



FROM THE LABS AT  
GRIN TECHNOLOGIES  
FOR EBIKE RIDERS  
AROUND THE WORLD

# THE CYCLE SATIATOR

POWERFUL – PROGRAMMABLE – PORTABLE



3 MODELS

PART#	SUITABLE PACKS	APPLICATIONS
CG360-2415	12-24V Batteries	Mobility Scooters, Low Voltage Ebikes
CG360-4808	24-48V Batteries	Performance Ebikes, Scooters, Pedicabs
CG360-7205	48-72V Batteries	High Speed Ebikes, Electric Motorcycles

A FAMILY OF UNIVERSAL FAST CHARGERS  
FOR ALL TYPES OF BATTERY PACKS

- Supports All Major Chemistries
- 100-240V AC Input Range
- Programmable Output Voltage
- 360 Watts of Charging Power
- Rugged, Sealed, and Compact
- 95% Power Efficiency

The Cycle Satiator® defines a whole new class of 'smart charger', one that gives you, as a user, dealer or OEM, full control to set up the optimal charging scenario for your batteries

## FEATURES



### UNIVERSAL COMPATIBILITY

The Satiator is not limited to charging a specific battery type. Instead, this one charger can be configured for virtually any Lithium, Nickel Metal Hydride, or Lead Acid battery pack. Each model supports a wide range of output voltages, up to 103V max, and can be loaded with dozens of preset or custom charging profiles.



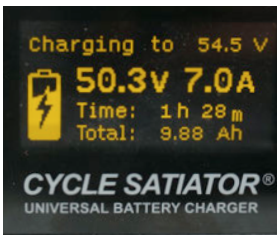
### FAN FREE EFFICIENCY

The power electronics were carefully designed to reach 95% efficiency at full load, eliminating the need for a fan to get rid of waste heat and keep things cool. No more buzzing fan noise and no risk of charger meltdowns if the fan fails.



### SEALED AND WATERTIGHT

A gasketed enclosure and connector design strategy keeps the charger electronics protected in the face of rain, road spray, dust storms etc.

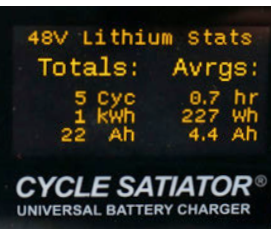
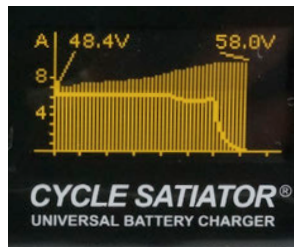


### REALTIME CHARGE STATS

A large and bright OLED display screen shows all your realtime charging statistics; you can see the total amp-hours and voltage along with a clear graphic indicating the approximate charge in the pack.

### CHARGE GRAPH

An additional screen allows you to see a full graphical plot of the charge current and voltage while the charge is under way.



### HISTORIC PROFILE STATS

The Satiator also keeps tracks of the lifetime charge history of each profile, so you can easily assess your usage pattern and overall battery health.

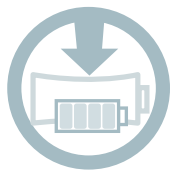
### COMPACT AND NARROW SIZE

The charger is less than 5cm high and 8cm wide, allowing it to fit easily in a saddle bag, under the rear rack, inside a frame triangle, or screwed to a chassis.



### IMPRESSIVE POWER DENSITY

At almost 0.5 watts / cm<sup>3</sup>, the Satiator packs 2-3 times more power per volume than most other chargers available. That translates into big league charging currents in a portable size device.



Such versatility and impressive specs provide many advantages both to end users and OEMs



**ONBOARD INSTALLATION**

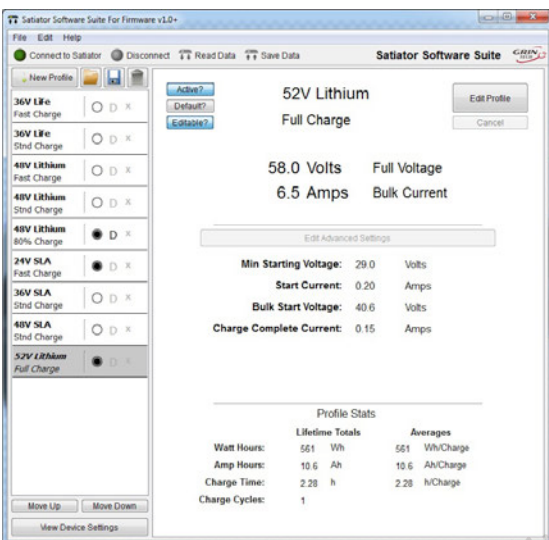
The rugged, compact, and fan-free design allows the charger to be permanently mounted on the vehicle without risk of premature failure from vibration or exposure.

**SERIOUSLY FAST CHARGING**

With a 360 watt power output, the Satiator can charge your batteries in half the time of typical 150-200W "Fast" Chargers.

**SATIATOR SUITE SOFTWARE**

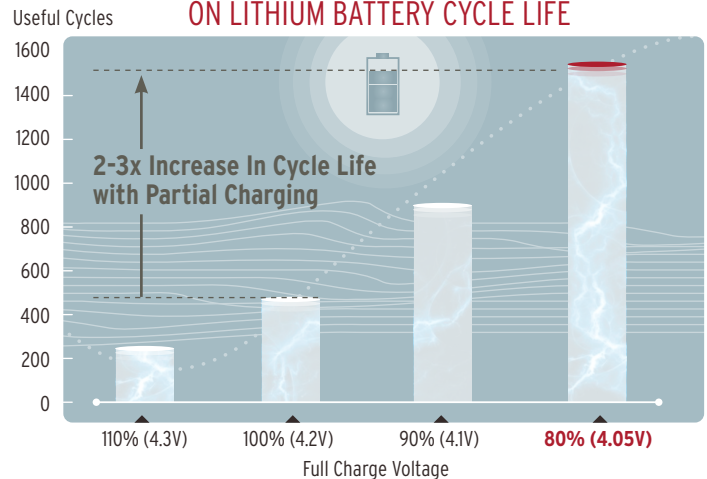
Easy to use computer software allows for rapid modification of the charge profiles and Satiator settings. End-users and OEMs can configure custom profile names, and back up, restore, and share their profiles. Available for Windows, MacOS and Linux.



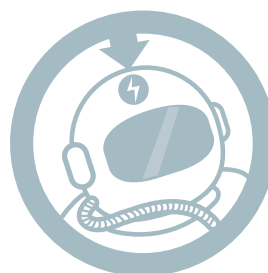
**SATIATE FOR ENHANCED BATTERY LIFE**

Most lithium batteries are capable of vastly improved cycle life if they are not fully charged to saturation all the time, but at the expense of reduced range.

**EFFECT OF CHARGE VOLTAGE ON LITHIUM BATTERY CYCLE LIFE**



With the Cycle Satiator, you can program your primary profile to give an 80% charge, and have a secondary profile that does a 100% charge when you need full range. Then have the best of both worlds, a battery that lasts thousands of cycles but still goes the distance when you need it.



**FUTURE PROOF**

The firmware can be upgraded in the field, and along with the flexible custom profiles this means your Cycle Satiator is ready for whatever batteries the future has in store.

## SPECIFICATIONS

### OUTPUT RANGE

Version	24V 15A	48V 8A	72V 5A
Model Number	GC360-2415	GC360-4808	GC360-7205
Max Voltage	36V	63V	103V
Max Current*	15A	8A	5A

\*Charge current may be further limited by 360 watts or thermal rollback

### ELECTRICAL

Input Range	100-240VAC 50-60Hz
Operating Efficiency	95% @ 230V, 94% @ 120V
Power Factor	> 99%
No Load AC Power	< 1 Watt
Output Leakage	< 100uA

### MECHANICAL

Dimensions	237 x 78 x 48 mm
Mounting Holes	5mm Flange Slots 220mm Apart
Weight	1.06 kg (1.33 kg with AC-DC cords)
Chassis Material	Diecast Aluminum



### CONNECTORS / CABLES

AC Input Connector	IEC320-C14
DC Output Connector	SINGATRON 2CT3002-W03400
DC Output Cable 48V & 72V models	1m with 3-Pin Neutrik XLR (1=DC+ 2=DC- 3=signal)
24V Model	Unterminated 4 Conductor Cable

### INTERFACE

Dual Tactile Push Buttons for Field Setup
128x64 OLED Graphical Display for Charge / Profile Info
LIN Bus on Signal Pin for PC Communication and Firmware Updates (Requires Custom Cable)

### REGULATORY CERTIFICATIONS

Safety	UL 1012, CSA C22.2 No. 107.2, CE / IEC 60335-1/2-29
Emissions	FCC Part 15 B, EN55014, EN 61000-3-2, EN 61000-3-3
Immunity	EN 61000-4-2/-3/-4/-5/-6/-11

#### DESIGNED IN CANADA

The engineering and design team behind the Satiator are avid ebike users with years of experience in electric vehicle technology. This product is the charger they always wished they had, and we hope you feel the same way too.

#### FOR OEM AND BUSINESSES

In addition to electric bike enthusiasts, this charger is of great value to ebike businesses that need to manage a range of battery packs, and for OEMs wanting to distinguish their vehicle with a rugged and modern full featured charger.

#### CERTIFICATIONS

This device is CSA, UL, and CE listed, meaning it has passed rigorous safety and reliability tests, and can be legally resold in most jurisdictions.