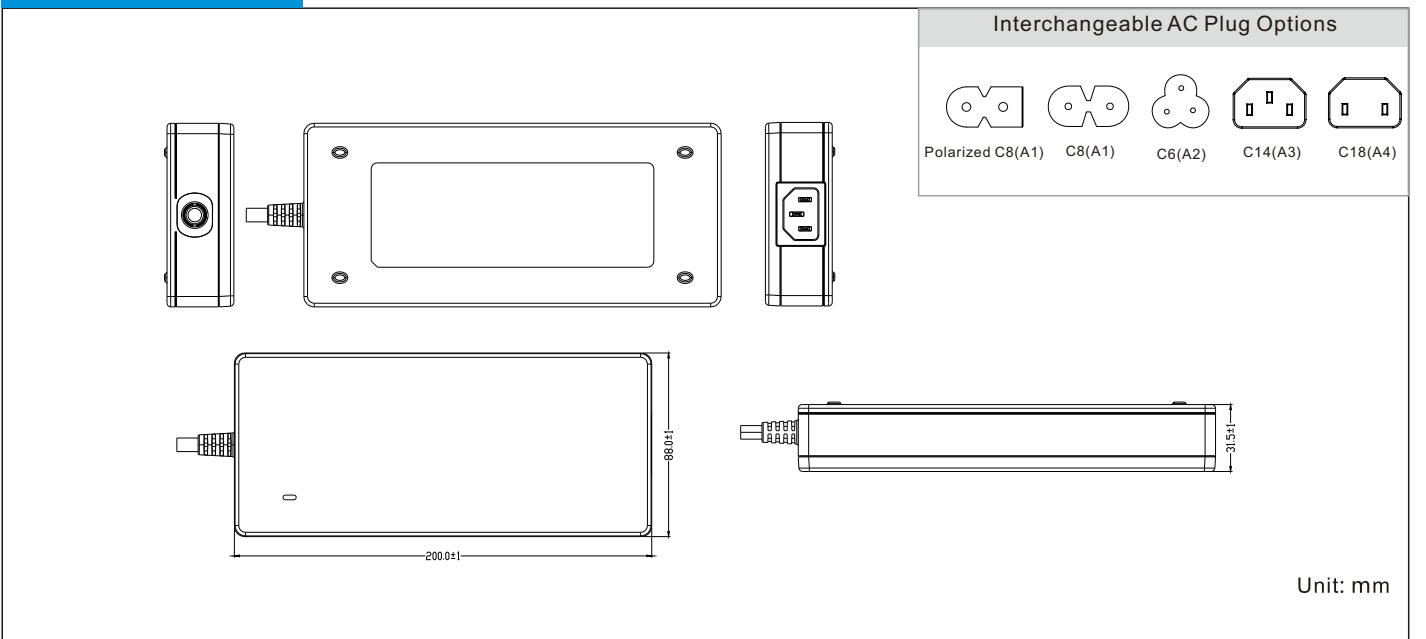
- Medical & I.T.E. safety standard
- 2 MOPP input to output isolation
- Touch current $\leq 100\mu\text{A}$
- Energy efficiency Level VII
- $\leq 0.15\text{W}$ standby power
- 12V-54V outputs, up to 310W
- Up to 5,000m operating altitude
- 5 types of AC inlet
- GaN technology



Models & Ratings

Model Number	Voltage (*1) (V)	Current (A)	Rated Power	Ripple & Noise (max)(*2)	Voltage Tolerance	Line & Load Regulation	Efficiency	Start Up Delay
UES310D-XXXYYYSPA	12.0	19.50	234.0W	200mVpk-pk	$\pm 5\%$	Line: $\pm 1\%$ Load: $\pm 5\%$	92.0%	$\leq 3\text{s}$
	15.0	18.00	234.0W	200mVpk-pk	$\pm 5\%$		92.0%	$\leq 3\text{s}$
	19.0	15.00	285.0W	240mVpk-pk	$\pm 5\%$		92.0%	$\leq 3\text{s}$
	20.0	14.50	290.0W	240mVpk-pk	$\pm 5\%$		92.0%	$\leq 3\text{s}$
	24.0	12.50	300.0W	300mVpk-pk	$\pm 5\%$		93.0%	$\leq 3\text{s}$
	48.0	6.46	310.0W	400mVpk-pk	$\pm 5\%$		93.0%	$\leq 3\text{s}$
	54.0	5.74	310.0W	500mVpk-pk	$\pm 5\%$		93.0%	$\leq 3\text{s}$

Mechanical Details



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	80-264VAC(80-90VAC refer to derating curve)
Frequency Range	47-63Hz
Input Current	5.0A max at 90VAC
Inrush Current	120A max at 240VAC cold start
Touch Leakage Current ^(max)	≤100μA 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	200.0(L)x88.0(W)x31.5(H)mm
Power supply power density	0.55W/cm ³
Weight	800g
MTBF	>100,000hrs Telcordia SR-332 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 Meets

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	UL62368-1
TUV-Mark	EN60601-1/EN60601-1-11	-
CE	-	EN62368-1

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 - 2.7GHz
EFT/Burst	IEC61000-4-4	±2KV on AC port, ±1KV on signal ports
Surge	IEC61000-4-5	±1KV line to line, ±1KV/Line-Earth
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	4000VDC input to output
Insulation Resistance	10M Ohms, 500VDC input to output

Derating Curve

