

## Product Features

- Medical & ITE safety approvals
- 2 MOPP input to output isolation
- Suitable for medical equipment up to class BF<sup>(^)</sup>
- Low leakage current  $\leq 10\mu\text{A}$
- DOE efficiency level VI
- CoC V5 Tier 2(2016)
- $\leq 0.075\text{W}$  standby power
- 4.2V to 12V outputs, up to 6W
- Up to 5,000m operating altitude
- Interchangeable AC plugs



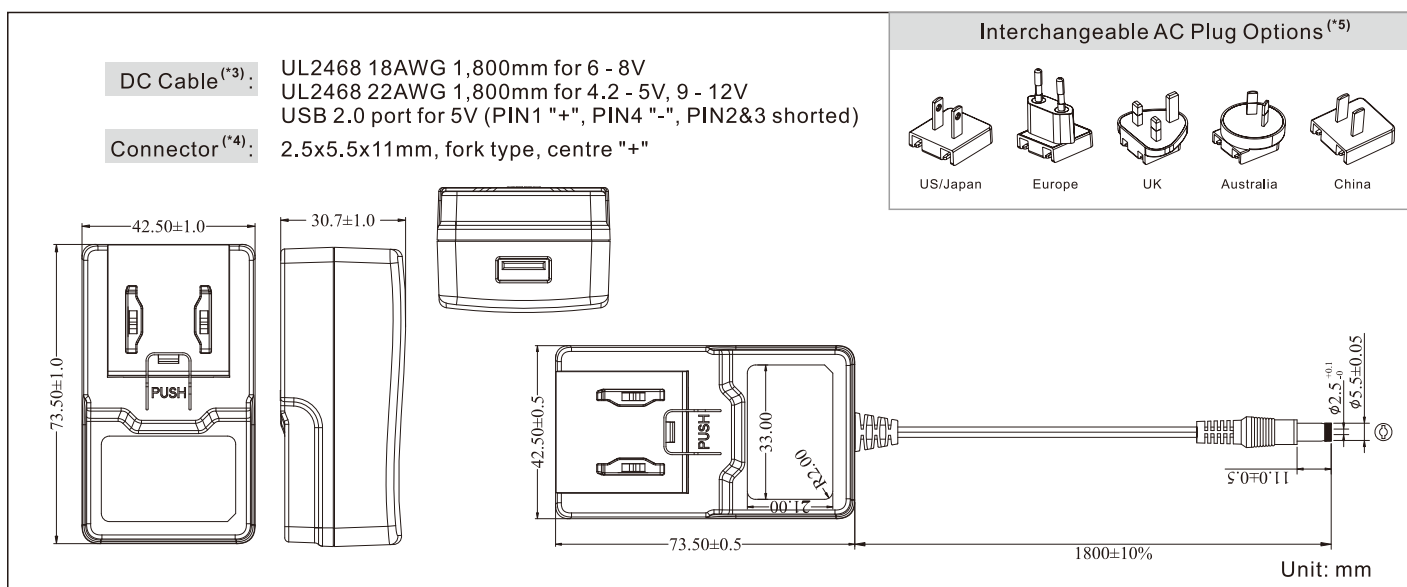
## Models & Ratings

| Model Number      | Voltage <sup>(*1)</sup><br>(V) | Current<br>(A) | Rated<br>Power | Ripple & Noise<br>(max) <sup>(*2)</sup> | Voltage<br>Tolerance | Line & Load<br>Regulation | Efficiency<br>(Average) | Start Up<br>Delay |
|-------------------|--------------------------------|----------------|----------------|-----------------------------------------|----------------------|---------------------------|-------------------------|-------------------|
| UES06WZ-XXXXYYSPA | 4.2                            | 0.01-1.20      | 5.04W          | 200mVpk-pk                              | ±5%                  | Line: ±1%<br>Load: ±5%    | 73.83%                  | ≤3s               |
|                   | 5.0-6.0                        | 0.01-1.00      | 6W             | 150mVpk-pk                              | ±5%                  |                           | 73.77%                  | ≤3s               |
|                   | 6.1-7.0                        | 0.01-0.86      | 6W             | 150mVpk-pk                              | ±5%                  |                           | 78.16%                  | ≤3s               |
|                   | 7.1-8.0                        | 0.01-0.75      | 6W             | 200mVpk-pk                              | ±5%                  |                           | 78.26%                  | ≤3s               |
|                   | 8.1-8.9                        | 0.01-0.67      | 6W             | 200mVpk-pk                              | ±5%                  |                           | 78.38%                  | ≤3s               |
|                   | 9.0-10.0                       | 0.01-0.60      | 6W             | 200mVpk-pk                              | ±5%                  |                           | 78.35%                  | ≤3s               |
|                   | 10.1-11.0                      | 0.01-0.54      | 6W             | 200mVpk-pk                              | ±5%                  |                           | 78.42%                  | ≤3s               |
|                   | 11.1-12.0                      | 0.01-0.50      | 6W             | 200mVpk-pk                              | ±5%                  |                           | 78.53%                  | ≤3s               |

Model encoding:

For changeable AC plug, replace "Z" with "NCPU" for USB 2.0 port (5V only), "NCP" for fixed DC cable

## Mechanical Details



### Notes

(\*1, 3, 4, 5) Other options are available, please contact our sales representative for details.

(\*2) Measured at output connector with 20MHz bandwidth and 0.1uF ceramic in parallel with 10uF electrolytic capacitors.

(^) Power supplies are not medical equipment (applied parts), medical product manufacturers shall take responsibility for further evaluation of class B/BF/CF compliance of their end product.

## Input

|                                        |                              |
|----------------------------------------|------------------------------|
| Input Voltage Range                    | 90-264VAC                    |
| Frequency Range                        | 47-63Hz                      |
| Input Current                          | 0.2A at 90VAC                |
| Inrush Current                         | 30A max at 240VAC cold start |
| Touch Leakage Current <sup>(max)</sup> | ≤10μA at 264VAC              |

## Environmental

|                       |                               |
|-----------------------|-------------------------------|
| Operating Temperature | 0°C to 45°C                   |
| Storage Temperature   | -20°C to 60°C                 |
| Operating Humidity    | 10% to 90% RH, non-condensing |
| Storage Humidity      | 5% to 90% RH                  |
| Operating Altitude    | 5,000m                        |

## General

|            |                                  |
|------------|----------------------------------|
| Dimensions | 73.5(L)x42.5(W)x30.7(H)mm        |
| Weight     | 85g                              |
| MTBF       | >100,000hrs MIL-HDBK-217 at 25°C |
| Isolation  | 4,000VAC Input to Output         |

## 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                        |
| UL                   | ANSI/AAMI ES60601-1       | UL60950-1                         |
| TUV                  | CAN/CSA C22.2 NO. 60601-1 | CAN/CSA C22.2 NO. 60950-1         |
| RCM                  | EN60601-1                 | EN60950-1                         |
| CCC                  | -                         | AS/NZS 60950.1                    |
| PSE                  | -                         | GB4943.1                          |
| KC                   | -                         | J60950-1                          |
|                      |                           | K60950-1 (4.2 to 6VDC model only) |

## EMC

| Emissions            | Medical                    | ITE                                   |
|----------------------|----------------------------|---------------------------------------|
| Conducted            | IEC/EN 60601-1-2, CISPR 11 | EN55022, CISPR 22                     |
| Radiated             | IEC/EN 60601-1-2, CISPR 11 | EN55022, CISPR 22                     |
| Harmonic Currents    | EN61000-3-2, Class A       | EN61000-3-2, Class A                  |
| Voltage Flicker      | EN61000-3-3                | EN61000-3-3                           |
| Immunity             | IEC/EN 60601-1-2           | EN55024, CISPR 24                     |
| ESD                  | EN61000-4-2                | ±15kV air, ±8kV contact               |
| Radiated Immunity    | EN61000-4-3                | 10V/m, 3V/m 80MHz - 2700MHz           |
| EFT/Burst            | EN61000-4-4                | ±2kV on AC port, ±1kV on signal ports |
| Surge                | EN61000-4-5                | ±1KV line to line (diff mode)         |
| 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 | 5,656VDC input to output          |
| Insulation Resistance        | 100M Ohms, 500VDC input to output |