

CONFIGURABLE BATTERY CHARGER BCH-MO1 SERIES

- Industrial quality
- Configurable
- Full protection
- Field-proven design



Wall-mount option



Bench-mount option



Rack-mount option

The BCH-MO1 is a configurable battery charger system designed to accommodate a wide range of requirements. It is comprised of a 4U(6.97") x 19" x 7" chassis and an internal rectifier module. The BCH-MO1 can be configured for charging 12V, 24V, 48V, 120V or other types of batteries. Depending on electrical performance requirements, the internal modules would typically provide 300W, 500W, or 750W.

Internal modules are housed in vented, enclosed packages which provide EMI shielding and contribute to the charger meeting EN55022 Class B EMI requirements. Two analog meters on the front-panel of the chassis monitor output voltage and current. The battery and AC-input breakers are located on the front panel. Other indicators include a green charger 'Good' LED, a green Battery 'Good' LED, a red charger 'Low' LED and a red battery 'Fail' LED. The BCH-MO1 has three mounting options: a rack-mount option, a bench-mount and a wall-mount option. These are illustrated in photograph above.

SPECIFICATIONS

Input Voltages

115/230Vac \pm 15%
Input frequency: 47-420Hz
PFC versions with universal range are also available

Input Protection

Inrush current limiting
Varistor
Internal safety fuse
Circuit breaker for AC-input
Battery breaker

Isolation

2250Vdc input to chassis
4300Vdc input to output
8mm spacing
500Vdc output to chassis

Standards

Meets requirements for EN60950

EMI

EN55022 Class B

Switching Frequency

47kHz \pm 2kHz

Output Voltages/Currents

13.6Vdc, 27.6Vdc, 55.2Vdc or
138Vdc. Other voltages available.

Line/Load Regulation

\pm 1% combined from 10% load to full load including output separation diode

Output Ripple/Noise

Better than 1% of output voltage peak to peak or 0.2% RMS of the output voltage (20MHz BW) without battery connected

Output Overload Protection

Rectangular current limiting with short-circuit protection on the charger section
Battery breaker

Output Overvoltage Protection

Double regulator loop

Efficiency

Min 80% at full load

Operating Temperature Range

0 to +50°C for full specifications

Temperature Drift

0.03% per deg.C over operating

Cooling

Convection and conduction via base plate. Larger modules may have fan cooling

MTBF

150,000h at 45°C
(fans, if applicable, are excluded)

Indicators

Analog Voltmeter & Ammeter for output voltage and current,
Green CHARGER GOOD LED;
Green BATTERY GOOD LED
Red CHARGER FAIL LED;
Red BATTERY LOW LED

Alarm Outputs

Charger Fail (Form C)
Low Battery Alarm (Form C)

Environmental Protection

Basic ruggedizing

Dimensions (H x W x D)

4U(6.97") x 19" x 7"

Weight

Approx 10lb/4.5kg (depending on model)

Connections

AC Input: IEC320
Battery Input: Phoenix (60A)
Battery output: Phoenix (60A)
Alarms: WECO

Warranty

Twelve months subject to application within good engineering practice



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