



**Product Features**

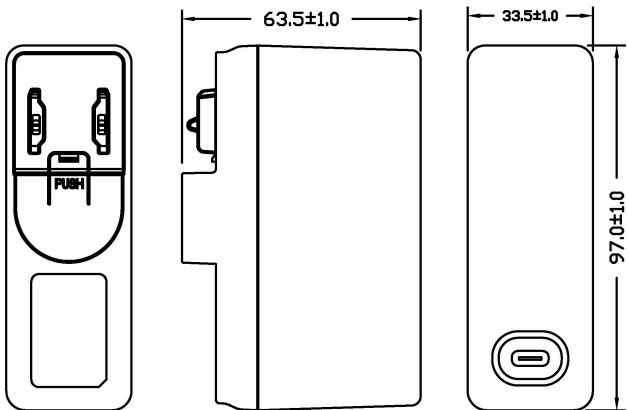
- Medical & I.T.E. safety approvals
- 2 MOPP input to output isolation
- Touch current  $\leq 100\mu\text{A}$
- Energy efficiency level VI
- $\leq 0.15\text{W}$  standby power
- 5V-20V outputs, up to 60W
- Up to 5,000m operating altitude
- Support online programming
- Meet USB PD3.0 fast charge agreement




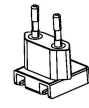



**Models & Parameters**

| Model Number       | Voltage <sup>(*)</sup><br>(V) | Current<br>(A) | Rated<br>Power | Ripple & Noise<br>(max) | Voltage<br>Tolerance | Line & Load<br>Regulation          | Efficiency<br>(Average) | Start Up<br>Delay |
|--------------------|-------------------------------|----------------|----------------|-------------------------|----------------------|------------------------------------|-------------------------|-------------------|
| UES60LCP-200300SPC | 5.0                           | 0.01-3.00      | 15.00W         | 150mVpk-pk              | $\pm 5\%$            | Line: $\pm 1\%$<br>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

US/JP
EU
UK
AU
CN

Unit: mm

Notes  
(\*) 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 <sup>(max)</sup> | ≤ 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 | 97.0(L) 63.5(W) 33.5(H)mm        |
| Weight     | 180g                             |
| 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<br>CAN/CSA-C22.2 NO. 60601-1 | -                 |
| TUV-SUD/Mark         | EN60601-1  | EN62368-1         |
| TUV-SUD/GS           | -  | EN62368-1         |
| CCC                  | -  | GB4943.1          |
| PSE                  | -  | J62368-1          |
| NRTL                 | -  | UL62368-1         |
| RCM                  | -  | AS/NZS62368.1     |
| CE                   | -  | EN62368-1         |
| FCC                  | -  | FCC PART 15       |
| BSMI                 | -  | CNS14336-1        |
| 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           | 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 |