

Model 2542 LA

2,2 A max out • 90-264 VAC input

- 3-step charge control with current detection as charge termination
- Universal input voltage (90-264 VAC)
- 2-pin IEC 320 mains connector
- Waterproof (IP67) version available
- Approvals:
 - Medically certified
 - Safety: EN 60601-1 ed. 3.1
 - Home healthcare EN 60601-1-11
 - EMC: EN 60601-1-2 ed. 4
 - UL approved
 - MET
- Custom specifications on request:

Charging parameters, connectors, cords, logo print, housing/open frame/IP rating and certificates. For more information: [custom design info sheet](#)



Available versions

12V / 2,2A

24V / 1,2A

Notes:

Plug-in unit

Exchangeable AC and DC plugs

Order plugs & mains cord separately

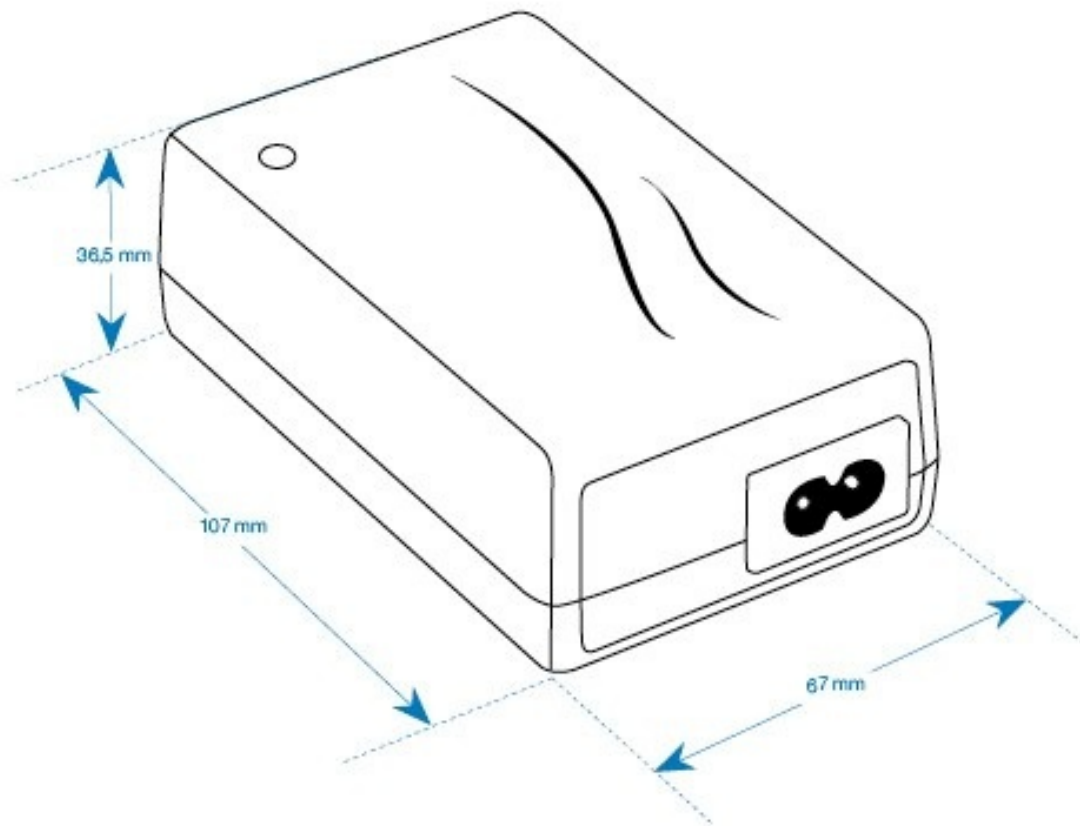
Standard DC output cord (exch. DC plugs):

Female conn. L 1.8m, AWG 18, OD: 2.7 X 5.4 Black w. white line,
UL 2468

Mounting bracket available

Desktop unit available (2541)

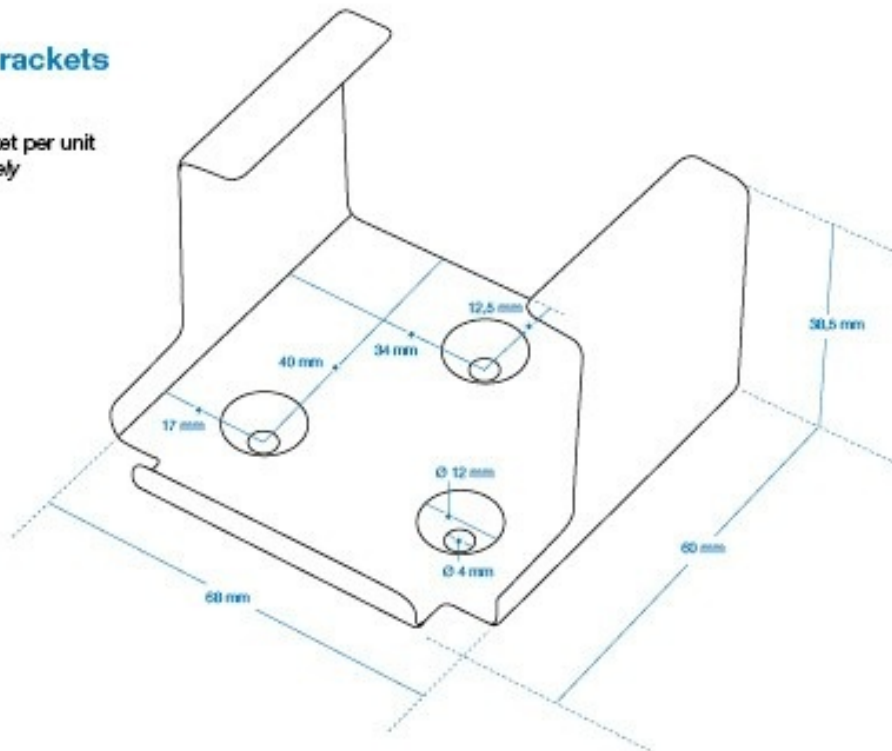
Specifications for MASCOT type 2541/2542	Lead Acid versions				
	6V	12V	24V	36V	48V
Input voltage:	90 - 264VAC	90 - 264VAC	90 - 264VAC	90 - 264VAC	90 - 264VAC
Line frequency:	47 - 63Hz	47 - 63Hz	47 - 63Hz	47 - 63Hz	47 - 63Hz
Charge control:	Charge indication:				
Step 1 Charge current:	Orange				
Step 2 Charge voltage:	2.7A ±0.1A	2.2A ±0.1A	1.2A ±0.1A	0.8A ±0.05A	0.6A ±0.05A
- Charge current >:	7.35V ±0.10V	14.7V ±0.15V	29.4V ±0.25V	44.1V ±0.25V	58.8V ±0.25V
- Charge current <:	Orange	1.00A ±0.1A	0.50A ±0.1A	0.40A ±0.05A	0.25A ±0.05A
Step 3 Charge termination I <:	Yellow	250mA ±20%	250mA ±20%	250mA ±20%	100mA ±20%
Standby voltage:	Green	6.85V ±0.10V	13.7V ±0.15V	27.4V ±0.30V	41.1V ±0.30V
Max output power:	20W	32W	35W	35W	35W
Ripple:	<100mV p-p	<100mV p-p	<100mV p-p	<100mV p-p	<100mV p-p
Efficiency (at 100% load, 230V) approx.:	78%	84%	87%	87%	87%
Switch frequency approx.:	40kHz				
Leakage current from battery with mains switched off:	<250µA				
Protection:	Protected against reversed polarity and short circuit proof				
Temperature range:	Operating: +25 to +40°C / Storage: +25 to +85°C				
Safety:	EN 62368-1, EN 60601-1, UL 60601-1, EN 60335-2-29				
Insulation class :	Class II				
Insulation voltage: Primary – secondary:	4000VAC / 5700VDC				
EMC standards:	Med. EN 60601-1-2 / Emission EN 61000-6-3 / Immunity EN 61000-6-1				
MTBF at Ta = 30°C and full load: Calculated according to MIL – HDBK – 217F	>250 000 hours				
Mains connection:	2-pins IEC 60320 connector. (Exchangeable mains plugs EU, UK, US, AU available on type 2542).				
Output terminals:	Cord with/without plug. Exchangeable plugs available.				
IP-Grade:	41				
Dimensions:	107 x 67 x 37mm (117 x 75 x 44mm for type 2542)				
Weight:	250g (280g for type 2542)				



Mounting brackets

TYPE 201565

1 mounting bracket per unit
Available separately



Charging method B

STEP 1 - BOOST CHARGE

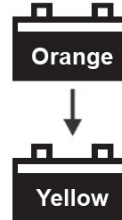
To start a charge cycle, connect the charger to the mains.

The charger is in constant current mode, charging with the maximum current indicated on the charger, the LED-indication on the charger is ORANGE.



STEP 2 – TOP-UP CHARGE

The charger is in constant voltage mode, charging with a decreasing current until the current is below the charger's charge termination level (indicated on the charger). The LED-indication will turn to YELLOW during Top-up charge. The battery is typically 90-95% fully charged when the LED indicator changes to yellow. The charger stays in this mode until the charge current decreases to charge termination level. The battery is charged to its full capacity at the end of this step.



STEP 3 – FLOAT CHARGE

The LED-indication on the charger is GREEN and the battery is fully charged.

The charger is in standby mode. The charge voltage is at standby level and the charger may remain connected to the battery.

The charger will return to boost charging if the battery is used.

A load larger than the cut-off current will initiate a new charge cycle.

