



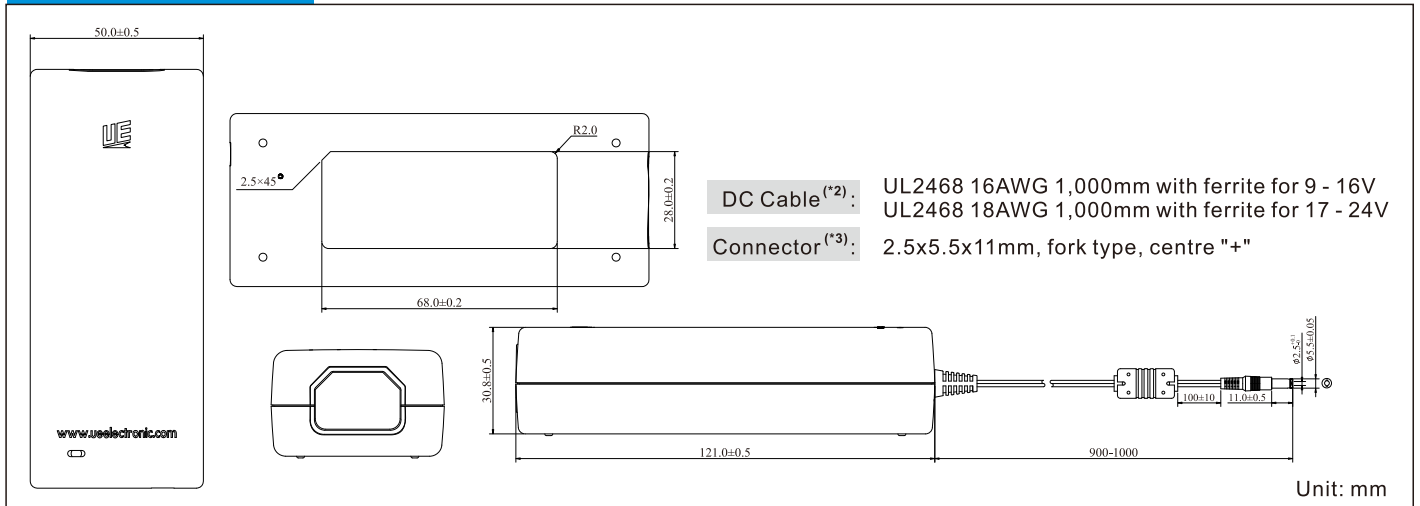
IP20 Class I & II (V)

Product Features

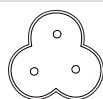
- Meets medical & I.T.E. safety
- 2 MOPP input to output isolation
- Touch current $\leq 100\mu\text{A}$
- Earth Leakage current $\leq 5\text{mA}$
- Energy efficiency level V
- $\leq 0.3\text{W}$ standby power
- 9V-24V outputs, up to 48W
- Up to 3,048m operating altitude
- 3 types of AC inlet


Models & Parameters

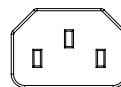
Model Number	Voltage (*1) (V)	Current (A)	Rated Power	Ripple & Noise (max)	Voltage Tolerance	Line & Load Regulation	Efficiency (Average)	Start Up Delay
UE48-XXXYYYS SPAZ	9.0-12.0	0.01-4.02	48.24W	200mVpk-pk	$\pm 5\%$	Line: $\pm 1\%$ Load: $\pm 5\%$	88.62%	$\leq 3\text{s}$
	12.1-13.0	0.01-3.70	48.10W	200mVpk-pk	$\pm 5\%$		88.61%	$\leq 3\text{s}$
	13.1-14.0	0.01-3.43	48.00W	200mVpk-pk	$\pm 5\%$		88.60%	$\leq 3\text{s}$
	14.1-15.0	0.01-3.20	48.00W	200mVpk-pk	$\pm 5\%$		88.59%	$\leq 3\text{s}$
	15.1-16.0	0.01-3.00	48.00W	200mVpk-pk	$\pm 5\%$		88.59%	$\leq 3\text{s}$
	16.1-17.0	0.01-2.83	48.10W	200mVpk-pk	$\pm 5\%$		88.61%	$\leq 3\text{s}$
	17.1-18.0	0.01-2.67	48.10W	200mVpk-pk	$\pm 5\%$		88.60%	$\leq 3\text{s}$
	18.1-19.0	0.01-2.53	48.10W	200mVpk-pk	$\pm 5\%$		88.60%	$\leq 3\text{s}$
	19.1-20.0	0.01-2.40	48.00W	200mVpk-pk	$\pm 5\%$		88.59%	$\leq 3\text{s}$
	20.1-21.0	0.01-2.29	48.10W	200mVpk-pk	$\pm 5\%$		88.61%	$\leq 3\text{s}$
	21.1-22.0	0.01-2.19	48.20W	200mVpk-pk	$\pm 5\%$		88.62%	$\leq 3\text{s}$
	22.1-23.0	0.01-2.09	48.10W	200mVpk-pk	$\pm 5\%$		88.60%	$\leq 3\text{s}$
	23.1-24.0	0.01-2.01	48.24W	200mVpk-pk	$\pm 5\%$		88.62%	$\leq 3\text{s}$

Mechanical Details

AC Inlet Options


C8 (SPA1)



C6 (SPA2)



C14 (SPA3)

Notes

(*1, 2, 3) Other options are available, please contact our sales representative for details.

Input

Input Voltage Range	90-264VAC
Frequency Range	47-63Hz
Input Current	1.1A at 90VAC
Inrush Current	50A max at 240VAC cold start
Touch Leakage Current ^(max)	Class I ≤ 250µA & Class II ≤ 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	3,048m

General

Dimensions	121(L)x50(W)x30.8(H)mm
Weight	260g
MTBF	>100,000hrs MIL-HDBK-217 at 25°C

Protection

Overload	120-280% 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	IEC60950-1 IEC62368-1
UL	ANSI/AAMI ES60601-1 CAN/CSA C22.2 NO. 60601-1	-
TüV-SUD/Mark	EN60601-1	-
TüV-SUD/GS	-	EN60950-1
CCC	-	GB4943.1(For Class I only)
PSE	-	J62368-1(For UE48-120300SPA1 only)
CE	-	EN60950
FCC	-	FCC PART 15
NOM	-	NOM-001-SCFI-2018

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	EN55024, CISPR 24
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	±1KV line to line (different mode)
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	2,121VDC for Class I / 5,656VDC for Class II input to output
Insulation Resistance	10M Ohms, 500VDC input to output