



Product Features

- Meets medical & I.T.E. safety
- 2 MOPP input to output isolation
- Touch current $\leq 100\mu\text{A}$
- Earth Leakage current $\leq 5\text{mA}$
- Energy efficiency level VI
- PF>0.95@230VAC full load
- $\leq 0.15\text{W}$ standby power
- 11V-54V outputs, up to 120W
- Up to 5,000m operating altitude



Models & Parameters

Model Number	Voltage ⁽¹⁾ (V)	Current (A)	Rated Power	Ripple & Noise _(max)	Voltage Tolerance	Line & Load Regulation	Efficiency	Start Up Delay
UES120D"Z"-XXXXYYSPA	11.0-12.0	0.01-10.00	120.00W	150mVpk-pk	±5%		92.0%	≤3s
	12.1-13.0	0.01-9.23	120.00W	150mVpk-pk	±5%		92.0%	≤3s
	13.1-14.0	0.01-8.57	120.00W	150mVpk-pk	±5%		92.0%	≤3s
	14.1-15.0	0.01-8.00	120.00W	150mVpk-pk	±5%		92.0%	≤3s
	17.1-18.0	0.01-6.66	120.00W	180mVpk-pk	±5%		93.0%	≤3s
	18.1-19.0	0.01-6.31	120.00W	180mVpk-pk	±5%		93.0%	≤3s
	19.1-20.0	0.01-6.00	120.00W	200mVpk-pk	±5%		93.0%	≤3s
	20.1-21.0	0.01-5.71	120.00W	200mVpk-pk	±5%		93.0%	≤3s
	21.1-22.0	0.01-5.45	120.00W	200mVpk-pk	±5%		93.0%	≤3s
	22.1-23.0	0.01-5.21	120.00W	200mVpk-pk	±5%		93.0%	≤3s
	23.1-24.0	0.01-5.00	120.00W	240mVpk-pk	±5%		93.0%	≤3s
	24.1-25.0	0.01-4.80	120.00W	240mVpk-pk	±5%		93.0%	≤3s
	25.1-26.0	0.01-4.61	120.00W	240mVpk-pk	±5%	Line: ±1%	93.0%	≤3s
	26.1-27.0	0.01-4.44	120.00W	240mVpk-pk	±5%	Load: ±5%	93.0%	≤3s
	33.1-34.0	0.01-3.52	120.00W	300mVpk-pk	±5%		94.0%	≤3s
	34.1-35.0	0.01-3.42	120.00W	300mVpk-pk	±5%		94.0%	≤3s
	35.1-36.0	0.01-3.33	120.00W	300mVpk-pk	±5%		94.0%	≤3s
	36.1-37.0	0.01-3.24	120.00W	300mVpk-pk	±5%		94.0%	≤3s
	37.1-38.0	0.01-3.15	120.00W	300mVpk-pk	±5%		94.0%	≤3s
	38.1-39.0	0.01-3.07	120.00W	300mVpk-pk	±5%		94.0%	≤3s
	39.1-40.0	0.01-3.00	120.00W	300mVpk-pk	±5%		94.0%	≤3s
	47.1-48.0	0.01-2.50	120.00W	400mVpk-pk	±5%		94.0%	≤3s
	48.1-49.0	0.01-2.44	120.00W	400mVpk-pk	±5%		94.0%	≤3s
	49.1-50.0	0.01-2.40	120.00W	400mVpk-pk	±5%		94.0%	≤3s
	50.1-51.0	0.01-2.35	120.00W	400mVpk-pk	±5%		94.0%	≤3s
	51.1-52.0	0.01-2.30	120.00W	400mVpk-pk	±5%		94.0%	≤3s
52.1-53.0	0.01-2.26	120.00W	400mVpk-pk	±5%		94.0%	≤3s	
53.1-54.0	0.01-2.22	120.00W	400mVpk-pk	±5%		94.0%	≤3s	

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

Mechanical Details

DC Cable ⁽²⁾: UL 1185 14AWG*2C 1,200mm with ferrite for 11- 20V
UL 1185 16AWG*2C 1,200mm with ferrite for 21- 54V

Connector ⁽³⁾: 4PIN,31*10mm, 1&4"+", 2&3"-"

Unit: mm

Notes
(*1, 2, 3) Other options are available, please contact our sales representative for details.

Input

Input Voltage Range	90-264VAC (Class I); 80-264VAC (Class II)
Frequency Range	47-63Hz
Input Current	2.0A at 80/90VAC
Inrush Current	120A max at 240VAC cold start
Touch Leakage Current ^(max)	≤ 100µA at 264VAC

Environmental

Operating Temperature	-10°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	145.1(L)x69.5(W)x24.25(H)mm
Weight	450g
MTBF	>100,000hrs MIL-HK8K-217 at 25°C

Protection

Overload	120-170% 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
BSMI	-	CNS14436-1
FCC	-	FCC PART 15

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 - 2.7GMHz
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