

# ESPE-18UN-W2E

- premium quality plug type 3-12 V power supply

## FEATURES:

- compact design
- high power output
- premium class design
- safe and reliable power source
- universal purpose

## APPLICATIONS:

- consumer electronics
- office equipment
- audio-video equipment
- home and building automation
- toys

**ESPE-18UN-W2E** is a compact and efficient 18-watt wall-mounted style plug type power unit for various types of electronic devices. Provides 7 stabilized output voltages with a value set with a rotary switch (from 3 to 12 V). Its design is based on high-quality electronic components that allow for continuous, long-term operation in all conditions. It is reliable and fully protected against overload. It has universal application and excellent technical parameters.



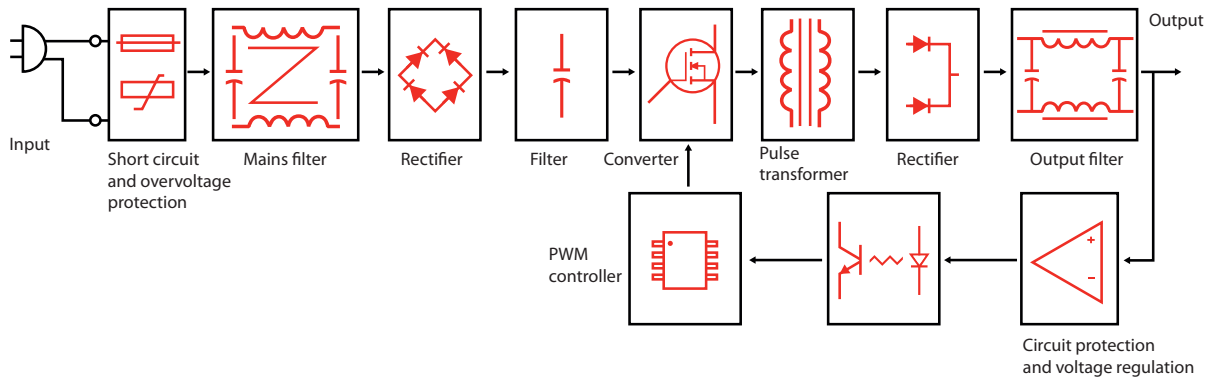
## TECHNICAL SPECIFICATION

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.)	0.5 A	At 100 VAC and full load
	Inrush current (max.)	60 A	
	No load power consumption	0.1 W	
	Input leakage current (max.)	0.25 mA	At 264 VAC
Output	Rated output voltage	3; 4.5V; 5V; 6V; 7.5V; 9V; 12V	
	Rated output power	18 W	
	Rated output current	1.5 A	
	Average efficiency	74.5% (3V), 85% (12V)	At 230 VAC
	Efficiency at 10% load	72% (3V), 77% (12V)	
	Line regulation	±3%	
	Load regulation	±5%	For 4.5-12V
		±8%	For 3V
	Ripple and noise	120 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.)	70 ms	At 100 VAC and full load
Turn on delay time (max.)	3 s	At 100 VAC and full load	
Environmental	Working temperature	0 to +40°C	
	Working humidity	25% to 75% RH	40°C
	Storage temperature	-10°C to +80°C	
	Cooling method	Free air circulation	
Protection	Short circuit	Yes	
	Overcurrent	Yes	
	Output overvoltage	Yes	
	Automatic recovery on fault remove	Yes	
Safety and EMC	Withstand isolation voltage	3 kVAC (input to output)	5 mA, 1 min
	Isolation resistance	100 MΩ	500 VDC
	Isolation class	2	
	Safety compliance	EN62368-1	
	EMC compliance	EN55022 class B	
	Marking	RoHS, CE	
Mechanical and features	Enclosure	Black ABS plastic	
	Size	92 × 46 × 36 mm	L × W × H
	Weight	125 g	
	Output connector	DC Jack – 6 versions	Plus in the middle
	Input connector	EU 2-pole plug	
	Output cable	1 m	0.32 mm <sup>2</sup>
	Single package	104 × 53 × 80 mm	
	Packing	425 × 230 × 285 mm	50 pieces
	Warranty	2 years	

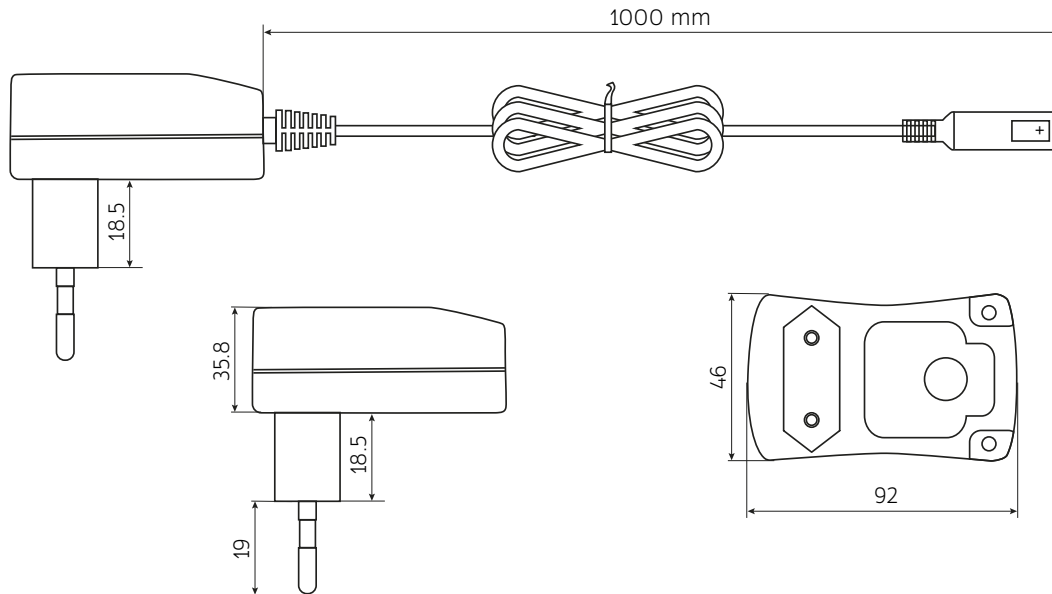
## Notes:

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.

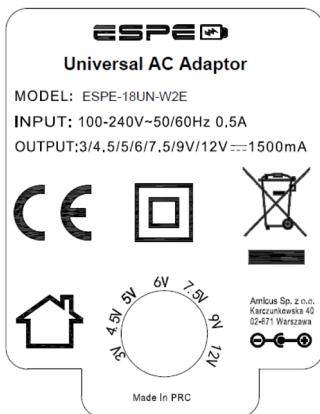
## BLOCK DIAGRAM



## MECHANICAL SPECIFICATION



## PRODUCT LABEL



### Legend to the label icons:

- - II 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
- ♻️ - the product must not be disposed of in normal waste containers

## MARKING SYSTEM

### ESPE-18UN-W2E



## REPLACEABLE PLUGS AVAILABLE FOR ALL UN SERIES POWER SUPPLIES

Plug color	Dimensions
Red	1.35/3.5 mm
Blue	2.1/5.5 mm
White	2.5/5.5 mm
Yellow	0.7/2.35 mm
Yellow	1.7/4.0 mm
	Microjack 2.5 mm

## OTHER POWER SUPPLIES IN THIS SERIES

Model	ESPE-30UN-W2E	ESPE-24UN-W2E	ESPE-18UN-W2E
Output voltage set by switch	3 V; 4.5 V; 5 V; 6 V; 7.5 V; 9 V; 12 V		
Rated output current	2.25 A	2 A	1.5 A
Rated output power	27 W	24 W	18 W