

Model 2440 LA

4 A max out • 90-264 VAC input

- 3-step charge control with microprocessor
- Low current start up of deeply discharged batteries (step 0)
- Unaffected by fluctuations in mains voltage
- Protected against reverse polarity and short circuit proof
- Waterproof (IP67) version available
- Wall mount IP67 version [go to 2440 IP67](#)
- 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

- 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 / 4,0A

24V / 2,5A

Notes:

Desktop, 2-pin IEC 60320 unit

Battery clips, push-on terminals or exchangeable DC plugs

Standard DC output cord (exch. DC plugs):

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

Mounting bracket available

Order plugs and mains cord separately

IP67 desktop version: Fixed cord, weight 890g

MASCOT type 2440 12V LA Charger:	2440 1250 00 w. female connector	2440 0120 00 w. battery clips
Input voltage: / Line frequency:	90 - 264VAC / 47 - 63Hz	
Max output power:	58W	
Charge control:	1.2A ± 0.2A, when battery voltage < 10.5V	
Step 0 < 30min	Yellow	
Step 0 > 30min	Red (Error-mode)	
Step 1 (until Vbat = 14.7V)	Yellow	
Step 2 (until I charge < 1.2A or > 4h)	Flashing Yellow	
Step 3 (until I charge > 4.0A)	Green	
Charge timer (step2):	4h	
Safety timer:	72h	
Restart charge current:	4.0A	
Formation Charge:	Low current start-up of deeply discharged battery.	
Float charge:	4.0A pulses at safe float voltage level for maximum topping of battery capacity.	
Indication when "Battery not connected"	Flashing Green (1s/1s)	
Temperature compensation of charge voltage:	-3 to -4mV/°C pr. cell	
Ripple:	< 100mV p-p	
Efficiency (at 100% load, 90V) approx.:	> 85 %	
Switch frequency approx.:	40kHz	
Leakage current from battery with mains switched off:	< 200 µA at 13V battery voltage (0.15Ah/month)	
Protection:	Protected against reversed polarity and short circuit proof. Safety timer. Charging of wrong lower voltage battery pack (e.g. 6V) will be limited to 1.2A and terminated after 30min.	
Temperature range:	Operating: +25 to +40°C. Storage: +25 to +85°C	
Safety:	Medical EN 60601-1 / Home Healthcare EN 60601-1-11 / Battery Charger EN 60335-2-29	
Insulation class :	Class II	
Insulation voltage: Primary – secondary:	4000VAC / 5700VDC	
EMC standards:	EN 55014-1 and -2, Emission EN 61000-6-3, Immunity EN 61000-6-1, EN 60601-1-2	
Input terminal:	2-pins IEC 320 connector	
Output terminals:	Battery clips, Push-on terminals or DC connector	
IP-Grade:	41	
Rec. battery capacity:	20 - 200Ah	
Dimensions:	135 x 80 x 44 mm	
Weight:	390g	610g

MASCOT type 2440 24V LA Charger:	2440 2450 00 w. female connector	2440 0240 00 w. battery clips
Input voltage: / Line frequency:	90 - 264VAC / 47 - 63Hz	
Max output power:	74W	
Charge control: Step 0 < 30min Step 0 > 30min Step 1 (until Vbat = 29.4V) Step 2 (until I charge < 0.6A or > 4h) Step 3 (until I charge > 2.5A) Charge timer (step2): Safety timer:	Charge indication: Yellow Red (Error-mode) Yellow Flashing Yellow Green	0.6A ± 0.2A, when battery voltage < 21V < 0.2A 2.5A - 0.2A + 0.05A, when battery voltage > 21V. 29.4V ± 0.1V and charge current is tapering. 27.4V ± 0.2V, supply current up to maximum 2.5A for possible parallel load. 4h 72h 2.5A
Restart charge current:	Low current start-up of deeply discharged battery.	
Formation Charge:	2.5A pulses at safe float voltage level for maximum topping of battery capacity.	
Float charge:	Flashing Green (1s/1s)	
Indication when "Battery not connected"	-	
Temperature compensation of charge voltage:	-3 to -4mV/°C pr. cell	
Ripple:	< 100mV p-p	
Efficiency (at 100% load, 90V) approx.:	> 83%	
Switch frequency approx.:	40kHz	
Leakage current from battery with mains switched off:	< 200 µA at 26V battery voltage (0.15Ah/month)	
Protection:	Protected against reversed polarity and short circuit proof. Safety timer. Charging of wrong lower voltage battery pack (e.g. 12V) will be limited to 0.6A and terminated after 30min.	
Temperature range:	Operating: +25 to +40°C. Storage: +25 to +85°C	
Safety:	Medical EN 60601-1 / Home Healthcare EN 60601-1-11 / Battery Charger EN 60335-2-29	
Insulation class :	Class II	
Insulation voltage: Primary – secondary:	4000VAC / 5700VDC	
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Input terminal	2-pins IEC 320 connector	
Output terminals:	Battery clips, Push-on terminals or DC connector	
IP-Grade:	41	
Rec. battery capacity:	12 - 125Ah	
Dimensions:	135 × 80 × 44 mm	
Weight:	390g	610g

distributed by:



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