



IP20 Class II VI

Product Features

- Medical & ITE safety approvals
- 2 MOPP input to output isolation
- Suitable for medical equipment up to class BF^(^)
- Low leakage current $\leq 10\mu\text{A}$
- DOE efficiency level VI
- CoC V5 Tier 2(2016)
- $\leq 0.075\text{W}$ standby power
- 4.2V to 12V outputs, up to 6W
- Up to 5,000m operating altitude
- Interchangeable AC plugs



Models & Ratings

Model Number	Voltage ^(*1) (V)	Current (A)	Rated Power	Ripple & Noise (max) ^(*2)	Voltage Tolerance	Line & Load Regulation	Efficiency (Average)	Start Up Delay
UES06WZ-XXXXYYSPA	4.2	0.01-1.20	5.04W	200mVpk-pk	$\pm 5\%$	Line: $\pm 1\%$ Load: $\pm 5\%$	73.83%	$\leq 3\text{s}$
	5.0-6.0	0.01-1.00	6W	150mVpk-pk	$\pm 5\%$		73.77%	$\leq 3\text{s}$
	6.1-7.0	0.01-0.86	6W	150mVpk-pk	$\pm 5\%$		78.16%	$\leq 3\text{s}$
	7.1-8.0	0.01-0.75	6W	200mVpk-pk	$\pm 5\%$		78.26%	$\leq 3\text{s}$
	8.1-8.9	0.01-0.67	6W	200mVpk-pk	$\pm 5\%$		78.38%	$\leq 3\text{s}$
	9.0-10.0	0.01-0.60	6W	200mVpk-pk	$\pm 5\%$		78.35%	$\leq 3\text{s}$
	10.1-11.0	0.01-0.54	6W	200mVpk-pk	$\pm 5\%$		78.42%	$\leq 3\text{s}$
	11.1-12.0	0.01-0.50	6W	200mVpk-pk	$\pm 5\%$		78.53%	$\leq 3\text{s}$

Model encoding:

For changeable AC plug, replace "Z" with "NCPU" for USB 2.0 port (5V only), "NCP" for fixed DC cable

Mechanical Details

DC Cable^(*3): UL2468 18AWG 1,800mm for 6 - 8V
UL2468 22AWG 1,800mm for 4.2 - 5V, 9 - 12V
USB 2.0 port for 5V (PIN1 "+", PIN4 "-", PIN2&3 shorted)

Connector^(*4): 2.5x5.5x11mm, fork type, centre "+"

Interchangeable AC Plug Options^(*5)

US/Japan Europe UK Australia China

Unit: mm

Notes
 (*1, 3, 4, 5) 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.
 (^) Power supplies are not medical equipment (applied parts), medical product manufacturers shall take responsibility for further evaluation of class B/BF/CF compliance of their end product.

Input

Input Voltage Range	90-264VAC
Frequency Range	47-63Hz
Input Current	0.2A at 90VAC
Inrush Current	30A max at 240VAC cold start
Touch Leakage Current ^(max)	≤10μA 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	73.5(L)x42.5(W)x30.7(H)mm
Weight	85g
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	ITE
CB	IEC60601-1	IEC60950-1
UL	ANSI/AAMI ES60601-1	UL60950-1
TUV	CAN/CSA C22.2 NO. 60601-1	CAN/CSA C22.2 NO. 60950-1
RCM	EN60601-1	EN60950-1
CCC	-	AS/NZS 60950.1
PSE	-	GB4943.1
KC	-	J60950-1
		K60950-1 (4.2 to 6VDC model only)

EMC

Emissions	Medical	ITE
Conducted	IEC/EN 60601-1-2, CISPR 11	EN55022, CISPR 22
Radiated	IEC/EN 60601-1-2, CISPR 11	EN55022, CISPR 22
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	±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	100M Ohms, 500VDC input to output