ANALYTIC SYSTEMS
INNOVATIVE POWER CONVERSION SOLUTIONS

8128 River Way, Delta, BC Canada V4G1K5
Tel. 604-946-9981 Fax. 604-946-9983
Toll Free. 1-800-668-3884 (US/CANADA)
www.analyticsystems.com

AC Battery Chargers

LIAC600-28 Series LI-ION Battery Charger

NSN# 6130-20-002-2433

Benefits

- Ultra-Quiet
- Power sensitive electronics without interference
- Rugged & Reliable
- Ensure years of safe and trouble free operation
- Fast & Accurate Charging

Description

This COTS Charger is designed for recharging the SAFT Lithium-Ion Battery (LBB) used by the US Armed Forces and is controlled using industry standard interface circuitry. It can also be used in Bypass Mode as a Stand-Alone power supply. It is designed to deliver 32.0 VDC at up to 22 amps continuous to recharge the battery. The output charges to 28 VDC at up to 22 amps when operating in Bypass Mode.

The LIAC600-28 can be powered from either 110 or 220 VAC (Auto Switching) at frequencies from 45 to 405 Hz. The unit is tested to MIL461E for both radiated and conducted emissions. It is compliant with MIL810F for shock and vibration and is designed to withstand submersion in 50cm of water for up to 5 minutes.

The unit can be operated over a temperature range of -40 to +60 degrees Celsius, and with an optional pre-heater, will operate at temperatures down to -55 degrees C.

Available options include a carrying handle and various Mil-Spec Connectors. We are confident that you will get many years of reliable service from this AC Battery Charger.

Military Option

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 EMC radiated and conducted emissions MIL-STD 461E.

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

GSA Schedule

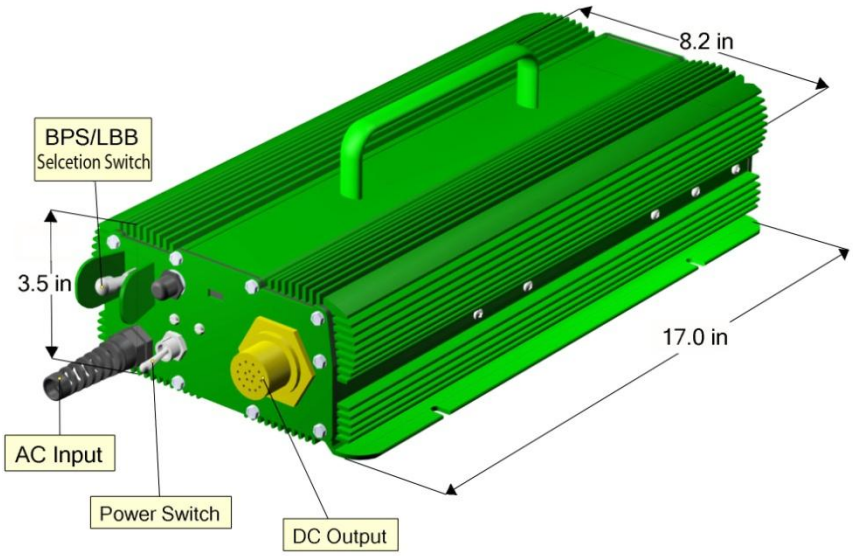
GSA Contract #GS-07F-5624R

Features

- ✓ Built 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
- ✓ Can function as a power supply
- ✓ Optional Carrying Handle available
- ✓ Visual indicators for output and charging
- ✓ Short circuit protection
- ✓ Output over-voltage crowbar
- ✓ Inrush Current Limiting with solid state bypass
- ✓ 110/220 Vac input auto switch circuitry
- ✓ 3 year parts and labour warranty *(2 yr. Extension available)*
- ✓ Designed to meet MIL-STD 810F, Method 514-3, Cat-I Proc I for vibration
- ✓ Built according to the Q-Base Quality System

LIAC600-AAI Lithium-Ion AC Charger

Specification



Mechanical Specification

Length	17.0 in / 43.2 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 Aluminum – rainproof
Finish	Anodized green
Fastenings	All 18-8 Stainless Steel
Weight	14.4 lb / 6.6 kg
Connections	Cannon Connectors Shown *(Other custom MIL-Spec Connectors also available)*
Vibration	Designed to meet MIL-STD810F, Method 514-3 and Cat-1 Proc 1
Interconnect	IPC-A-610
Warranty	3 years *(2 yr. extension avail.)*

Electrical (Input)

Nominal Vac (ip)	110	220
	(Auto ranging)	
Actual (Vac)	90-140	180-284
Input Amps (max)	10.5	5.3
Input Circuit Breaker	10A Magnetic	
Input Frequency	45-405 Hz	
Noise on Input	< 50 mV	

Environmental Specification

Operating Temp. Range	-40° to +50°C @ maximum output Derate Linearly 2.5% per °C from 50°C to 85°C (Optional pre-heater to allow -55°C operation available)
Humidity	0 - 95°C Relative Humidity (non-condensing) with standard conformal coating
Audible Noise	NONE Ødb @ 3 ft
Typical Service Life	> 10 yrs. (87,600 hrs)
Isolation	Case & Input-Output 1500VDC / Output-Case 500VDC

Electrical (Output)

Output Voltage (Charging Mode)	32.0 -0.05/+0.00 VDC
Output Voltage (Bypass Mode)	28.0 +/- 0.05 VDC
Charging Amps	22A Continuous
Output Ripple & Noise	< 260mV p-p @ 20A Load
Regulation (Line & Load)	< +/- 1.0% or 260mV, max.
Battery Banks	1
Stages	2 *(Float and bypass)*
Efficiency	> 75% @ Maximum Output
Hold-Up Time	20msec., min. @ 24 Amps
Dynamic Response	1 sec., max.
Temperature Coefficient	0.02%/°C, max.
Over-Voltage Protection	32.25 VDC Latching
Duty Cycle	Continuous 100% for 24 hours per day
Battery Load when OFF	25 milli-amps Max
EMC	Designed to meet MIL461E
Visual Indicators	Input On, Input Undervolt, Output Undervolt, & Overheat

Available From:

ANALYTIC SYSTEMS
INNOVATIVE POWER CONVERSION SOLUTIONS
ISO 9001:2008 Certified Quality System