UE Electronic

Switching Power Supply
Open Frame Style

Universal 120 Watt - UES120-XXXYYYSPAZ -OP

CLASS I & II

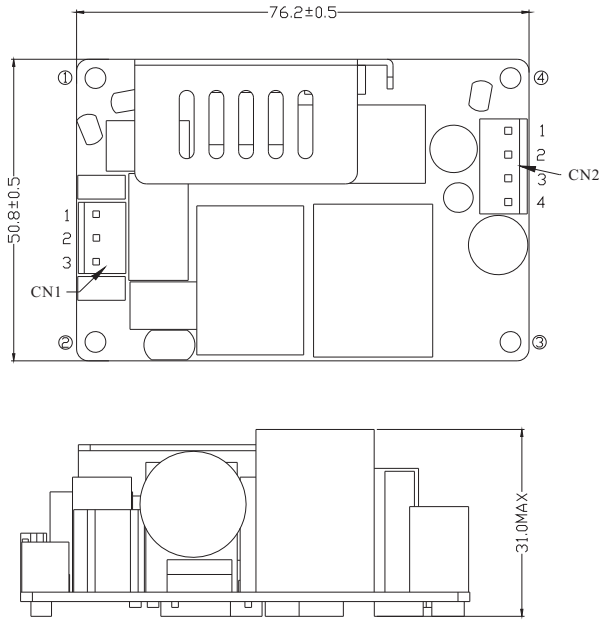
Product Features

- Medical safety approvals
- 2 MOPP input to output isolation
- Leakage current: ≤ 100μA
- Efficiency up to 95%
- ≤ 0.5W standby power
- Peak Load : 125% Rated Load (10s)
- Up to 5,000m operating altitude
- Convection cool

Models & Parameters

Model Number	Voltage(*1) (V)	Current (A)	Rated Power	Ripple & Noise (max)(*2)	Voltage Tolerance	Line & Load Regulation	Efficiency	Start Up Delay
UES120-XXXYYYSPAZ-OP (*3)	12.0	10.00	120.00W	150mVpk-pk	±5%	Line:±1% Load:±2%	92.0%	≤3s
	15.0	8.00	120.00W	150mVpk-pk	±5%		92.0%	≤3s
	18.0	6.66	119.88W	180mVpk-pk	±5%		93.0%	≤3s
	19.0	6.31	119.89W	180mVpk-pk	±5%		93.0%	≤3s
	24.0	5.00	120.00W	240mVpk-pk	±5%		93.0%	≤3s
	27.0	4.44	119.88W	300mVpk-pk	±5%		93.0%	≤3s
	36.0	3.33	119.88W	300mVpk-pk	±5%		94.0%	≤3s
	48.0	2.50	120.00W	400mVpk-pk	±5%		95.0%	≤3s
	54.0	2.22	119.88W	400mVpk-pk	±5%		95.0%	≤3s

Mechanical Details



AC Input Connector(CN1) :
JST B3P-VH or equivalent

Pin No.	1	2	3
Assignment	AC/L	No Pin	AC/N

DC Output Connector(CN2):
JST B4P-VH or equivalent

Pin No.	1,2	3,4
Assignment	V+	V-

NOTES:

1. Both positions ① and ④ of the CLASS I system must be short circuited and connected to the input ground.
2. Both positions ① and ④ of the CLASS II system must be short circuited.

Unit: mm

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
(*3) "Z" represents "1" or "2": "1" refers to the CLASS II standard, used for 2PIN input; "2" refers to the CLASS I standard, used for 3PIN input.

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Input

Input Voltage Range	85-264VAC(85-115VAC refer to derating curve)
Frequency Range	47-63Hz
Input Current	2.0A max at 100VAC
Inrush Current	100A max at 240VAC cold start
Touch Leakage Current (max)	≤100μA at 264VAC

Environmental

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

General

Dimensions	76.2(L)x50.8(W)x31.0(H)mm 3x2”
Power supply power density	1.000W/cm³
Weight	130g
MTBF	>1000,000hrs Telcordia_SR-332 at 25℃

Protection

Overload	120-180% rated output power, auto recovery
Over Voltage	110-150% rated output voltage input to reset
Short Circuit	Trip and restart (hiccup mode)

Safety Approvals

Safety Agency / Mark	Medical(meet)	ITE
CB	IEC60601-1	-
NRTL	ANSI/AAMI ES60601-1 CAN/CSA C22.2 NO.60601-1	-
TÜV Mark	EN60601-1	-

EMC

Emission	Medical	ITE
Conduction	IEC/EN60601-1-2,CISPR 11	-
Radiation	IEC/EN60601-1-2,CISPR 11	-
Harmonic Currents	EN61000-3-2, Class A	-
Voltage Flicker	EN61000-3-3	-

Immunity	IEC/EN60601-1-2	
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 - line ,±4KV 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

NOTE:
The power supply is considered a component which will be installed into a final equipment. All EMC tests are executed by mounting the unit on a 360mm*360mm metal plate with 1mm of thickness. The final equipment must be re-confirmed that it still meets EMC directives.

Others

Dielectric Withstand Voltage	4000VAC input to output
Insulation Resistance	100M Ohms, 500VDC input to output

Derating Curve