



Up to 80V input

Watertight O-ring sealed and EMC gasketed enclosure

Deutsch DT04-4P connector on pigtail

Compact size and easy mounting

BCH10MW

MIL connectors

BCH10W & BCH10MW
DC SOURCE BATTERY CHARGER

The BCH10 Step Down series of Battery Chargers supply up to 10 amps of charging current at 12, 24, 36 or 48 volts from any higher voltage between 20 and 80 volts DC in an IP66 rated watertight and EMC shielded enclosure for use in automotive, heavy equipment, marine, industrial, rail or alternative energy environments. The output voltage is configured to allow permanent connection to the battery.

The standard BCH10W model offers a Deutsch connector on a pigtail input/output cable, and the military grade BCH10MW features separate bayonet style MIL connectors for input and output.

The all surface mount high frequency design offers higher reliability, higher efficiency (more than 91%), more power (up to 544 watts at 48 VDC Out) and minimum size.

The BCH10MW is rated for operation from -40 to +55 degrees C and has been tested and confirmed to meet MIL-STD-461F for radiated and conducted emissions. It is designed to meet MIL-STD-810G for shock and vibration.

The unit has reverse input protection, reverse battery connection protection, output over-voltage protection and features spark free connection to the battery. Smart Ideal Diode output circuitry prevents any reverse current flowing from the battery back into the converter.

2 YEAR WARRANTY



Available models

Input (VDC)

20 - 80	30 - 80	40 - 80	45 - 80	60 - 80
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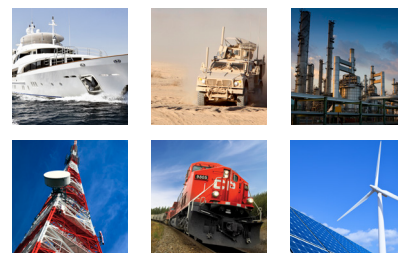
Output | Nominal (VDC)

12	24	32	36	48
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Output | Actual (VDC)

13.6	27.2	36.3	40.8	54.4
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Applications



BCH10W & BCH10MW | DC SOURCE BATTERY CHARGER

INPUT

Model	BCH10(M)W-12	BCH10-24	BCH10-32	BCH10-36	BCH10-48
Input Volts	20 - 80 VDC	30 - 80 VDC	40 - 80 VDC	45 - 80 VDC	60 - 80 VDC

OUTPUT

Nominal Volts	12 VDC	24 VDC	32 VDC	36 VDC	48 VDC
Actual Volts	13.6 VDC	27.2 VDC	36.3 VDC	40.8 VDC	54.4 VDC
Output Amps	10 Amps				
Dissipation	12 Watts				
Efficiency	91.9%	95.8%	96.8%	97.1%	97.8%

ELECTRICAL

Input Ripple & Noise	< 100 mV Peak to Peak
Output Ripple & Noise	< 50 mV Peak to Peak
Transient Response	< 300 mV for 50% Load Step Change
Regulation (Line & Load)	< +/- 0.5%
Emissions	Meets MIL-STD-461F

MECHANICAL

Dimensions	6.20 in / 15.8 cm Long x 4.91 in / 12.5 cm Wide x 2.15 in / 5.5 cm High
Clearance	1.0 in / 2.5 cm all around
Weight	0.62 lb / 0.28 kg
Material and Finish	Diecast Aluminum with O-Ring and EMC Gaskets, Black Powder Coat Finish
Mounting	Wall or shelf mount
Connections	BCHW - Deutsch DT04-4P on 15cm Pigtail; Mating Connector Included BCHMW - Input - GTC020R10SL-3P; Output - GTC020R10SL-3S; Mating connectors included
Shock and Vibration	Designed to meet MIL-STD-810G

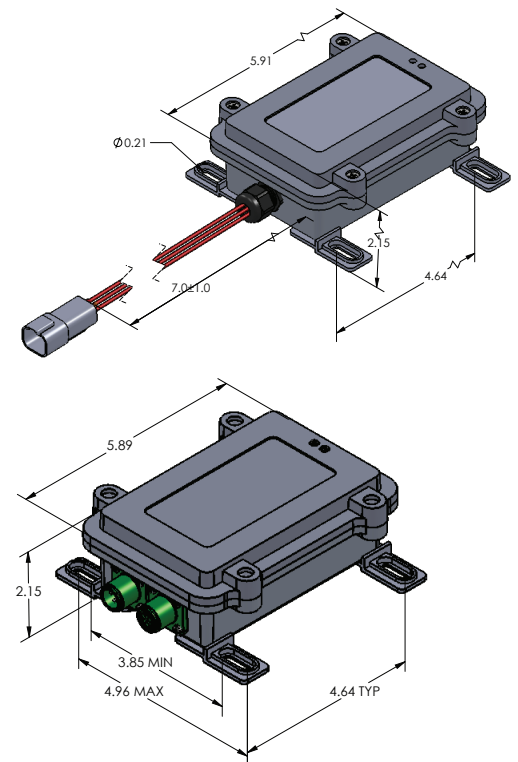
ENVIRONMENTAL AND SAFETY

Operating Temperature Range	-40°C to +55°C @ maximum output.
Humidity	0 - 95% Relative Humidity (non-condensing) with standard conformal coating
Audible Noise	NONE 0db @ 3ft
Typical Service Life	> 10 years (87,600 hrs)
Isolation	Any input or output to case (1500 VDC) Input to output - common negative
Warranty	Two years parts and labour
Safety	Built to meet CSA 22.2.107.1 & UL458

OPTIONS

- Custom output voltages available
- Custom connector arrangements
- Industrial BCH10 model available
- COTS - MIL461F and MIL810G in-house testing with report for each unit
- Stand alone MIL461F tested and report
- Stand alone MIL810 tested and report
- European ROHS compliant (Lead free manufactured)

DIMENSIONS



ANALYTIC SYSTEMS
Power Conversion Solutions



www.tecknowledgey.com



info@tecknowledgey.com



914.739.4499



Tecknowledgey Inc.

8 John Walsh Blvd
Peekskill, NY 10566 USA