

MicroGenius[®]LE

Compact Marine & Genset Battery Charger

12 Volt, 6 or 10 Amp
24 Volt, 5 Amp



Small. Automatic. Smart.

Small & light - fits practically anywhere

Protected from water & dust - ideal for harsh genset or marine duty

Advanced battery management - utilizes proven Dynamic Boost™ and HELIX™ charging

Self-adjusting output - precisely charges all types of lead-acid batteries

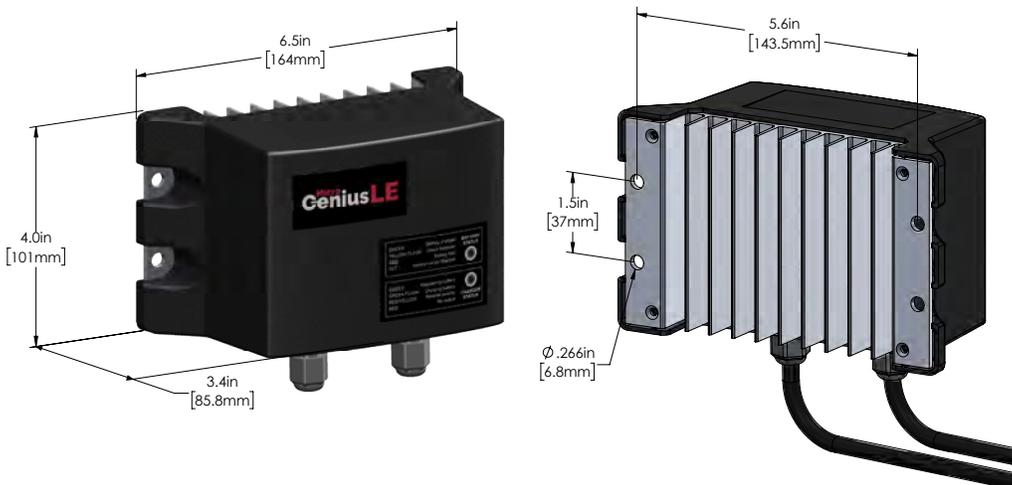
Battery & charger status LEDs - provide system health information at-a-glance

Superior efficiency & cooling - delivers full power even at high temperatures

MicroGenius LE battery chargers are ideal for small gensets and low power marine applications. Employing technology that was previously only available in more powerful SENS chargers, patented microprocessor control delivers fast and safe charging. MicroGenius LE also extends starting battery life and helps prevent catastrophic battery failures caused by traditional float charging.

Chargers self-adjust for flooded and AGM batteries of differing specific gravities, making MicroGenius LE compatible with most lead-acid batteries without the need for user adjustment.

MicroGenius LE meets all relevant North American regulatory requirements including cUL_{US} safety and California Energy Commission energy efficiency regulations.



High efficiency design and a finned metal heat sink keep internal electronics cool. Chargers deliver full power at higher ambient temperatures than potted chargers that trap heat inside.

Specifications for **MicroGenius LE**: 12 & 24V Models

		MicroGenius LE 12V	MicroGenius LE 24V
AC input	Voltage, Hz	117VAC nominal (88-140VAC), 44-66Hz	
	Amps	2.0A	3.0A
	Efficiency	85% typical	88% typical
DC output	Volts, amps	12V nom., 6A; 90W max	24V nom., 3A; 90W max
		12V nom., 10A; 150W max	24V nom., 5A; 150W max
	Charging modes	Automatic Dynamic Boost fast charging; HELIX Eco-float and Refresh maintenance modes	
	Charging characteristic	Constant voltage, rectangular current limit; patented Dynamic Boost control	
	Battery compatibility	12V nom. flooded & AGM lead-acid	24V nom. flooded & AGM lead-acid
	Current limit	100% of rated output. Delivers full current over entire specified ambient temperature range.	
	Float voltage	HELIX automatically modulates output voltage to maximize battery capacity and lifetime	
	Boost voltage	14.5V	29.0V
	Line & load regulation	+0.5%. Automatic output voltage compensation for line and load variation.	
	Output ripple	< 1% of nom. output voltage (10Hz to 100KHz)	
	Dead battery charge	Starts into and recharges zero volt battery without user intervention	
	Charge mode control	Fully automatic Dynamic Boost and HELIX battery management systems	
	Reverse polarity	Fully automatic. De-energized and energized chargers protected from reverse polarity.	
Adjustments	Charger self-adjusts to different battery types. No manual adjustment is necessary.		
Status indication	LEDs	Two multi-color front panel status LEDs indicating battery status and charger status	
	Battery LED indications	"Battery charged". "Check batt/load". "Battery bad". "Battery not yet charged".	
	Charger LED indications	"Charging Battery". "Maintaining Battery". "Reverse polarity". "No output"	
Environmental	Operating temperature	-25C to +70C; 12V, 6A full spec to +50C; 12V, 10A and 24V, 5A full spec to +40C	
	Cooling	Natural convection and conduction	
	IP rating	IP 67	
	Operating vibration	Swept sine (EN60068-2-6): 4G, 18-500 Hz, 3 primary axes Random: 20-500 Hz, 0.1G ² /Hz	
Electromagnetic compatibility	ESD protection	8 KV free air discharge to charger housing or chassis	
	EMC noise immunity	EN 61000-6-2; EN 61000-6-4	
	EMI	FCC Part 15, Class B; EN 61000-6-2; -6-4; -4-4; -4-5; -4-6; -4-11;	
Regulatory compliance	North America	C-UL Listed for US & Canada to UL 1236	
		NFPA 70	
		FCC Part 15, Class B	
		CEC Title 20 energy efficiency for California and Oregon	
Construction & connections	Housing	Aluminum heat sink baseplate with high impact sealed plastic cover	
	Connections	6' AC cord with NEMA 5-15P plug; 6' DC cord with 3/8" ring lugs for battery connection	
	Weight	Two pounds (900 grams)	

How To Order

LE – – **A0** – **SS** Example: LE-1210-A0-SS

Output
 1206 = 12V, 6A
 1210 = 12V, 10A
 2405 = 24V, 5A

Contact SENS or your local sales representative for additional specification, engineering and installation information, or visit SENS' website for latest available data. Specification subject to change without notice.

SENS, Stored Energy Systems, battery/rectifier logo, Dynamic Boost and MicroGenius are trademarks of Stored Energy Systems LLC. Patented US 9,270,140; 9,385,556; 9,413,186; 9,509,164. Other patents pending.

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