

# **ESPE-0112-W2E**

premium quality plug type 12 V power supply

#### **FEATURES:**

- compact design
- premium class design
- safe and reliable power source
- high efficiency Energy Star Compliance Level V
  home automation

#### **APPLICATIONS:**

- consumer electronics
- general purpose
- computer devices
- security and monitoring systems
- telecommunication devices

**ESPE-0112-W2E** is a compact and efficient 1-watt wall-mounted style plug type power unit for various types of electronic devices. It is based on high quality electronic components that allow continuous, long-lasting work in all conditions. It is reliable, fully protected and stable. It provides high efficiency and excellent specification.



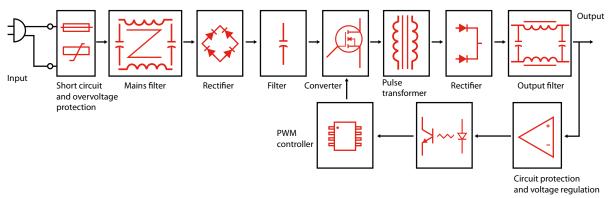
#### **TECHNICAL SPECIFICATION**

| Group                      | Parameter                          | Value                          | Conditions               |
|----------------------------|------------------------------------|--------------------------------|--------------------------|
| Input                      | Rated input voltage                | 100-240 VAC                    |                          |
|                            | Input voltage range                | 90-264 VAC                     |                          |
|                            | Mains frequency range              | 47-63 Hz                       |                          |
|                            | AC current (max.)                  | 0.1 A                          | At 100 VAC and full load |
|                            | Inrush current (max.)              | 20 A                           |                          |
|                            | No load power consumption          | 0.3 W                          |                          |
|                            | Input leakage current (max.)       | 0.25 mA                        | At 264 VAC               |
|                            | Power factor correction            | No                             |                          |
| Output                     | Rated output voltage               | 12 V                           |                          |
|                            | Rated output power                 | 1.2 W                          |                          |
|                            | Rated output current               | 0.1 A                          |                          |
|                            | Efficiency                         | 61%                            | At 230 VAC               |
|                            | Efficiency compliance              | Energy Star Compliance Level V |                          |
|                            | Line regulation                    | ±3%                            |                          |
|                            | Load regulation                    | ±5%                            |                          |
|                            | Ripple and noise                   | 200 mVp-p                      | At 100 VAC               |
|                            | Minimal output current             | No                             |                          |
|                            | Hold up time (max.)                | 5 ms                           | At 100 VAC and full load |
|                            | DC voltage rise time (max.)        | 40 ms                          | At 100 VAC and full load |
|                            | Turn on delay time (max.)          | 3 s                            | At 100 VAC and full load |
|                            | Working temperature                | 0 to +40℃                      |                          |
| For the control            | Working humidity                   | 25% to 75% RH                  | 40℃                      |
| Environmental              | Storage temperature                | -10°C to +80°C                 |                          |
|                            | Cooling method                     | Free air circulation           |                          |
|                            | Short circuit                      | Yes                            |                          |
| Btti                       | Overcurrent                        | Yes                            |                          |
| Protection                 | Output overvoltage                 | Yes                            |                          |
|                            | Automatic recovery on fault remove | Yes                            |                          |
|                            | Withstand isolation voltage        | 3 kVAC (input to output)       | 5 mA, 1 min              |
|                            | Isolation resistance               | 100 ΜΩ                         | 500 VDC                  |
|                            | Isolation class                    | 2                              |                          |
| Safety and EMC             | Safety compliance                  | EN62368                        |                          |
|                            | EMC compliance                     | EN55022 class B                |                          |
|                            | Marking                            | RoHS, CE                       |                          |
|                            | Power on LED                       | Yes                            |                          |
|                            | Enclosure                          | Black ABS plastic              |                          |
| Mechanical<br>and features | Size                               | 60 × 39 × 25 mm                | L × W × H                |
|                            | Weight                             | 64 g                           |                          |
|                            | Output connector                   | Wire with soldering tips       |                          |
|                            | Input connector                    | EU 2-pole plug                 |                          |
|                            | Output cable                       | 1.5 m                          | 0.13 mm <sup>2</sup>     |
|                            | Single package                     | 75 × 48 × 68 mm                |                          |
|                            | Packing                            | 405 × 260 × 300 mm             | 100 pieces               |
|                            | Manufacturing                      | China                          |                          |
|                            | Warranty                           | 3 years                        |                          |

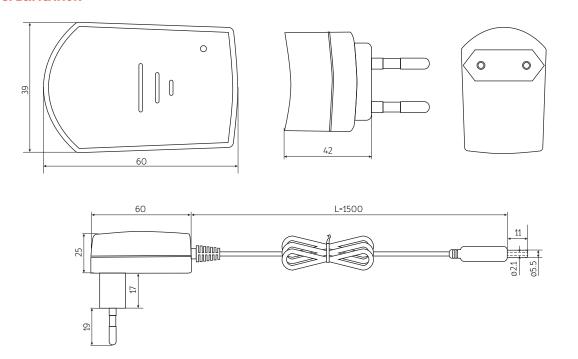
#### Notes:

Unless otherwise stated, all parameters are specified at 230 VAC input voltage, 50 Hz, ambient temperature 25°C and relative humidity 70% for rated load output. The values of parameters related to the output voltage regulation is measured from low to high line or for load changes from 0 to 100%, respectively. The power supply is considered as an independent unit, but the final equipment still need to reconfirm that the whole system complies with the EMC directives. If the PSU is installed in the final device as a subassembly, the tests should be repeated to verify that the system has been met compliance. Detailed technical data are available on request.

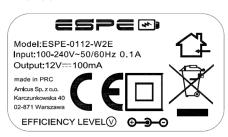
#### **BLOCK DIAGRAM**



#### **MECHANICAL SPECIFICATION**



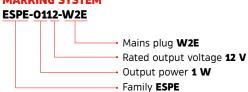
## **PRODUCT LABEL**



#### Legend to the label icons:

- I safety class: no grounding is required, no dangerous voltage even in an emergency situation will appear on output
- 🗘 power supply intended for indoor use only
- e—• − polarization: plus in the middle, minus outside
- of in normal waste containers
- $\bigcirc$  high efficiency and low no load power consumption, meeting the requirements of Energy Star Compliance Level 5

# **MARKING SYSTEM**



### **OTHER POWER SUPPLIES IN THIS SERIES**

| Model                   | ESPE-0112-W2E | ESPE-0312-W2E | ESPE-0612-W2E | ESPE-1212-W2E | ESPE-1512-W2E | ESPE-1812-W2E | ESPE-2412-W2E |
|-------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Rated output<br>voltage | 12 V          |
| Rated output<br>current | 0.1 A         | 0.3 A         | 0.5 A         | 1 A           | 1.2 A         | 1.5 A         | 2 A           |
| Output power            | 1.2 W         | 3.6 W         | 6 W           | 12 W          | 14 W          | 18 W          | 24 W          |

File name: ESPE-0112-W2E\_EN\_2021\_10\_17.pdf