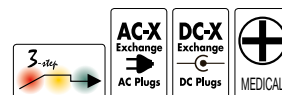


- 3-step charge control with current detection
- Universal input voltage (90-264 VAC)
- Wake up and low current start-up of deeply discharged batteries
- Error indication for reverse polarity, short circuit, charging battery packs with wrong number of cells and safety timer run-out
- With NTC input on request
- Order plugs and mains cord separately
- ECO-design compliance: DoE and GEC
- Approvals:
 - Medically certified
 - Safety: EN 60601-1 ed. 3.1
 - EMC: EN 60601-1-2 ed. 4
 - UL approved



For updates: see www.mascot.no

TECHNICAL SPECIFICATIONS



GENERAL INPUT/OUTPUT

Input voltage:	90-264 VAC
Line Frequency:	47 – 63Hz
Switch frequency, approx.:	40 kHz
Leakage current from batt. with mains switched off:	<0,4mA @ nominal battery voltage
Temperature range	
• Operating:	-25 °C - +40 °C
• Storage:	-25 °C - +85 °C
Ripple:	< 100 mV p-p
Dimensions (LxWxH):	124 x 50 x 37 mm
Weight:	220g

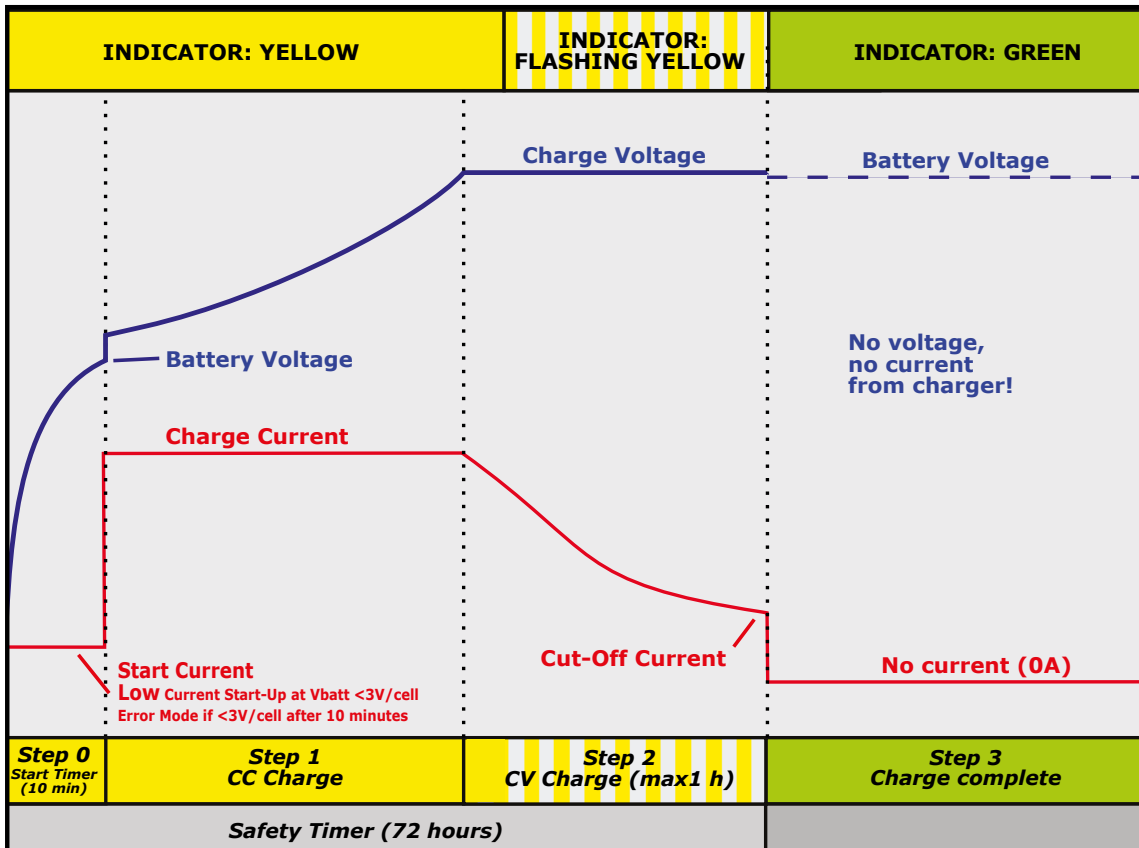
SAFETY PROTECTION EMC

Protection:	Protected against reversed polarity and short circuit proof Class II
Insulation class:	Class II
Insulation voltage	
Primary – secondary:	4000VAC / 5700VDC
Electrical safety std:	EN/IEC 60335-2-29, EN/IEC/ANSI 60601-1
EMC standards	
• Medical	EN 60601-1-2
• Emission	EN 55014-1, EN 61000-6-3
• Immunity	EN 55014-2, EN 61000-6-1
Input terminal:	2-pin IEC 60320 connector C8
Output terminals:	DC connector, battery clips, push on terminals or open ends 4X
IP-code:	4X

VERSIONS

CHARGE CONTROL		Step 0 < 10min (yellow)	Step 0 > 10min (Red: 4 blinks)	Step 1 (yellow)	Step 2 (Flash yellow)	Step 3 (green)	
Cells	Max output power (W)	Low Current start-up for deeply discharged batt.	Battery voltage too low	Charge Current	Charge Voltage	Charge term when current is:	Restart
2	23W	CC 100mA±25mA when batt. < 6V	0A/0V	2.5A ±0.3A	8.4V ±0.1V	< 100mA or max. 1 hr.	8.2V
3	28W	CC 100mA±25mA when batt. < 9V		2.2A ±0.2A	12.6V ±0.1V		12.3V
4	28W	CC 100mA±25mA when batt. < 12V		1.6A ±0.15A	16.8V ±0.1V		16.4V
7	29W	CC 100mA±25mA when batt. < 21V		1.0A ±0.1A	29.4V ±0.2V		28.7V
10	29W	CC 100mA±25mA when batt. < 30V		0.7A ±0.07A	42V ±0.3V		41V

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.

WAIT MODE INDICATIONS

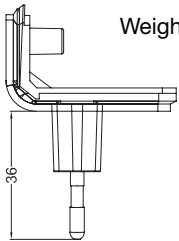
Yellow with 1 red blink: Battery temperature is too low ($< 0^{\circ}C$)
 Yellow with 2 red blink: Battery temperature is too high ($> 45^{\circ}C$)



Exchangeable AC plugs

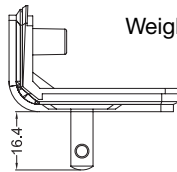
EU plug adapter

Part no. 127000
Weight: 20,9 g



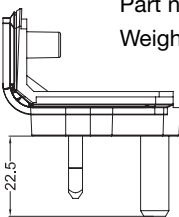
US plug adapter

Part no. 127100
Weight: 13,4 g



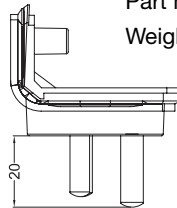
UK plug adapter

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

