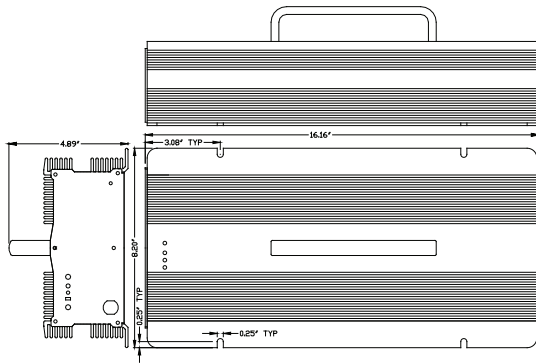


# ANALYTIC SYSTEMS

Power Conversion Solutions

## AC BATTERY CHARGER MODEL BCA1505MSP-110-24NC



### Description

The BCA1505MSP-110-24NC battery charger provides up to 1350 watts to charge a 24 Volt battery system (2 bank) from a 110VAC source. The batteries must share a common ground. Auto-ranging input is an option.

This all-new single board design incorporates state of the art switch-mode technology for unmatched efficiency and ultra-quiet operation. Multiple stages of filtering reduce radiated or conducted noise to very low levels. Extra features include visual indicators for low input voltage, charging and over-temperature.

Safety features include both charger and battery over-temperature shutdown, current limiting, short circuit protection with automatic recovery, input undervoltage shutdown and output over-voltage crowbar.

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
- Fast & Accurate Charging

### Design Features

- Ideal as a COTS Power Supply for Military Applications
- Military-Grade extrusion ensures a high tolerance for shock and vibration
- Ultra-quiet low EMI operation
- Can be left permanently connected
- Can function as a power supply
- Temperature compensated charging
- Over-temperature shutdown
- Audible & visual indicators for low output voltage & over-temperature
- Short circuit protection
- Output over-voltage crowbar
- Inrush Current Limiting with solid state bypass
- Designed to meet MIL-STD 810F, Method 514-3, Cat-I Proc I for vibration

### Applications

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 -40 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 461E.

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)

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# AC BATTERY CHARGER

# MODEL BCA1505MSP-110-24NC



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## Electrical (Input)

Nominal (ip)	110
Actual (Vac)	90-130 VAC
Input Amps (max)	16.2
Input Breaker	25A
Input Frequency	45-65 Hz
Noise on Input	< 50mV

## Electrical (Output)

Output Nominal (op)	24
Output Volts (DC) (Float)	27.2 ±0.05
Charging Amps	50
Battery Banks	1 or 2
Battery Size (Amp Hrs.)	200-300
Output Crowbar	34.0 ± 1.0V
Temperature Compensation Coefficient	-60mV/°C
Duty Cycle	Continuous 100% for 24 hours per day
Efficiency	81-82% @ Maximum Output
Stages	2
Regulation	< +/- 0.5%

## Environment Specification

Operating Temp. Range	-40° to +50°C @ maximum output Derate Linearly 2.5% per °C from 50°C
Humidity	0 - 95% Relative Humidity (non-condensing) with optional conformal coating
Audible Noise	NONE Ødb @ 3 ft (34.5 dB when fan operating)
Typical Service Life	> 10 yrs. (87,600 hrs)
Isolation	Input-Case & Input-Output 1500VDC / Output-Case 500VDC (1500VDC @ 48V Output)

## Mechanical Specification

Length	21.5 in
Width	9.5 in
Height	5.5 in
Clearance	1" inch (2.5 cm) all around
Material	Marine Grade Aluminum
Finish	Black
Fastenings	All 18-8 Stainless Steel
Weight	21.7 lb
Connections	NATO Receptable, ABORD954
Warranty	2 years
Safety	Designed to meet UL458 & CSA 22.2.107.1

Note: Specifications are subject to change without notice.

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