

### Product Features

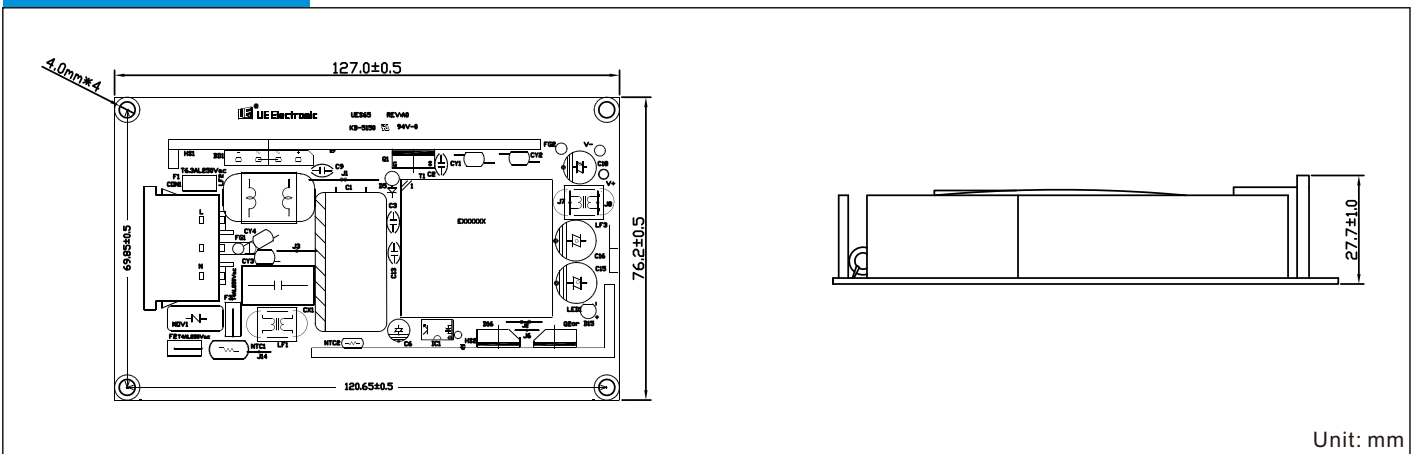
- Meets medical & I.T.E. safety
- 2 MOPP input to output isolation
- Touch current  $\leq 100\mu\text{A}$
- Energy efficiency level VI
- $\leq 0.15\text{W}$  standby power
- 9V-54V outputs, up to 65W
- Up to 5,000m operating altitude



### Models & Parameters

Model Number	Voltage <sup>(*)</sup> (V)	Current (A)	Rated Power	Ripple & Noise (max)	Voltage Tolerance	Line & Load Regulation	Efficiency (Average)	Start Up Delay
UES65-XXXXXXSPAZ-OP	9.0-12.0	0.01-5.42	65.04W	200mVpk-pk	±5%	Line: ±1% Load: ±5%	89.00%	≤3s
	12.1-13.0	0.01-5.00	65.00W	200mVpk-pk	±5%		89.00%	≤3s
	13.1-14.0	0.01-4.64	64.96W	200mVpk-pk	±5%		89.00%	≤3s
	14.1-15.0	0.01-4.30	64.50W	200mVpk-pk	±5%		89.00%	≤3s
	15.1-16.0	0.01-4.06	64.96W	200mVpk-pk	±5%		89.00%	≤3s
	16.1-17.0	0.01-3.82	64.94W	200mVpk-pk	±5%		89.00%	≤3s
	17.1-18.0	0.01-3.60	64.80W	200mVpk-pk	±5%		89.00%	≤3s
	18.1-19.0	0.01-3.40	64.60W	200mVpk-pk	±5%		89.00%	≤3s
	19.1-20.0	0.01-3.24	64.80W	200mVpk-pk	±5%		89.00%	≤3s
	20.1-21.0	0.01-3.09	64.89W	200mVpk-pk	±5%		89.00%	≤3s
	21.1-22.0	0.01-2.95	64.90W	200mVpk-pk	±5%		89.00%	≤3s
	22.1-23.0	0.01-2.82	64.86W	200mVpk-pk	±5%		89.00%	≤3s
	23.1-24.0	0.01-2.70	64.80W	240mVpk-pk	±5%		89.00%	≤3s
	48.0	0.01-1.35	64.80W	300mVpk-pk	±5%		89.00%	≤3s
	48.1-54.0	0.01-1.20	64.80W	300mVpk-pk	±5%		89.00%	≤3s

### Mechanical Details



#### Notes

(\*1) 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 <sup>(max)</sup>	≤ 100μA at 264VAC

**Environmental**
**General**

Operating Temperature	0°C to 40°C	Dimensions(mm)	127(L) 76.2(W) 27.7(H)
Storage Temperature	-20°C to 60°C	Weight	196g
Operating Humidity	10% to 90% RH, non-condensing	MTBF	>100,000hrs MIL-HDBK-217 at 25°C
Storage Humidity	5% to 90% RH		
Operating Altitude	5,000m		

**Protection**

Overload	120-200% rated output power, auto recovery
Over Voltage	120-200% 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	IEC60950-1 IEC62368-1
UL	ANSI/AAMI ES60601-1 CAN/CSA C22.2 NO. 60601-1	-

**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	EN55024, CISPR 24
Radiated Immunity	IEC61000-4-3	10V/m, 3V/m 80MHz-2.7GHz
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 (015MHz-80MHz)
Magnetic Field	IEC61000-4-8	30 A/m
Dips & Interruptions	IEC61000-4-11	0%, 70%, 0% of UT

**Others**

Dielectric Withstand Voltage	2,121VDC for Class I / 5,656VDC for Class II input to output
Insulation Resistance	10M Ohms, 500VDC input to output