





#### **Features:**

- Miniature aluminium housing
- DIN-rail mounting allowed with additional DIN-holder
- Work mode LED indication on-board and additional external board (optional)
- Automatic protection: overload, short circuit, wrong polarity battery connection, battery deep discharge
- Battery hot swapping
- Work without battery as power supply
- Absence output voltage drop-down during switch to battery and back
- On-board information outputs (transistor's open collector)

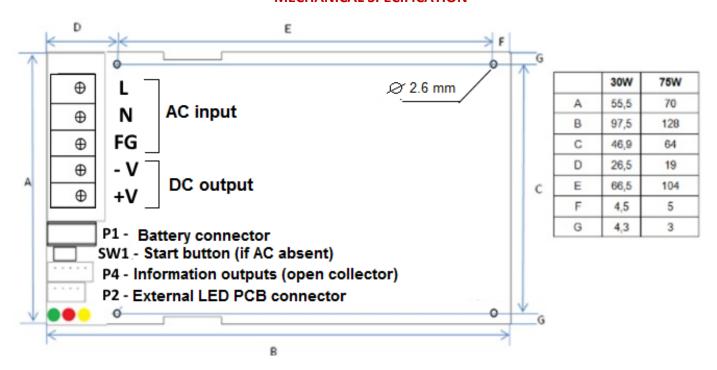
### **SPECIFICATION**

	Model name	UPS 30W/24V Simple	UPS 30W Simple	UPS 75W Simple
Output	DC voltage (AC mode)	27,4 V ± 2%	13,8 V ± 2%	13,8 V ± 2%
	DC voltage (Battery mode)	20,827,6 V	10,313,8 V	10,313,8 V
	Voltage ripple and noise	≤60 mV	≤30 mV	≤120 mV
	Battery maximum charge voltage	27,4 V ± 2%	13,8 V ± 2%	13,8 V ± 2%
	Battery low voltage	21,0±0,2V	10,5±0,2V	10,5±0,2V
	Rated current	1 A	2 A	5 A
	Maximum current (AC mode)	1.1 A	2,2 A	5,2 A
	Maximum current (Battery mode)	1.1 A	2,2 A	5,2 A
	Battery charge current	0,3 A	0,5 A	1,0 A
	Battery sustaining current	20 - 100 mA (depends of battery capacity)		
	Recommended battery capacity	2 x 7 A/h	7 A/h	712 A/h
	UPS self consumption (AC absent)	≤30 mA		
	Voltage loss between battery and output	0,3 V	0,3 V	0,3 V
	Power source efficiency	≥85%	≥85%	≥85%
Input	AC Voltage range	100 - 240 VAC (86 - 264 VAC max.)		
	No load power consumption	≤0,5 W	≤0,5 W	≤0,5 W
	Frequency range		47 - 63 (400) Hz	
Protection	Short circuit in load	Yes	Yes	Yes
	Overload	Yes	Yes	Yes
	Battery deep discharge	Yes	Yes	Yes
	Wrong polarity battery connection	Yes	Yes	Yes
Info out	AC present	Yes	Yes	Yes
	Out OK	Yes	Yes	Yes
	Battery low voltage	<22V	<11V	<11V
Indication	Indication of AC, DC out and Battery	3 LEDs on PCB		
		(External PCB - optional)		
	Yellow LED (AC)	'ON' - AC present		
	Tenent 225 (res)	Blinking - battery charging		
	Red LED (Battery)	Constantly ON -	Constantly ON -	Constantly ON -
		battery voltage less	battery voltage less	battery voltage less
		than 22V	than 11V	than 11V
	Green LED (DC out)	'ON' - DC output voltage OK		
Safety	Withstand voltage I/P-O/P	3kV / 60 s / 5 mA		
	Withstand voltage I/P-FG	1.5kV / 60 s / 5 mA		
	Withstand voltage O/P-FG	0.5kV / 60 s / 5 mA		
Others	Working temperature	-20+45 °C		
	Storage temperature	-30+80 °C		
	Dimension, mm	101x59x29	101x59x29	134x74x37





#### **MECHANICAL SPECIFICATION**



# Connectors pin assignment

## P2 connector. External indication:

P4 connector. Information outputs (open collector, 30 mA max.)

- 1 Gnd
- 2 Green LED +V (DC out)
- 3 Red LED +V (Battery)
- 4 Yellow LED +V (AC)

- 2 Battery voltage ≤11V (22V) (transistor closed if battery voltage ≤11V (22V))
- 3 AC present (transistor open if AC present)
- 4 DC out OK (transistor open if DC OK)
- 5 not used
- 6 +V

1 - -V

To start the UPS without AC, you must briefly press the SW1 button.

The UPS will not start when either the battery contacts are incorrectly connected (wrong polarity), or the battery voltage is below 10.5V (21V), or the current to the load is higher than the rated current specified in this description.

The battery will be automatically disconnected from the load (when AC absent), if the voltage at the battery contacts drops below 10.5V (21V). The battery charge will begin automatically when AC power is restored.

When AC present, the UPS automatically charges the battery up to 13.8V (27.4V). At the end of the battery charge, the current to the battery will decrease to 20-100 mA, depending on the type and capacity of the battery.

This model of uninterruptible power supplies is fully automatic and does not require maintenance. It is recommended to check the condition of the battery annually. Three to four full cycles of battery discharge/charge once a year extend the battery life to 3-5 years