



FC IP20 Class II VI

**Product Features**

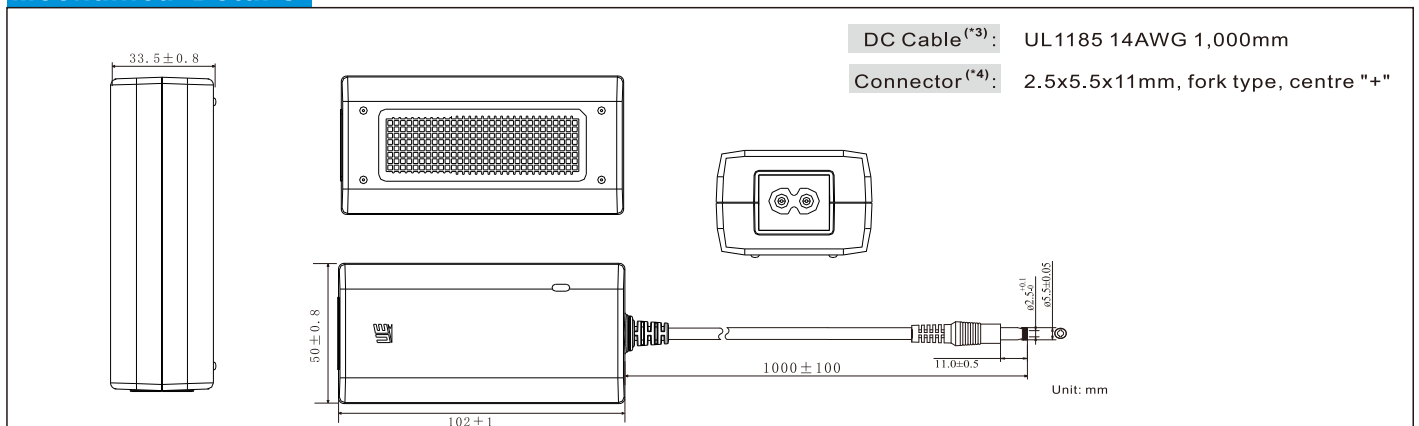
- Medical & ITE safety approvals
- 2 MOPP input to output isolation
- DOE efficiency level VI
- CoC Ver 5 tier 2
- Low leakage current  $\leq 50\mu\text{A}$
- $\leq 0.075\text{W}$  standby power
- 9.0V to 36V outputs, up to 36W
- 5,000m operating altitude
- AC inlet C8



**Models & Ratings**

Model Number	Voltage <sup>(1)</sup> (V)	Current (A)	Rated Power	Ripple & Noise (max) <sup>(2)</sup>	Voltage Tolerance	Line & Load Regulation	Efficiency (Average)	Start Up Delay
UES36-XXXXXXSPA	9.0-10.0	0.01-4.00	36.0W	400mVpk-pk	±5%	Line: ±1% Load: ±5%	88.3%	≤3s
UES36-XXXXXXSPA	10.1-11.0	0.01-3.56	36.0W	400mVpk-pk	±5%		88.3%	≤3s
UES36-XXXXXXSPA	11.1-12.0	0.01-3.24	36.0W	400mVpk-pk	±5%		88.3%	≤3s
UES36-XXXXXXSPA	12.1-13.0	0.01-2.97	36.0W	400mVpk-pk	±5%		88.3%	≤3s
UES36-XXXXXXSPA	13.1-14.0	0.01-2.74	36.0W	400mVpk-pk	±5%		88.3%	≤3s
UES36-XXXXXXSPA	14.1-15.0	0.01-2.55	36.0W	400mVpk-pk	±5%		88.3%	≤3s
UES36-XXXXXXSPA	15.1-16.0	0.01-2.38	36.0W	400mVpk-pk	±5%		88.3%	≤3s
UES36-XXXXXXSPA	16.1-17.0	0.01-2.23	36.0W	180mVpk-pk	±5%		88.3%	≤3s
UES36-XXXXXXSPA	17.1-18.0	0.01-2.10	36.0W	180mVpk-pk	±5%		88.3%	≤3s
UES36-XXXXXXSPA	18.1-19.0	0.01-1.98	36.0W	180mVpk-pk	±5%		88.3%	≤3s
UES36-XXXXXXSPA	19.1-20.0	0.01-1.88	36.0W	180mVpk-pk	±5%		88.3%	≤3s
UES36-XXXXXXSPA	20.1-21.0	0.01-1.79	36.0W	180mVpk-pk	±5%		88.3%	≤3s
UES36-XXXXXXSPA	21.1-22.0	0.01-1.70	36.0W	180mVpk-pk	±5%		88.3%	≤3s
UES36-XXXXXXSPA	22.1-23.0	0.01-1.62	36.0W	180mVpk-pk	±5%		88.3%	≤3s
UES36-XXXXXXSPA	23.1-24.0	0.01-1.55	36.0W	180mVpk-pk	±5%		88.3%	≤3s
UES36-XXXXXXSPA	24.1-25.0	0.01-1.49	36.0W	180mVpk-pk	±5%		88.3%	≤3s
UES36-XXXXXXSPA	25.1-26.0	0.01-1.43	36.0W	240mVpk-pk	±5%		88.3%	≤3s
UES36-XXXXXXSPA	26.1-27.0	0.01-1.37	36.0W	240mVpk-pk	±5%		88.3%	≤3s
UES36-XXXXXXSPA	27.1-28.0	0.01-1.32	36.0W	240mVpk-pk	±5%		88.3%	≤3s
UES36-XXXXXXSPA	28.1-29.0	0.01-1.28	36.0W	240mVpk-pk	±5%		88.3%	≤3s
UES36-XXXXXXSPA	29.1-30.0	0.01-1.23	36.0W	240mVpk-pk	±5%		88.3%	≤3s
UES36-XXXXXXSPA	30.1-31.0	0.01-1.19	36.0W	240mVpk-pk	±5%		88.3%	≤3s
UES36-XXXXXXSPA	31.1-32.0	0.01-1.15	36.0W	240mVpk-pk	±5%		88.3%	≤3s
UES36-XXXXXXSPA	32.1-33.0	0.01-1.12	36.0W	240mVpk-pk	±5%		88.3%	≤3s
UES36-XXXXXXSPA	33.1-34.0	0.01-1.08	36.0W	240mVpk-pk	±5%		88.3%	≤3s
UES36-XXXXXXSPA	34.1-35.0	0.01-1.05	36.0W	240mVpk-pk	±5%		88.3%	≤3s
UES36-XXXXXXSPA	35.1-36.0	0.01-1.02	36.0W	240mVpk-pk	±5%		88.3%	≤3s

**Mechanical Details**



Notes

(\*1, 3, 4) 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	0.5A at 90VAC
Inrush Current	70A max at 240VAC cold start
Touch Leakage Current <sup>(max)</sup>	≤50µA 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	102(L)x50(W)x33.5(H)
Weight	230g
MTBF	>100,000hrs MIL-HDBK-217 at 25°C
Isolation	4,000VAC Input to Output

**Protection**

Overload	110-200% 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	IEC60950-1 IEC62368-1
UL	ANSI/AAMI ES60601-1	UL60950-1 UL62368-1
TüV Rheinland/Mark	EN60601-1	-
TüV Rheinland/GS	-	EN60950-1 EN62368-1
RCM	-	AS/NZS 60950.1
PSE	-	J60950-1
CCC	-	GB4943.1
CE	-	EN62368
FCC	-	FCC PART 15
KC	-	K60950

**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	EN55024, CISPR 24
ESD	EN61000-4-2	±15kV air, ±8kV contact
Radiated Immunity	EN61000-4-3	10V/m, 3V/m 80MHz - 2.7GMHz
EFT/Burst	EN61000-4-4	±2kV on AC port, ±1kV on signal ports
Surge	EN61000-4-5	±1KV line to line (diff mode)
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	5,656VDC input to output
Insulation Resistance	10M Ohms, 500VDC input to output