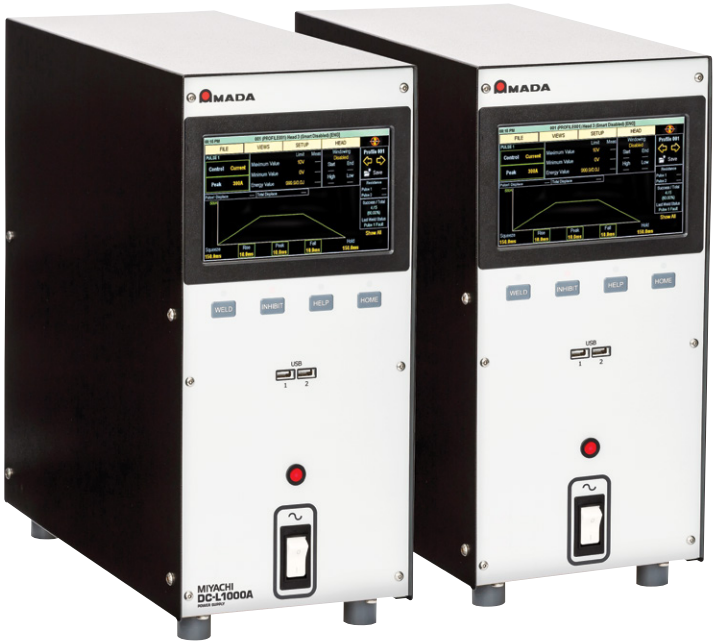
DC-L Series

Linear DC Resistance Spot Welding Power Supplies



The DC-L1000A and DC-L0600A are high performance 1000 A precision Linear DC spot welding power supplies that combine touch panel integrated database process control and monitoring with a high accuracy, low ripple linear transistor output stage that delivers ultra fast 10 µs dynamic process response rates, with absolute closed loop 1 A incremental accuracy and repeatability.

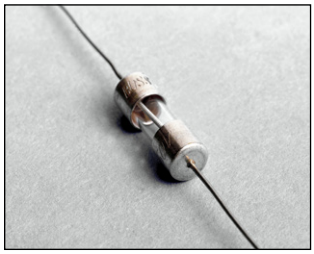
Typically used in aerospace, medical and electronic assembly applications, these units also incorporate SPC data collection and reporting capability via ethernet.

2 A to	1000 A	1 A steps	1% accuracy
10 mV to	10 V	10 mV steps	1% accuracy
10 W to	4 kW	1 W steps	1% accuracy

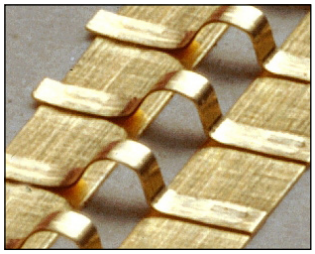
KEY FEATURES

- High speed, ultra low ripple closed-loop output control for consistent welding process definition and control
- Constant current, voltage and power modes with programmable multi-pulse combinations 1 A steps to 1000 A
- Programmable part & weld checking coupled with optional displacement and force limit checking
- Three phase (DC-L1000A) and single phase (DC-L0600A) operational variants
- Full TCP/IP Ethernet interfacing to internal and external SPC database systems
- Associate and view PDF and text format work instructions and process manuals with weld schedules
- Associate and view JPG and BMP files with weld schedules for QC and process checking
- 3 USB ports : USB memory stick, mouse, keyboard, servo head drives, etc.
- SMART weld head force control within weld schedules
- High speed automation and communication ports with full remote control capability

TYPICAL APPLICATIONS



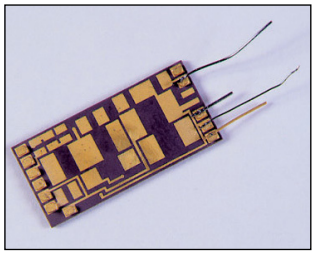
Butt welding fuses



Gold Ribbon bonding



Welding components to leadframe



Welding fine wire to pad

OPTIONS

- Optically isolated analogue electrical channel monitoring
- Versions available with 1,3 or 6 channel weld displacement monitoring built-in and combining dynamic weld cut-off

TECHNICAL SPECIFICATIONS

Model		DC-L1000A	DC-L0600A
Maximum output current		1000 A DC	1000 A DC
Output voltage at full load		4 V DC	4 V DC
Maximum output power		4 kW	4 kW
Full output duty cycle		5% @ 1000 A	4% @ 1000 A
Control modes		Current/Voltage/Power	Current/Voltage/Power
Output accuracy of setting		± 1%	± 1%
Program timing values	Squeeze time	0.1 – 999.9 ms	
	Upslope time pulse 1	0.1 – 999.9 ms	
	Peak time pulse 1	0.1 – 999.9 ms	
	Downslope time pulse 1	0.1 – 999.9 ms	
	Delay time between pulses	0.1 – 999.9 ms	
	Upslope time pulse 2	0.1 – 999.9 ms	
	Peak time pulse 2	0.1 – 999.9 ms	
	Downslope time pulse 2	0.1 – 999.9 ms	
	Hold time	0.1 – 999.9 ms	
Process monitor limits		Current/Voltage	Current/Voltage
Number of waveforms averaged		User defined	User defined
Waveform window limiting range		0 - 100%	0 - 100%
Waveform window tolerances		0 - 100%	0 - 100%
Optional displacement monitoring		LVDT or Encoder Up to 6 channels of real time weld displacement monitoring	LVDT or Encoder Up to 6 channels of real time weld displacement monitoring
Force		0 - 500 N (112 lb)	0 - 500 N (112 lb)
Input requirements		3 phase	1 phase
Input voltage		380 - 480 VAC	95 - 265 VAC
Control I/O		Opto isolated	Opto isolated
Serial communications		Ethernet via TCP/IP, USB 2.0, RS232	Ethernet via TCP/IP, USB 2.0, RS232

WEIGHT & DIMENSIONS

	DC-L1000A*	DC-L0600A*
Dimensions (W x D x H)	7.5 in x 15.7 in x 15.7 in (190 mm x 400 mm x 400 mm)	7.5 in x 15.7 in x 15.7 in (190 mm x 400 mm x 400 mm)
Weight	101.4 lb (46 kg)	70.5 lb (32 kg)

**Also available in horizontal configuration - ask factory for details*

USA Headquarters and Western Technical Center
AMADA WELD TECH
1820 S. Myrtle Ave. • Monrovia, CA 91016 US • T: (626) 303-5676
info@amadaweldtech.com • www.amadaweldtech.com
ISO 9001:2015 Certified Company • 24/7 Repair Service: 1-866-751-7378

AMADA WELD TECH (Eastern Technical Center)
High Point, North Carolina
T: (941) 544-5762
southsales@amadaweldtech.com

AMADA WELD TECH (Midwest Technical Center)
Detroit, Michigan
T: (248) 313-3078
midwestsales@amadaweldtech.com

AMADA WELD TECH GmbH
Puchheim, Germany
T: +49-89-839403-0
infode@amadaweldtech.eu

AMADA WELD TECH SHANGHAI CO., LTD.
Shanghai, China
T: +86-21-6448-6000
jwu@amadaweldtech.com.cn

AMADA WELD TECH KOREA CO., LTD.
Seoul, Korea
T: +82-31-8015-6810
sales@amadaweldtech.co.kr

AMADA TAIWAN CO., LTD.
Taipei, Taiwan
T: +886-3-328-3511

AMADA (THAILAND) CO., LTD.
Bangkok, Thailand
T: +66-2170-5900
info@amada.co.th

AMADA VIETNAM CO., LTD.
Ha Noi, Vietnam
T: +84-24-6261-4583
thuyet@amada.co.jp

AMADA WELD TECH INDIA PVT., LTD.
Bangalore, India
T: +91-80-4092-1749
info@amadaweldtech.in

Specifications subject to change without notice. Copyright© 2026 AMADA WELD TECH INC. The material contained herein cannot be reproduced or used in any other way without the express written permission of AMADA WELD TECH INC. All rights reserved.

follow us on:

06/25