

# SMCR II Battery Charger



- High efficiency switch-mode technology.
- Versatile constant voltage and constant current charging modes.
- Large LCD graphic display (71mm x 40mm).
- Comprehensive 11 parameter metering.
- Capacity measurement.
- Dual battery metering and testing facility.
- Programmable battery current limit.
- Precise adjustable temperature compensation.
- Isolated USB-B or RS485, Ethernet Modbus RTU, Modbus TCP, SNMP, Internal Web-page.
- Access facility software.
- Data Logging.



SMCR II series battery chargers combine the advanced functionality of MCR II with the flexibility of switch mode rectification. Available in single and three phase, the SMCR II series is ideal for all industrial applications including substation battery systems and DC UPS.

Incorporating dual battery management capabilities including automatic battery testing, the SMCR II prolongs battery life in any application, and can be used with Lead Acid, Lithium and NiCad batteries. With advanced communication facilities that enable full remote monitoring of the system, the SMCR II is state of the art.



# SMCR II Battery Charger

## TECHNICAL SPECIFICATIONS

Nominal Voltage	24V	32V	48V	110V	220V	
Nominal Current	5-200A	5-800A	5-600A	5-800A	5-320A	5-200A
Input Supply	Single phase 240V $\pm$ 10% 50Hz $\pm$ 5% for output power <5kVA					
Three Phase	415V $\pm$ 10% 50Hz $\pm$ 5% for output power >5kVA					
Output Voltage	9-16V	18-35V	24-46V	40-68V	88-150V	180-270V
Noise and Ripple	<2% specified at full load and without battery connected.					
Static Voltage Regulation	$\pm$ 1% for 0-100% load variation, $\pm$ 10% AC input voltage variation and 5% AC input frequency variation without battery connected					
Dynamic Voltage	5% for load variation of 10% to 100% or 100% to 10%					
Current Regulation	$\pm$ 1%					
Protection	Input Circuit Breaker, Charger Output Fuse/Circuit Breaker, Charger Current Limit, Dual Battery Current Limit, AC Surge Suppression, Short Circuit Protection, Reverse Battery Polarity Protection					
Alarms	Mains Fail, Charger Fail, DC High, DC Low, Under/Over Voltage Trip, Earth Fault, Low Electrolyte, Battery Disconnected, Battery Fail (including high impedance), Battery Over Temperature, Blown Fuse, Common Alarm Relay, Common Alarm Buzzer *All alarms are user programmable*					
Metering	Charger Voltage, Charger Current, Load Voltage, Load Current, Battery 1 Charge/Discharge Current, Battery 2 Charge/Discharge Current, Battery Temperature, Battery Initial Impedance, Battery Ongoing Impedance, Battery Capacity, Battery Capacity Ratio *Meter accuracy 1%*					
Options	Voltage - free contacts for all alarms, Battery test facility, 3 Stage diode voltage limiter, DC distribution board					
Physical	Free standing powder coated metal cabinet *Dimensions depend on charger output rating and associated battery requirements*					
Environmental	0-50°C, up to 95% humidity					
Standards	AS 1955, AS 3000, AS 3100 AS 4044, AS 2069					
Serial Comm.	DNP3, TCP/IP, Web-server, RS485 Modbus, SNMP, USB - B.					
EMC	AS 2064-1997					
MTBF / MTTR	100,000 Hours / 4 Hours					
Efficiency	85 to 90% depending on nominal voltage and power rating					
Temperature Compensation	Programmable 3 - 6 mV / Cell / °C					
Audible Noise	< 50 dB					
Limp Home Feature	Continuous operation in the event of control failure					
Revert to Factory Settings	Reinstates all original factory settings					

