



Class II (VI)

Product Features

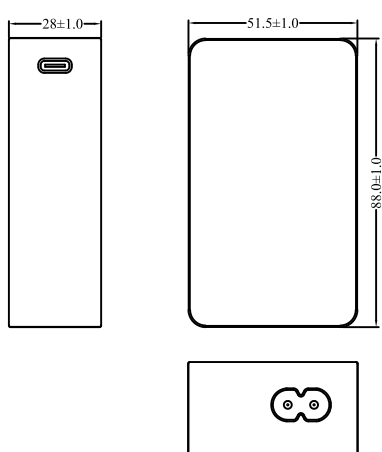
- Meets medical & I.T.E. safety
- 2 MOPP input to output isolation
- Touch current $\leq 100\mu\text{A}$
- Energy efficiency level VI
- $\leq 0.15\text{W}$ standby power
- 5V-20V outputs, up to 60W
- Up to 5,000m operating altitude
- Support online programming
- Meet USB PD3.0 fast charge agreement




Models & Parameters

Model Number	Voltage (*1) (V)	Current (A)	Rated Power	Ripple & Noise (max)	Voltage Tolerance	Line & Load Regulation	Efficiency (Average)	Start Up Delay
UES60D1-200300SPC	5.0	0.01-3.00	15.00W	150mVpk-pk	$\pm 5\%$	Line: $\pm 1\%$ Load: $\pm 5\%$	82.0%	$\leq 3\text{s}$
	9.0	0.01-3.00	27.00W	150mVpk-pk	$\pm 5\%$		86.8%	$\leq 3\text{s}$
	12.0	0.01-3.00	36.00W	150mVpk-pk	$\pm 5\%$		87.5%	$\leq 3\text{s}$
	15.0	0.01-3.00	45.00W	150mVpk-pk	$\pm 5\%$		88.0%	$\leq 3\text{s}$
	20.0	0.01-3.00	60.00W	150mVpk-pk	$\pm 5\%$	89.0%	$\leq 3\text{s}$	

Mechanical Details



Interchangeable AC Plug Options



C8(D1)

DC Connector: USB TYPE-C

Unit: mm

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	1.3A at 90VAC
Inrush Current	100A max at 240VAC cold start
Touch Leakage Current ^(max)	≤ 100μA at 264VAC

Environmental

Operating Temperature	0°C to 40°C
Storage Temperature	-40°C to 80°C
Operating Humidity	10% to 90% RH, non-condensing
Storage Humidity	5% to 90% RH
Operating Altitude	5,000m

General

Dimensions	88.0(L) 51.5(W) 28.0(H)mm
Weight	175g
MTBF	>100,000hrs MIL-HK8K-217 at 25°C

Protection

Overload	105-140% rated output power, auto recovery
Over Voltage	110-130% rated output voltage input to reset
Short Circuit	Trip and restart (hiccup mode)

Safety Approvals

Safety Agency / Mark	Medical	ITE
CB	IEC60601-1	IEC62368-1
UL	ANSI/AAMI ES60601-1 CAN/CSA-C22.2 NO. 60601-1	UL62368-1
TüV-SUD/Mark	EN60601-1	EN62368-1
TüV-SUD/GS	-	EN62368-1
CCC	-	GB4943.1
NRTL	-	UL62368-1
RCM	-	AS/NZS62368.1
CE	-	EN62368-1
FCC	-	FCC PART 15

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	EN55035, CISPR 35
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	±2KV line to line, ±4KV line to GND
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	5,656VDC input to output
Insulation Resistance	10M Ohms, 500VDC input to output