LCH Series Capacitor Charging Power Supplies

500W to 1,000W

The first advance in capacitor charging technology in 25 years !

The LCH Series is designed to meet the unique requirements of medical, aesthetic and industrial pulsed energy systems. The modular design of these highly efficient and flexible devices leads to lower cost, high reliability and shorter lead times.

For years capacitor chargers have relied on resonant inverter topology to deliver constant current to the load. The design of the inverter section requires carefully matched precision components that add to the complexity and testing of the power supply.

The LCH capacitor chargers use a simpler Quasi Constant Power (QCP) design that drastically reduces parts count and eliminates the need for costly matched components. This results in much better long term reliability and smaller size at a lower cost.

Features

- Standard output voltages to 1,000V
- Output power from 500 to 1,000W
- Universal input voltage
- Power Factor Correction 0.99
- High efficiency, typically 88%
- Robust protection against faults
- MTBF 50,000 hours
- Advice offers a complete line of capacitor chargers from 500 to 9,000 watts

Applications

- Medical laser systems
- Intense pulsed light "IPL" devices
- Flash lamp pumped lasers
- UV curing systems
- Sterilization systems
- Systems that require pulsed energy

For more information on the QCP design
https://www.advicepower.com/choosing-capacitor-charger

Exclusive Representation:

NEW SOURCE TECHNOLOGY LLC
6678 Owens Drive, Suite 105, Pleasanton, CA 94588
Phone: +1 (925) 462-6888 | Fax: +1 (925) 462-8388
newsourcetechnology.com | sales@newsourcetechnology.com

ADVICE
Creative Technology Solutions

Specifications

Input	
Input voltage	90–264Vac 47-63Hz for up to 1,000J/Sec
Power factor	0.99 typical
Inrush Current	<25A @220Vac
Leakage Current	<300µA
Output	
Output Voltage	Configurable 400V to 1,000V
Output Power Range	500 to 1,000W
Polarity	Positive.
Efficiency	Typically 88% (full Load)
Fault Protection	Over Temp, Over Voltage Open Circuit, Load Short, Over current
Environmental	
Operating Temperature	0°C to +50°C
Storage	- 20°C to +85°C
Humidity (Operating)	10 to 90%RH
Humidity (Storage)	10 to 95%RH
Cooling	Internal Fan
Safety	EN60601-1 3rd Edition CE Mark
MTBF	50,000 Hours @30°C
Mechanical	
AC Input Connector	2 position Phoenix connector DMKDS2.5
Interface Connector	4 pins Molex 70553-003
HV Output	Coax Cable RG58A/U 50Ω See Drawing
AC Earth	M5 Stud Length; 10.5mm
Dimensions	234 x 153 x 95mm 9.21" x 6.0" x 3.74"
Weight	2.5kg | 5.5lb

Models

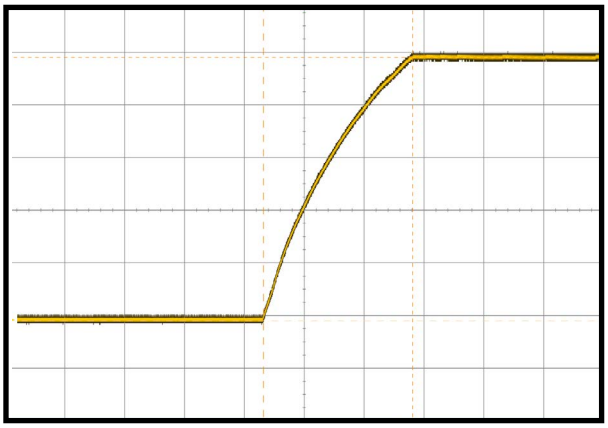
Part #	Output	Input	Input Current
LCH500-XXX	500W	90 to 264VAC	5.2A @ 115VAC
LCH750-XXX	750W		7.8A @ 115VAC
LCH1000-XXX	1,000W		10.5A @ 115VAC

XXX indicates the maximum output voltage/10
Example: 050=500V, 075=750V, 100=1,000V
Custom output voltages upon request

Pin #	Signal Name	Description
1	Inhibit [1]	Turn High Voltage ON/OFF
2	Chassis GND	Connected to all output returns
3	V porgram [2]	0 to 10V = 0 to V max
4	N/C	

Note:
1. Default: Pull down to ground enables HV. High enable available.
2. Standard program voltage can be modified. Example (0 to 5V = 0 to Vmax.)

Quasi-Constant Power (QPC)



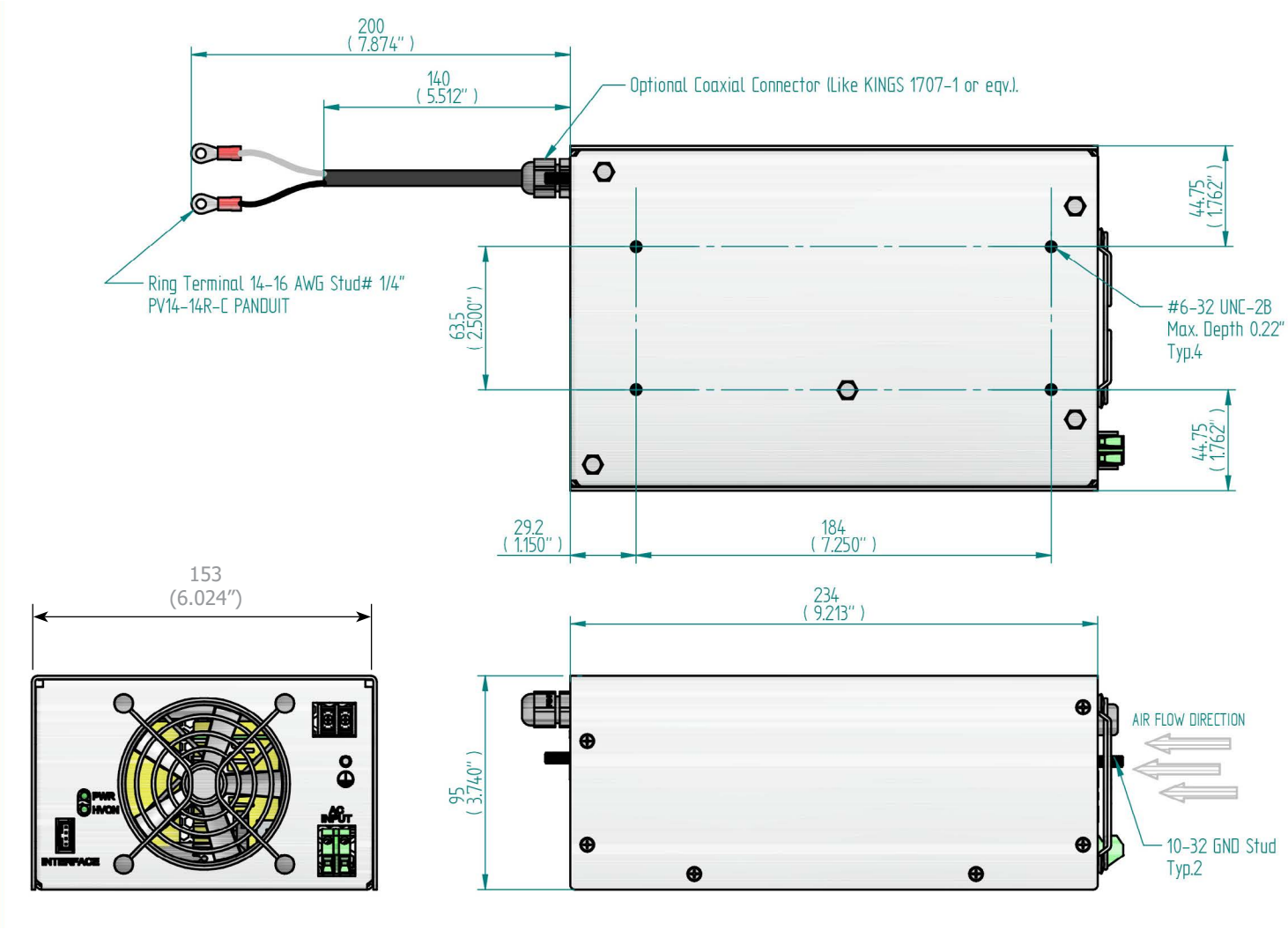
The LCH series capacitor chargers utilize Quasi-Constant Power Topology to deliver more power to the load while reducing input current and stress on the power supply. This results in more power in a smaller package and increased reliability at a reduced cost.

Exclusive Representation:

NEW SOURCE TECHNOLOGY LLC
6678 Owens Drive, Suite 105, Pleasanton, CA 94588
Phone: +1 (925) 462-6888 | Fax: +1 (925) 462-8388
newsourcetechnology.com | sales@newsourcetechnology.com

ADVICE
Creative Technology Solutions

Outline Drawing (A size Chassis)



Exclusive Representation:

NEW SOURCE TECHNOLOGY LLC

6678 Owens Drive, Suite 105, Pleasanton, CA 94588
Phone: +1 (925) 462-6888 | Fax: +1 (925) 462-8388
newsourcetechnology.com | sales@newsourcetechnology.com

ADVICE
Creative Technology Solutions