



**Product Features**

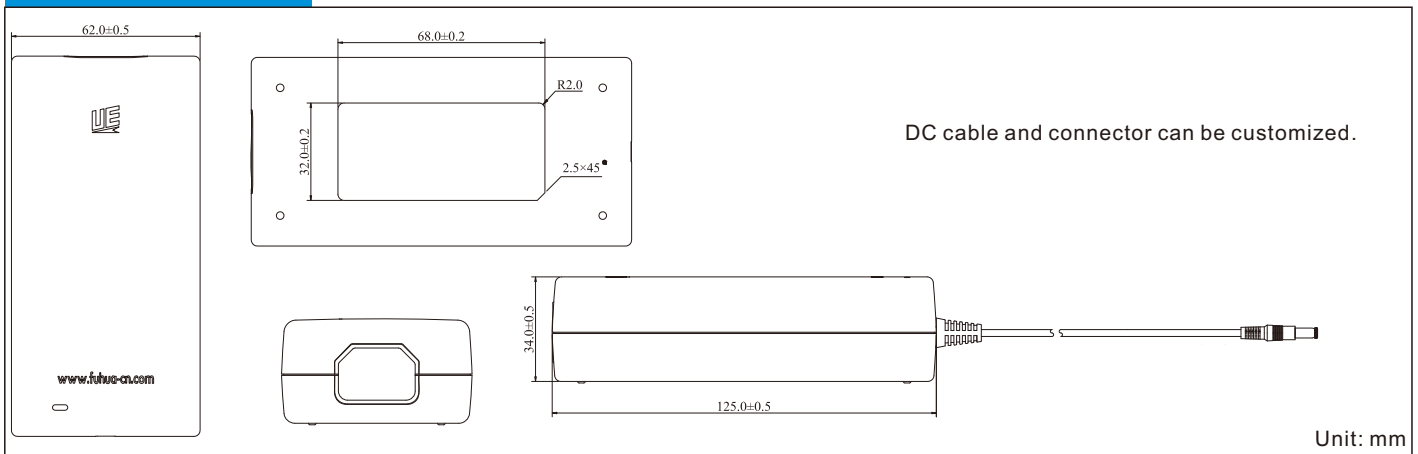
- Medical & I.T.E. safety approvals
- 2 MOPP input to output isolation
- Leakage current ≤ 100µA
- Earth Leakage current ≤ 5mA
- Energy efficiency level VI
- ≤ 0.15W standby power
- 9V-54V outputs, up to 65W
- Up to 5,000m operating altitude
- 4 types of AC inlet



**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 UES65-XXXXXXSPA2-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**



**AC Inlet Options**



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**

Operating Temperature	0°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	125(L) 62(W) 34(H)mm
Weight	315g
MTBF	>100,000hrs MIL-HDBK-217 at 25°C

**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	UL60950-1 UL62368-1
TUV Rheinland/Mark	EN60601-1 EN60601-1-11	-
TUV Rheinland/GS	-	EN62368-1
CCC	-	GB4943.1
CE	-	EN62368
FCC	-	FCC PART 15
PSE	-	J62368
BIS	-	IEC60950-1
BSMI	-	CNS14336-1
EAC	-	IEC62368-1
NOM	-	NOM-001-SCFI-2018
PSB	-	IEC62368-1
IRAM	-	IEC62368-1
RCM	-	AS/NZS62368-1
ST	-	IEC62368-1

**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	Medical	ITE
ESD	IEC61000-4-2	EN55035, CISPR 35
Radiated Immunity	IEC61000-4-3	
EFT/Burst	IEC61000-4-4	
Surge	IEC61000-4-5	
Conducted Immunity	IEC61000-4-6	
Magnetic Field	IEC61000-4-8	
Dips & Interruptions	IEC61000-4-11	

**Others**

Dielectric Withstand Voltage	4000VAC input to output
Insulation Resistance	10M Ohms, 500VDC input to output