



MCR11 BATTERY CHARGER

The MCR11 combines the most rugged and reliable AC to DC rectification, which is transformer and thyristor bridge based technology - with the most advanced microprocessor controlled system, to ensure a 25 year design life.

100% Made in Australia, the MCR11 series is highly reliable and designed for use in mining, substations, power stations, utility, marine, processing facilities, infrastructure and oil and gas applications.

The combination of ultra-rugged industrial design with state of the art advanced communication facilities and intelligent system controls make the MCR11 series the most reliable back up power system available.



Features

- Designed & manufactured in Australia
- Rugged industrial design
- Galvanically isolated
- Compatible with VRLA, LiFePO4 and NiCad batteries
- Intelligent system control
- Complies with Australian standards
- Pre-configured software
- Optional integrated distribution panel
- Ingress protection up to IP54
- Programmable constant voltage and current charging modes
- Comprehensive integrated communication facility



Technical Specification

INPUT

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
Input protection	2P/3P MCB

OUTPUT

Nominal voltage	12V	24V	32V	48V	110V	220V	380V
Output voltage	9-16V	18-35V	24-46V	40-68V	88-150V	180-270V	325-500V
Output current	5-1000A						
Noise and ripple	<2% specified at full load and without battery connection						
Static voltage regulation	\pm 1% for 0-100% load variation, \pm 10% AC input voltage variation and 5% AC input frequency variation						
Dynamic voltage	5% for load variation of 10% to 100% or 100% to 10%						
Current regulation	\pm 1%						

CONTROL AND MONITORING

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
Metering	Charger voltage, charger current, load voltage, load current, battery 1 charger/ discharge current, battery 2 charge/discharge current, battery temperature, battery internal impedance, battery capacity, battery capacity ratio *Meter accuracy 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
Communications	DNP3, TCP/IP, web-server, RS485 Modbus, SNMP, UBS-B, ethernet
Adjustable settings	Float voltage, boost voltage, boost timer, charger current limit, battery 1 current limit, battery 2 current limit, load sense boost inhibit, DC low alarm, DC high alarm, high volts inhibit, high volts disconnect, low volts disconnect, battery fail voltage, earth leakage current & periodic, battery check

SYSTEM PARAMETERS

Standards	AS4044, AS 3000, AS 3100, AS 3011, AS 61000, AS 1319
Enclosure	Wall mount or free-standing powder coated zincanneal enclosure Dimensions depend on charger output rating and associated battery requirements
MTBF/MTTR	200,000 hours / 4 hours
Efficiency	80 to 93% depending on nominal voltage and power rating
Temperature compensation	Programmable 3-6 mV / cell / $^{\circ}$ C
Audible noise	< 55DB
Data logging	3800 log entries
Options	Voltage -free contacts for all alarms, battery capacity and impedance test facility, three stage diode voltage limiter, DC distribution board integrated or external, surge protection device, breaker locking facility, communications, diode droppers, undervoltage shunt trip, auxiliary contacts, earth fault alarm, reverse polarity protection, psophometric filtering, custom labels, thermal test, battery management system, AC input voltage on screen, over voltage trip level, under voltage trip Level, over voltage trip delay, under voltage trip delay

