

SPECIFICATIONS FOR 2440 LA	12V female	12V batteryclips	24V female	24V batteryclips	36V	48V female	48V batteryclips
Available versions	x						
Input voltage:	90 - 264VAC						
Line frequency:	47 - 63Hz						
Max output power:	58W		74W		71W	76.5W	
Step 0 < 30min Yellow	1.2A ± 0.2A, when battery voltage < 10.5V		0.6A ± 0.2A, when battery voltage < 21V		0.4A ± 0.1A, when battery voltage < 31.5V	0.3A ± 0.1A, when battery voltage < 42.0V	
Step 0 > 30min Red (error-mode)	< 0.2A						
Step 1 (Constant Current) Yellow	4.0A ± 0.2A, when battery voltage >10.5V.		2.5A - 0.2A + 0.05A, when battery voltage >21V.		1.6A ± 0.1A, when battery voltage >31.5V.	1.3A ± 0.1A, when battery voltage > 42.0V.	
Step 2 (Constant Voltage) Flashing Yellow	14.7V ± 0.1V and charge current is tapering.		29.4V ± 0.1V and charge current is tapering.		44.1V ± 0.2V and charge current is tapering.	58.8V ± 0.2V and charge current is tapering.	
Step 3 Maintenance voltage: Green	13.7V ± 0.2V, supply current up to maximum 4.0A for possible parallel load.		27.4V ± 0.2V, supply current up to maximum 2.5A for possible parallel load.		41.1V ± 0.2V, supply current up to maximum 1.6A for possible parallel load.	54.8V ± 0.2V, supply current up to maximum 1.3A for possible parallel load.	
Charge timer (step2):	4h						
Safety timer:	72h						
Restart charge current:	4.0A		2.5A		1.6A	1.3A	
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.		2.5A pulses at safe float voltage level for maximum topping of battery capacity.			1.3A 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	-	-3 to -4mV/°C pr. cell	-	-3 to -4mV/°C pr. cell	
Ripple:	< 100mV p-p						
Efficiency (at 100% load, 90V) approx.:	> 85 %		> 83%		> 85 %	> 85%	
Switch frequency approx.:	40kHz						
Leakage current from battery with mains switched off:	< 200 µA at 13V battery voltage (0.15Ah/month)		< 200 µA at 26V battery voltage (0.15Ah/month)	< 200 µA at 39V battery voltage (0.15Ah/month)	< 200 µA at 26V battery voltage (0.15Ah/month)	< 200 µA at 52V 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 +40oC. Storage: ÷25 to +85oC		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					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		12 - 125Ah			7 - 70Ah	
Dimensions:	135 × 80 × 44 mm						
Weight:	390g	610g	390g	610g	390g	610g	