



CS1205

24 VDC 120 Watt Intelligent Active PFC Battery Charger



Features/Benefits

- UL recognized to 60601-1 3rd. Ed. and ETL recognized to UL 1012, in a outdoor rated form factor enclosure.
- 120 watts of output power.
- 24 volt nominal output.
- Five software-controlled charging stages including cell preparation, charge qualification, bulk charge, cell balancing, and float charge
- LED indicators provide status including improper battery connection and charge timeout
- Active Power Factor Correction
- Charger can operate as onboard charger with CSLLC controllers.
- Maintains a full “float” charge in all temperature conditions without damaging batteries.
- Integrated with motor controller to disable motor drive during charging (CSLLC controllers).
- Accurate float charge voltage allows charger to be left connected to batteries indefinitely to maintain full charge.

Description

24V or series-wired pair of 12V lead acid batteries (24 Amp-Hour or larger). Utilizing an internal microprocessor, the CS1205 charger adds multi-stage charging features and monitors the battery conditions to ensure batteries are fully charged without overcharging.

When used as a standalone charger or in conjunction with a Control Solutions CS11XX Motor Controller, the CS1205 battery charger provides a rugged, intelligent solution for charging and maintaining lead-acid batteries. The microprocessor controller in the charger protects against short circuits, voltage surges, reversed battery polarity, and over-temperature to ensure long battery life and safe operation.

The CS1205 intelligent charger has a front panel LEDs, displaying the charging status. When used in conjunction with a CSLLC Motor controller, the battery charging diagnostic codes can be monitored via the controller's interface (optional display).

About Us

We solve the world's toughest motion control challenges, providing custom solutions focusing on personal mobility and patient transportation products as well as many commercial applications. For over 20 years, Control Solutions LLC has developed a wide array of microprocessor-based control and battery charging solutions designed for flexible integration, feature-rich functionality, and robust performance.



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Specifications

CS1205 Specifications	Unit Of Measure	Min.	Nominal	Max.
Output Bulk Charge	Volts DC	29.9	30	30.1
Output Float Charge	Volts DC	27.4*	27.6*	27.8*
Bulk Charge Current	Amps		4.3 @ 28 VDC	
Peak Bulk Charge Current	Amps			5.0
Trickle Charge Current	mA		~50†	
Input Voltage	Volts AC	90 (50 Hz)		240 (60 Hz.)
AC Input Current	Amps			1.5
Operating Ambient Temperature	°F (°C)	14 (-10)	77 (25)	113 (45)
Dimensions	Inches (mm)		5.6 x 5.2 x 2.2 (142 x 133 x 57)	
Installed weight	Lb. (kg)		2.1 (0.95)	

* Inversely proportional to ambient temperature – For example: Ambient greater than 25°C= float voltage less than 27.6 volts.

† Dependent on battery self-discharge rate.

Specifications subject to change without notice.

CS1205 Back Panel

Yellow/Green Status LEDs

DC Output and controller interface (Mates to Molex part# 39-01-2045)

AC Input (Mates to Molex part# 39-01-4031)

	DC Output	AC Input
Charger		
Mates to:	Molex 39-01-2045	Molex 39-01-4031

DC Output	Color	Connects to . . .
Pin 1	Green	Only CS11XX Controllers
Pin 2	Blue	Only CS11XX Controllers
Pin 3	Red	Battery +
Pin 4	Black	Battery -
AC Input		
Pin 1	White	AC Neutral
Pin 2	Green	AC Earth Ground
Pin 3	Black	AC Power

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CONTROL SOLUTIONS LLC™
 2520 Diehl Road, Aurora, Illinois 60502
 Tel: 630.806.7062 Fax: 630.806.7065
 www.controls.com



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