


CB   FC

IP22 Class I & II 

Product Features

- Meet medical safety approvals
- 2 MOPP input to output isolation
- Leakage current $\leq 100\mu\text{A}$
- Energy efficiency level VI
- $\leq 0.15\text{W}$ standby power
- Peak load: 140W MAX @Rated Input Voltage
- Up to 5,000m operating altitude
- 4 types of AC inlet

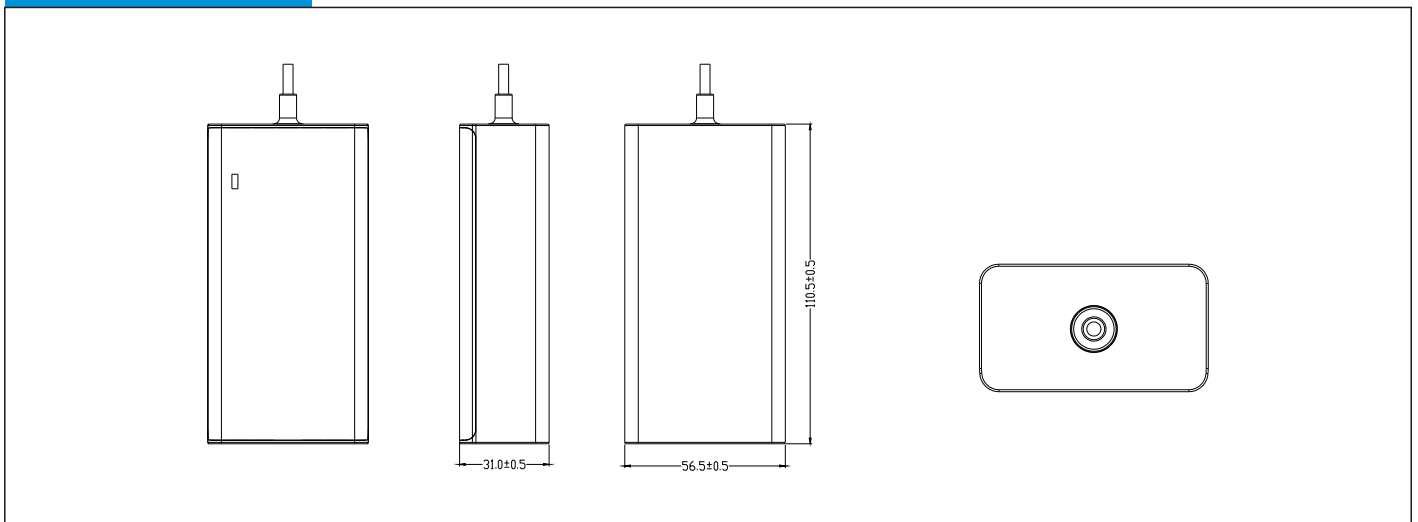


Models & Ratings

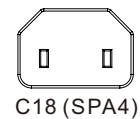
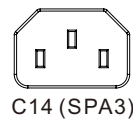
Model Number	Voltage ^(*) (V)	Current (A)	Rated Power	Ripple & Noise (max)	Voltage Tolerance	Line & Load Regulation	Efficiency (Average)	Start Up Delay
UES65CZ-XXXYYYSPA	12.0	0.01-5.0	60W	200mVpk-pk	$\pm 5\%$	Line: $\pm 1\%$ Load: $\pm 5\%$	88.0%	$\leq 3\text{s}$
	12.1-13.0	0.01-4.61	60W	200mVpk-pk	$\pm 5\%$		88.0%	$\leq 3\text{s}$
	13.1-14.0	0.01-4.28	60W	200mVpk-pk	$\pm 5\%$		88.0%	$\leq 3\text{s}$
	14.1-15.0	0.01-4.00	60W	200mVpk-pk	$\pm 5\%$		88.0%	$\leq 3\text{s}$
	19.0	0.01-3.42	65W	200mVpk-pk	$\pm 5\%$		88.0%	$\leq 3\text{s}$
	19.1-20.0	0.01-3.25	65W	240mVpk-pk	$\pm 5\%$		88.0%	$\leq 3\text{s}$
	20.1-21.0	0.01-3.09	65W	240mVpk-pk	$\pm 5\%$		88.0%	$\leq 3\text{s}$
	21.1-22.0	0.01-2.95	65W	240mVpk-pk	$\pm 5\%$		88.0%	$\leq 3\text{s}$
	22.1-23.0	0.01-2.82	65W	240mVpk-pk	$\pm 5\%$		88.0%	$\leq 3\text{s}$
	23.1-24.0	0.01-2.71	65W	240mVpk-pk	$\pm 5\%$		88.0%	$\leq 3\text{s}$

Model encoding: replace "Z" with "1" for C8 (Class II), "2" for C6 (Class I), "3" for C14 (Class I), "4" for C18 (Class I) AC inlets

Mechanical Details



AC Inlet Options



Notes

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

Input

Input Voltage Range	80-264VAC(80-90VAC refer to derating curve)
Frequency Range	47-63Hz
Input Current	1.8A at 90VAC
Inrush Current	120A max at 240VAC cold start
Touch Leakage Current ^(max)	≤100μA at 264VAC

Environmental

Operating Temperature	-30°C to 70°C(40°C to 70°C refer to derating curve)
Storage Temperature	-40°C to 85°C
Operating Humidity	10% to 90% RH, non-condensing
Storage Humidity	5% to 90% RH
Operating Altitude	5,000m

General

Dimensions	110.5(L) 56.5(W) 31.0(H)mm
Power density	0.335W/cm ³
Weight	260g
MTBF	>500,000hrs MIL-HK8K-217 at 25°C

Protection

Overload	220-330% rated output power, auto recovery
Over Voltage	110-145% rated output voltage input to reset
Short Circuit	Trip and restart (hiccup mode)

Safety Approvals

Safety Agency / Mark	Medical
CB	IEC60601-1
NRTL	ANSI/AAMI ES60601-1 CAN/CSA-C22.2 NO. 60601-1
TUV-SUD/MARK	EN60601-1

EMC

Emissions	Medical
Conducted	IEC/EN 60601-1-2, CISPR 11
Radiated	IEC/EN 60601-1-2, CISPR 11
Harmonic Currents	EN61000-3-2, Class A
Voltage Flicker	EN61000-3-3
Immunity	IEC/EN 60601-1-2
ESD	EN61000-4-2 ±15kV air, ±8kV contact
Radiated Immunity	EN61000-4-3 10V/m, 3V/m 80MHz - 2.7GHz
EFT/Burst	EN61000-4-4 ±2kV on AC port, ±1kV on signal ports
Surge	EN61000-4-5 ±1KV line to line (DM)
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	4000VAC input to output
Insulation Resistance	10M Ohms, 500VDC input to output

Derating Curve
