

# SMC-HF

## 24V 120A / CG5301

SMC chargers are a leading range of chargers by Century which incorporate a specified charging algorithm and proven high efficiency power conversion. This range of chargers has been selected for Australian conditions and is able to recharge a variety of battery voltages including 24VDC, 36VDC, 48VDC and 80VDC.

The integrated industrial microprocessor using Century's specified algorithms can optimise charging on a range of battery types, including VRLA (Sealed) batteries. This optimisation has the benefit of delivering a fully charged battery quicker while minimising the effects that standard chargers can have on batteries.

The use of high frequency power conversion has the effect of reducing the amount of energy consumed for charging, and providing a greater level of control of the power output. This technology also has the advantage of being lighter weight to conventional thyristor controlled chargers. This allows operators to have the option of wall mounting these chargers, reducing the possible risk of impact from other equipment, and improving the use of space.

### Features and Benefits

- Compliant to relevant Australian Standards: Century ensures full compliance with relevant standards applicable to chargers.
- Industry leading charging algorithms: Century specified charging profiles to improve charging efficiency and reduce physical wear on the battery, such as increase water consumption.
- Alarm indicators: Highlights to the operator and logs issues with the charger and battery.
- High frequency power conversion: With >90% efficiency with power conversion from input power to output power, can have the advantage of reducing the amount of power consumed to recharge batteries.



Left & middle: 24V 30A, 45A, 60A  
Right: 24V120A, all 36V, 48V & 80V

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### ELECTRICAL INPUT SPECIFICATIONS

VAC Input	1P 230VAC -15%/ +10%
Input Current (Max I)	15.4A (@ 230VAC)
Fuse	16A
Input Frequency	50 - 60Hz
Power Outlet Required	Clipsal 56C310
Power Factor	>0.9 at rated power
Efficiency	>89% at 100% Load

### ELECTRICAL OUTPUT SPECIFICATIONS

Technology	High Frequency Conversion (Soft Start)
Nominal VDC	24VDC
VDC Output Range	1.4VDC to 2.9VDC Per Cell
Output Power (kW)	3.2kW (@ 2.2V/Cell, Input 230VAC)
Output Ripple (Max)	30mV RMS of Nominal DC Voltage
Output Accuracy Setting	VDC Ouput +/- 1% / Current Ouput +/- 2%
MTBF	~60,000 hours @ 30°C

### ENVIRONMENTAL

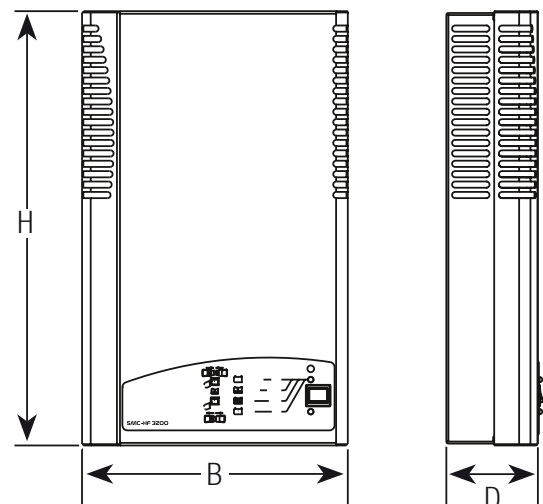
Environmental Protection	Conformal Coating
Operational Temperature (Ambient)	0°C to +40°C (Full Power)
Storage Temperature	-20°C to +50°C
Humidity	RH <90% non-condensing
Cooling	Fan Cooled - Temperature Controlled
IP Rating	IP20

### STANDARDS

Emissions	EN 50081-1 Light Industry
Immunity	EN61000-6-2 From 2002-04-01
Safety	EN60335-1 & EN60335-2-29

### MECHANICAL

Weight (kgs)	10 (without external cabling)
Height (H) (mm)	425
Width (B) (mm)	255
Depth (D) mm	90



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