

- 3-step charge control with current detection
- Universal input voltage (90-264 VAC)
- Wake up and low current start-up of deeply discharged batteries
- Error indication for reverse polarity, short circuit, charging of lower voltage batteries and safety timer run-out
- Temp. compensated charge voltage on request
- Order plugs and mains cord separately
- ECO-design compliance: DoE and CEC

**Approvals:**

- Home Healthcare EN 60601-1-11
- Household safety, EN 60335-1 & -2-29 (6, 12, 18 and 24V)
- Medically certified
- Safety: EN 60601-1 ed. 3.1
- EMC: EN 60601-1-2 ed. 4
- UL approved

For updates: see [www.mascot.no](http://www.mascot.no)



**TECHNICAL SPECIFICATIONS**

**GENERAL INPUT/OUTPUT**

<b>Input voltage:</b>	90-264 VAC
<b>Line Frequency:</b>	47 – 63Hz
<b>Switch frequency, approx.:</b>	40 kHz
<b>Leakage current from batt. with mains switched off:</b>	<0.3mA @ nominal battery voltage
<b>Temperature range</b>	
• <b>Operating:</b>	-25 °C - +40 °C
• <b>Storage:</b>	-25 °C - +85 °C
<b>Ripple:</b>	< 100 mV p-p
<b>Input terminal:</b>	2-pin IEC 60320 connector C8
<b>Output terminals:</b>	DC connector, battery clips, push on terminals or open ends
<b>IP-code:</b>	4X
<b>Dimensions (LxWxH):</b>	124 x 50 x 37 mm
<b>Weight:</b>	220g

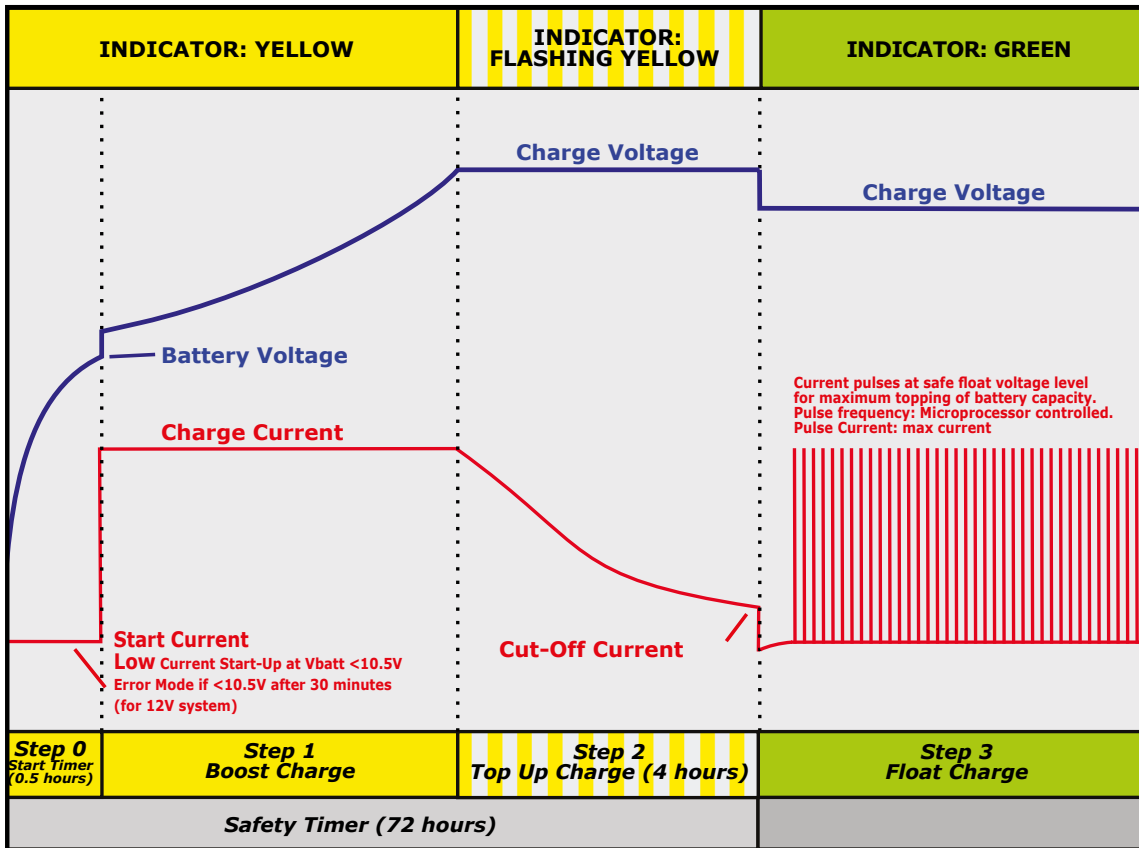
**SAFETY PROTECTION EMC**

<b>Protection:</b>	Protected against reversed polarity and short circuit proof
<b>Insulation class:</b>	Class II
<b>Insulation voltage</b>	
<b>Primary – secondary:</b>	4000VAC / 5700VDC
<b>Electrical safety std:</b>	EN/IEC 60335-2-29, EN/IEC/ANSI 60601-1, EN 60601-1-11
<b>EMC standards</b>	
• <b>Medical</b>	EN 60601-1-2
• <b>Emission</b>	EN 55014-1, EN 61000-6-3
• <b>Immunity</b>	EN 55014-2, EN 61000-6-1

**VERSIONS**

	Step 0 < 30 min	Step 0 > 30 min	Step 1	Step 2	Step 3	Float charge
	(Yellow)	(Red=error)	(Yellow)	(Flash Yellow)	(Green)	
<b>12V</b>	100mA ± 25mA (batt volt < 10.5V)	0A/0V	2A ± 0.1A (batt volt > 10.5V) (until Vbat = 14.7V)	14.7V ± 0.2V (until I charge < 0.5A or > 4hr) tapering charge current	13.7V ± 0.2V (until I charge > 2.0A) supply current up to max. 2.0A for possible parallel load	Pulsing current at safe float volt. level for max topp. of batt.
<b>24V</b>	100mA ± 25mA (batt volt < 21V)	0A/0V	1A ± 0.1A (batt volt < 21V) (until Vbat = 29.4V)	29.4V ± 0.2V (until I charge < 0.25A or > 4hr) tapering charge current	27.4V ± 0.2V (until I charge > 1A) supply current up to max 1A for possible parallel load	

## Charging characteristics and LED indication \*



\* an animated video of this charging progress is available on our website

### BATTERY NOT CONNECTED INDICATIONS

Battery not connected is indicated by FLASHING GREEN. In this mode charger will apply short pulses attempting to wake up deeply discharged batteries.

### ERROR INDICATIONS

- 2 red blinks: Battery is connected to charger with wrong polarity!
- 3 red blinks: Charger output is shorted. Check output cable connection!
- 4 red blinks: Battery voltage is low. Check battery status or voltage.
- 5 red blinks: Safety timer has run out. Check battery status or capacity.
- LED off: Battery voltage is too high. Check battery voltage.

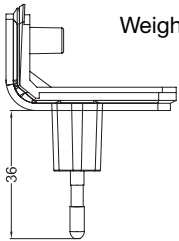


## Exchangeable AC plugs

### EU plug adapter

Part no. 127000

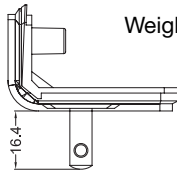
Weight: 20,9 g



### US plug adapter

Part no. 127100

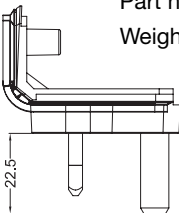
Weight: 13,4 g



### UK plug adapter

Part no. 127200

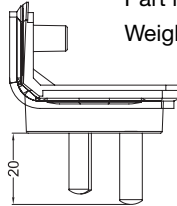
Weight: 29,2 g



### AUS plug adapter

Part no. 127300

Weight: 21,4 g



### 2-pin IEC 60320 C7 mains cord

1800 mm

EU part no. 131306, UK part no. 131148,

US part no. 131368, AU part no. 013108

