



IP20 Class I & II (VI)

Product Features

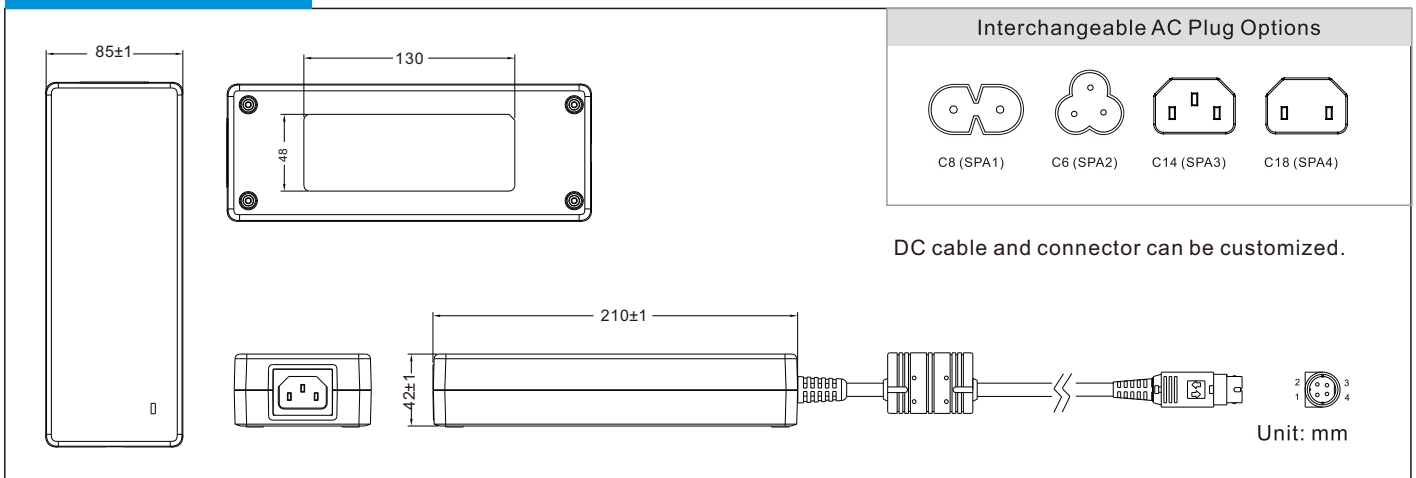
- Meet medical & LED driver safety approvals
- 2 MOPP input to output isolation
- Leakage current $\leq 100\mu\text{A}$
- Earth Leakage current $\leq 5\text{mA}$
- Energy efficiency level VI
- $\text{PF} > 0.95 @ 230\text{VAC}$ full load
- $\leq 0.15\text{W}$ standby power
- 11V-48V outputs, up to 200W
- Up to 5,000m operating altitude
- 4 types of AC inlet



Models & Parameters

Model Number	Voltage ^(*) (V)	Current (A)	Rated Power	Ripple & Noise (max)	Voltage Tolerance	Line & Load Regulation	Efficiency (Full load)	Start Up Delay
UES200-XXXXYYSPAZ	11.0-12.0	0.01-15.0	180.00W	150mVpk-pk	$\pm 5\%$	Line: $\pm 1\%$ Load: $\pm 5\%$	89.0%	$\leq 3\text{s}$
	12.1-13.0	0.01-14.0	182.00W	150mVpk-pk	$\pm 5\%$		89.0%	$\leq 3\text{s}$
	13.1-14.0	0.01-13.5	190.00W	150mVpk-pk	$\pm 5\%$		89.0%	$\leq 3\text{s}$
	14.1-15.0	0.01-13.3	200.00W	150mVpk-pk	$\pm 5\%$		89.0%	$\leq 3\text{s}$
	15.1-48.0	0.01-12.5	200.00W	180mVpk-pk	$\pm 5\%$		89.0%	$\leq 3\text{s}$

Mechanical Details



Notes

(*1) Other options are available, please contact our sales representative for details.

Input

Input Voltage Range	90-264VAC
Frequency Range	47-63Hz
Input Current	2.5A at 90VAC
Inrush Current	120A max at 240VAC cold start
Touch Leakage Current ^(max)	Class I & Class II ≤ 100µA at 264VAC

Environmental

Operating Temperature	-20°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	210(L) 85(W) 42(H)mm
Weight	950g
MTBF	>100,000hrs MIL-HDBK-217 at 25°C

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	Lamp	Medical(Meet)
CB	IEC61347	IEC60601-1
UL	UL 8750	ANSI/AAMI ES60601-1
TUV-SUD/Mark	EN 61347	CAN/CSA-C22.2 NO. 60601-1
CE	EN61347	EN60601-1
		-

EMC

Emissions	Lamp	Medical
Conducted	EN 55015, CISPR 15	IEC/EN60601-1-2, CISPR 11
Radiated	EN 55015, CISPR 15	IEC/EN60601-1-2, CISPR 11
Harmonic Currents	EN61000-3-2, Class C	IEC/EN61000-3-2, Class A
Voltage Flicker	EN61000-3-3	EN61000-3-3
Immunity	IEC/EN61547	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	±4KV line to line (DM)
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

Others

Dielectric Withstand Voltage	4000VAC for Class I & Class II input to output
Insulation Resistance	10M Ohms, 500VDC input to output