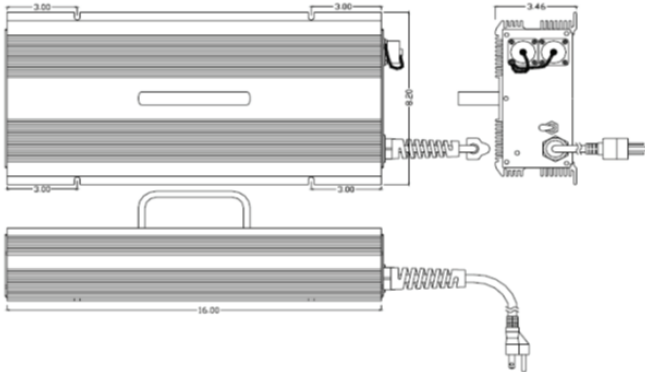


ANALYTIC SYSTEMS

Power Conversion Solutions

AC BATTERY CHARGERS

MODEL BCA650MS C.O.T.S SERIES



Description

The BCA650-MS-26 Battery Charger provides up to 650 watts to charge a 24V military electrical system from a 110 and/or 220VAC source (autoranging). This design features a unique rainproof chassis that easily meets the MIL-STD 810D vibration standard.

This all-new single board design incorporates state-of-the-art switchmode technology for unmatched efficiency and ultra-quiet operation. Multiple stages of filtering reduce radiated or conducted noise to very low levels to meet MIL461F. Extra features include visual indicators for output ON and output overload (single dual brightness LED). Safety features include over-temperature shutdown, current limiting, short circuit protection with automatic recovery, input undervoltage shutdown and output overvoltage crowbar.

This unit is built in a Full Battery Charger configuration with a 2-Stage charging profile designed for Military Lead Acid battery systems (Lithium- Ion available by special order). We are confident that you will get many years of reliable service from this AC Battery Charger.

Benefits

- Ultra-Quiet
- Power sensitive electronics without interference
- Rugged & Reliable
- Ensure years of safe and trouble free operation
- Clean, Precise Power

Design Features

- Ideal as a COTS Battery Charger for military applications
- Military grade extrusion ensures a high tolerance for shock and vibration
- Ultra-quiet, low EMI operation
- Can be left permanently connected
- Power supply version available
- Optional carrying handle available
- Visual output current indicator
- Many isolated versions including two high output for converting positive ground to negative ground or resolving other ground related problems
- Reverse input protection
- Short circuit protection
- Parallel output included
- 3 year parts and labour warranty

Military Features

Most of the products manufactured by Analytic Systems can be adapted for military use (Commercial Off The Shelf).

We provide four different levels of ruggedization; most often, a product in military use will use the extra-wide temperature range components to allow operation to -55 degrees Celsius.

The printed circuit boards are also protected against condensation and are enhanced with vibration protection that meets or exceeds MIL-STD810F, Method 514-3 and Cat-1 Proc 1.

C.O.T.S. products are designed to meet various levels of EMC radiated and conducted emissions MIL-STD 461F.

All C.O.T.S. products are manufactured in accordance with IPC-A-610.

An ISO9001 and AS9100 Registered Company Battery Chargers • Inverters • Power Supplies • Voltage Converters

8128 River Way, Delta B.C. V4G 1K5 Canada T. 604.946.9981 F. 604.946.9983 TF. 800.668.3884 (US/CANADA)

www.analysissystems.com

AC BATTERY CHARGERS

MODEL BCA650MS C.O.T.S SERIES

Electrical (Input)	
Nominal Vac (ip)	110/220 (Autoranging)
Actual (Vac)	90-140 - 180-284
Input Amps (max)	16.2 - 8.1
Input Circuit Breaker	25A Magnetic
Input Frequency	45-405 Hz
Noise on Input	<50 mV
Electrical (Output)	
Output Nominal (op)	24
Output Volts (DC)	27.2+/-0.05
Output Current (Amps)	26A
Charging Stage	2
Output Fuse(ATC)	40 x 2
Output Crowbar	32.0+/-1.0V
Output Ripple & Noise	< 50mV
Regulation (Line & Load)	< +/- 0.5%
Duty Cycle	Continuous 100% for 24 hours per day
EMC	Meets MIL461E
Efficiency	>75% Maximum Output
Environment Specification	
Operating Temp. Range	-40°C to +50°C @ maximum output (derate linearly 2.5% per C from 50°C to 85°C)
Humidity	0-95% relative humidity (non-condensing) with standard conformal coating
Audible Noise	NONE Ødb @ 3 ft
Typical Service Life	> 10 yrs. (87,600 hrs)
Isolation	Input-Case & input-output 1500VDC / output – case 500VDC
Mechanical Specification	
Length	16.0 in / 40.6 cm
Width	8.2 in / 20.8 cm
Height	3.5 in / 8.9 cm (without carrying handle)
Clearance	1 inch (2.5 cm) all around
Material	Marine Grade Aluminium
Finish	Clear Chromate
Fastenings	All 18-8 Stainless Steel
Weight	14.4 lb / 6.6 kg
Connections	Cannon Connectors #MS3102E16-11S
Warranty	3 years
Safety	Designed to meet CSA 22.2.107.1 & UL458

Note: Specifications are subject to change without notice.



ANALYTIC SYSTEMS
Power Conversion Solutions

An ISO9001 and AS9100 Registered Company Battery Chargers • Inverters • Power Supplies • Voltage Converters

8128 River Way, Delta B.C. V4G 1K5 Canada T. 604.946.9981 F. 604.946.9983 TF. 800.668.3884 (US/CANADA)

www.analysystems.com