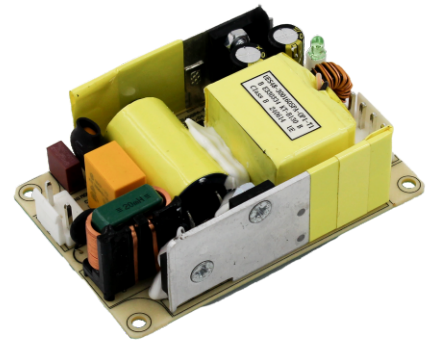


CB  
Product Features

- Medical & ITE safety meet
- 2 MOPP input to output isolation
- Energy efficiency level VI
- Leakage current < 10μA
- ≤ 0.075W standby power
- Up to 5,000m operating altitude


Models & Ratings

Model Number	Voltage ^(*)	Current	Rated Power	Ripple & Noise (max)(^{(*)2})	Voltage Tolerance	Line & Load Regulation	Efficiency (typ.)	Start Up Delay
UES48-XXXXYYSPA-OP1	24.0V	0.01-2.0	48W	300mVpk-pk	±5%	Line: ±1% Load: ±5%	89.0%	≤3s
	24.1-25.0	0.01-1.92	48W	300mVpk-pk	±5%		89.0%	≤3s
	25.1-26.0	0.01-1.84	48W	300mVpk-pk	±5%		89.0%	≤3s
	26.1-27.0	0.01-1.77	48W	300mVpk-pk	±5%		89.0%	≤3s
	27.1-28.0	0.01-1.71	48W	300mVpk-pk	±5%		89.0%	≤3s
	28.1-29.0	0.01-1.65	48W	300mVpk-pk	±5%		89.0%	≤3s
	29.1-30.0	0.01-1.60	48W	300mVpk-pk	±5%		89.0%	≤3s
	30.1-31.0	0.01-1.54	48W	300mVpk-pk	±5%		89.0%	≤3s
	31.1-32.0	0.01-1.50	48W	300mVpk-pk	±5%		89.0%	≤3s
	32.1-33.0	0.01-1.45	48W	300mVpk-pk	±5%		89.0%	≤3s
	33.1-34.0	0.01-1.41	48W	300mVpk-pk	±5%		89.0%	≤3s
	34.1-35.0	0.01-1.37	48W	300mVpk-pk	±5%		89.0%	≤3s
	35.1-36.0	0.01-1.33	48W	300mVpk-pk	±5%		89.0%	≤3s

Mechanical Details

Top view mechanical drawing of a power supply unit. Dimensions include a total width of 76.2 ± 0.5 mm, an internal width of 69.85 ± 0.5 mm, and a height of 50.8 ± 0.5 mm. Pin 1 is located at the top left, and pins 2, 3, and 4 are at the bottom right. A vertical dimension of 44.45 ± 0.5 mm is shown on the left, and a 3.175 mm offset is indicated for the top pins.

AC Input Connector :

JST B3P-VH or equivalent

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

DC Output Connector :

JST B4P-VH or equivalent

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

Side view mechanical drawing of the power supply unit. Maximum height dimensions are specified: 27.5 MAX. mm for the top section, 24.5 MAX. mm for the main body, and 3.0 MAX. mm for the bottom section.

Unit: mm

Notes

(*) 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	90-264VAC
Frequency Range	47-63Hz
Input Current	1.2A at 90VAC
Inrush Current	100A max at 240VAC cold start
Touch Leakage Current ^(max)	< 10μA at 264VAC

Environmental

Operating Temperature	-30°C to 60°C
Storage Temperature	-30°C to 70°C
Operating Humidity	10% to 90% RH, non-condensing
Storage Humidity	5% to 90% RH
Operating Altitude	5,000m

General

Dimensions	76.2(L) 50.8(W) 27.5(H)mm 3x2"
Weight	110g
MTBF	>100,000hrs MIL-HK8K-217 at 25°C
Isolation	5,656VDC Input to Output

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(Meet)
CB	IEC60601-1	IEC62368-1
NRTL	ANSI/AAMI ES60601-1 CAN/CSA-C22.2 NO. 60601-1	-

EMC

Emissions	Medical	ITE
Conducted	IEC/EN 60601-1-2, CISPR 11	EN55032, CISPR 32
Radiated	IEC/EN 60601-1-2, 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/EN 60601-1-2	EN55035, CISPR 35
ESD	EN61000-4-2	±15kV air, ±8kV contact
Radiated Immunity	EN61000-4-3	10V/m, 3V/m 80MHz - 2.7GHz
EFT/Burst	EN61000-4-4	±2kV on AC port, ±1kV on signal ports
Surge	EN61000-4-5	±2KV line to line (DM)
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	4000VAC input to output
Insulation Resistance	10M Ohms, 500VDC input to output