



IP22 Class I & II (VI)

### Product Features

- Medical safety approvals
- 2 MOPP input to output isolation
- PF>0.90@230Vac full load
- Touch current ≤ 100µA
- DOE level VI
- ≤ 0.21W standby power
- Peak load: 216W MAX @ Rated Input Voltage
- Up to 5,000m operating altitude
- 4 types of AC inlet

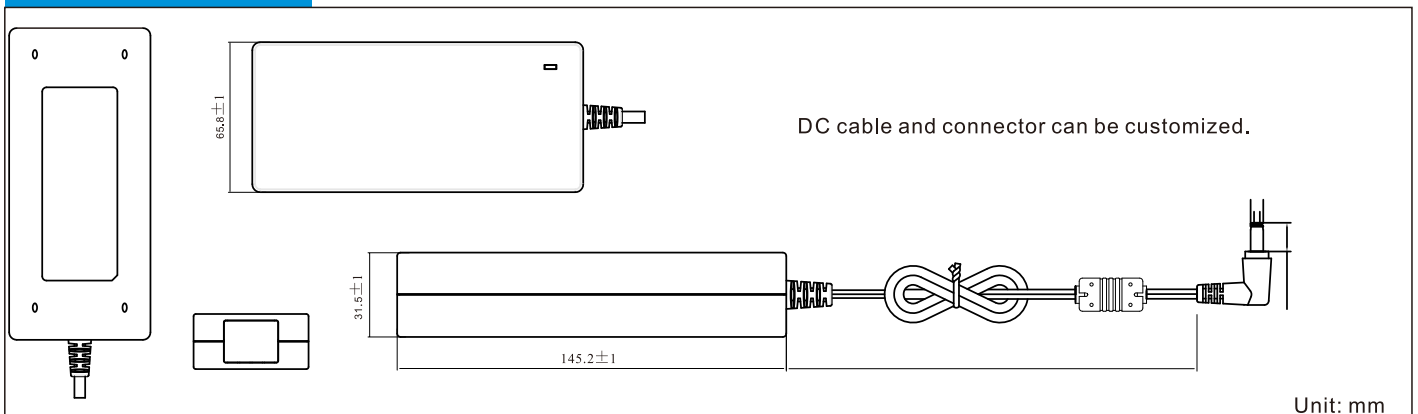


### Models & Ratings

Model Number	Voltage <sup>(*)1</sup>	Current	Rated Power	Ripple & Noise (max) <sup>(*)2</sup>	Voltage Tolerance	Line & Load Regulation	Efficiency (Average)	Start Up Delay
UES100DZ-XXXYYYSPA	12.0	0.01-7.50	90.00W	150mVpk-pk	±5%	Line: ±1% Load: ±5%	88.00%	≤3s
	12.1-13.0	0.01-6.92	90.00W	150mVpk-pk	±5%		88.00%	≤3s
	13.1-14.0	0.01-6.43	90.00W	150mVpk-pk	±5%		88.00%	≤3s
	14.1-15.0	0.01-6.00	90.00W	200mVpk-pk	±5%		88.00%	≤3s
	19.0	0.01-5.00	95.00W	200mVpk-pk	±5%		88.00%	≤3s
	19.1-20.0	0.01-5.00	100.00W	200mVpk-pk	±5%		88.00%	≤3s
	20.1-21.0	0.01-4.76	100.00W	300mVpk-pk	±5%		88.00%	≤3s
	21.1-22.0	0.01-4.54	100.00W	300mVpk-pk	±5%		88.00%	≤3s
	22.1-23.0	0.01-4.35	100.00W	300mVpk-pk	±5%		88.00%	≤3s
	23.1-24.0	0.01-4.17	100.00W	300mVpk-pk	±5%		88.00%	≤3s

Model encoding: replace "Z" with "1" for C8 (Class II), "2" for C6 (Class I), "3" for C14 (Class I), "4" for C18 (Class II) AC inlets

### Mechanical Details



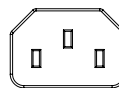
### AC Inlet Options



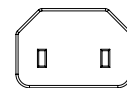
C8 (D1) <sup>(\*)3</sup>



C6 (D2)



C14 (D3)



C18 (D4)

#### Notes

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

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

(\*)3 Polarized C8 is available.

**Input**

Input Voltage Range	80-264VAC(80-90VAC refer to derating curve)
Frequency Range	47-63Hz
Input Current	2.5A at 90VAC
Inrush Current	120A max at 240VAC cold start
Touch Leakage Current <sup>(max)</sup>	≤100µA at 264VAC

**Environmental**

Operating Temperature	-30°C to 70°C(40°C to 70°C refer to derating curve)
Storage Temperature	-40°C to 85°C
Operating Humidity	10% to 90% RH, non-condensing
Storage Humidity	5% to 95% RH
Operating Altitude	5,000m

**General**

Dimensions	145.2(L)x65.8(W)x31.5(H)mm
Power density	0.332W/cm <sup>3</sup>
Weight	420g
MTBF	>500,000hrs MIL-HK8K-217 at 25°C

**Protection**

Overload	220-250% rated output power, auto recovery
Over Voltage	125-145% rated output voltage input to reset
Short Circuit	Trip and restart (hiccup mode)

**Safety Approvals**

Safety Agency / Mark	Medical
CB	IEC60601-1
TUV-SUD-NRTL	ANSI/AAMI ES60601-1
TUV-mark	EN60601-1

**EMC**

Emissions	Medical	
Conducted	IEC/EN 60601-1-2, CISPR 11	
Radiated	IEC/EN 60601-1-2, CISPR 11	
Harmonic Currents	EN61000-3-2, Class A	
Voltage Flicker	EN61000-3-3	
Immunity	IEC/EN 60601-1-2	
ESD	EN61000-4-2	±15kV air, ±8kV contact
Radiated Immunity	EN61000-4-3	10V/m, 3V/m 80MHz - 2.7GMHz
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

**Derating Curve**
