



Product Features

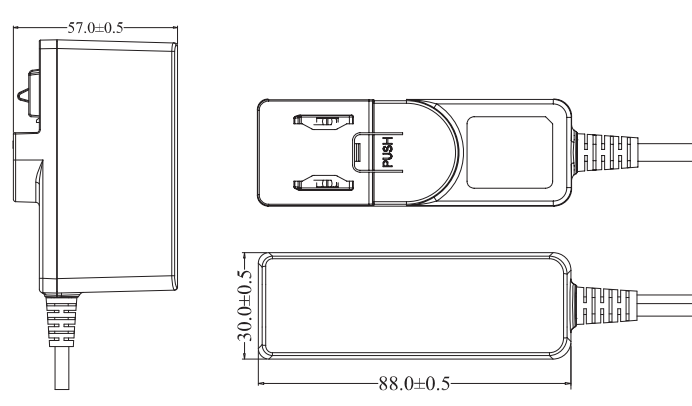
- Meets medical & I.T.E. & LED driver safety
- 2 MOPP input to output isolation
- Touch current $\leq 100\mu\text{A}$
- Energy efficiency level VI
- $\leq 0.075\text{W}$ standby power
- 5V-24V outputs, up to 18W
- Up to 5,000m operating altitude
- Interchangeable AC plugs








Models & Parameters

| Model Number | Voltage ^(*1) (V) | Current (A) | Rated Power | Ripple & Noise (max) | Voltage Tolerance | Line & Load Regulation | Efficiency (Average) | Start Up Delay |
|--------------------|--------------------------------|----------------|-------------|-------------------------|-------------------|------------------------------------|-------------------------|------------------|
| UES18LCP-XXXXYYSPA | 5.0-6.0 | 0.01-3.00 | 18.00W | 200mVpk-pk | $\pm 6\%$ | Line: $\pm 1\%$ Load: $\pm 5\%$ | 81.84% ^(*2) | $\leq 3\text{s}$ |
| | 6.1-7.0 | 0.01-2.00 | 14.00W | 200mVpk-pk | $\pm 5\%$ | | 83.36% | $\leq 3\text{s}$ |
| | 7.1-8.0 | 0.01-2.00 | 16.00W | 200mVpk-pk | $\pm 5\%$ | | 84.21% | $\leq 3\text{s}$ |
| | 8.1-9.0 | 0.01-2.00 | 18.00W | 200mVpk-pk | $\pm 5\%$ | | 84.91% | $\leq 3\text{s}$ |
| | 9.1-10.0 | 0.01-1.80 | 18.00W | 200mVpk-pk | $\pm 5\%$ | | 84.97% | $\leq 3\text{s}$ |
| | 10.1-11.0 | 0.01-1.65 | 18.00W | 200mVpk-pk | $\pm 5\%$ | | 84.96% | $\leq 3\text{s}$ |
| | 11.1-12.0 | 0.01-1.50 | 18.00W | 200mVpk-pk | $\pm 5\%$ | | 85.05% | $\leq 3\text{s}$ |
| | 12.1-13.0 | 0.01-1.40 | 18.00W | 200mVpk-pk | $\pm 5\%$ | | 85.14% | $\leq 3\text{s}$ |
| | 13.1-14.0 | 0.01-1.30 | 18.00W | 200mVpk-pk | $\pm 5\%$ | | 85.17% | $\leq 3\text{s}$ |
| | 14.1-15.0 | 0.01-1.20 | 18.00W | 200mVpk-pk | $\pm 5\%$ | | 85.14% | $\leq 3\text{s}$ |
| | 15.1-16.0 | 0.01-1.13 | 18.00W | 200mVpk-pk | $\pm 5\%$ | | 85.18% | $\leq 3\text{s}$ |
| | 16.1-17.0 | 0.01-1.10 | 18.00W | 200mVpk-pk | $\pm 5\%$ | | 85.37% | $\leq 3\text{s}$ |
| | 17.1-18.0 | 0.01-1.05 | 18.00W | 200mVpk-pk | $\pm 5\%$ | | 85.19% | $\leq 3\text{s}$ |
| | 18.1-19.0 | 0.01-0.95 | 18.00W | 200mVpk-pk | $\pm 5\%$ | | 85.22% | $\leq 3\text{s}$ |
| | 19.1-20.0 | 0.01-0.90 | 18.00W | 200mVpk-pk | $\pm 5\%$ | | 85.22% | $\leq 3\text{s}$ |
| | 20.1-21.0 | 0.01-0.86 | 18.00W | 200mVpk-pk | $\pm 5\%$ | | 85.25% | $\leq 3\text{s}$ |
| | 21.1-22.0 | 0.01-0.82 | 18.00W | 200mVpk-pk | $\pm 5\%$ | | 85.25% | $\leq 3\text{s}$ |
| | 22.1-23.0 | 0.01-0.80 | 18.00W | 200mVpk-pk | $\pm 5\%$ | | 85.36% | $\leq 3\text{s}$ |
| 23.1-24.0 | 0.01-0.75 | 18.00W | 200mVpk-pk | $\pm 5\%$ | 85.26% | $\leq 3\text{s}$ | | |

Mechanical Details



Interchangeable AC Plug Options^(*3)

US/JP
EU
UK
AU
CN

DC cable and connector can be customized.

Unit: mm

Notes
 (*1, 3) Other options are available, please contact our sales representative for details.
 (*2) Meets energy efficiency level V only.

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 ^(max) | ≤100µA at 264VAC |

Environmental

| | | | |
|-----------------------|-------------------------------|------------|----------------------------------|
| Operating Temperature | 0°C to 45°C | Dimensions | 88(L) 30(W) 57(H)mm |
| Storage Temperature | -20°C to 60°C | Weight | 140g |
| Operating Humidity | 10% to 90% RH, non-condensing | MTBF | >100,000hrs MIL-HDBK-217 at 25°C |
| Storage Humidity | 5% to 90% RH | | |
| Operating Altitude | 5,000m | | |

General
Protection

| | |
|---------------|--|
| Overload | 120-150% 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 |
| TüV Rheinland/Mark | CAN/CSA C22.2 NO. 60601-1 | CAN/CSA C22.2 NO. 60950-1 |
| TüV Rheinland/GS | EN60601-1 | - |
| RCM | - | EN62368-1 |
| CE | - | AS/NZS 60950.1 |
| CCC | - | EN62368 |
| KC | - | GB4943.1 |
| FCC | - | K60950-1 |
| PSE | - | FCC PART 15 |
| | | J62368 |

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 - 2700MHz |
| EFT/Burst | IEC61000-4-4 | ±2KV on AC port, ±1KV on signal ports |
| Surge | IEC61000-4-5 | ±2KV 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 | 5,656VDC input to output |
| Insulation Resistance | 10M Ohms, 500VDC input to output |