

# m1 series



## Compact DC Resistance Welding Power Supplies

The m1 series is a compact, lightweight resistance welding power supply range that blends leading edge power technology with affordable pricing.

The range offers high speed closed loop adaptive feedback control with embedded monitoring, making it the ideal tool for a wide range of joining applications where quality is crucial.

The m1-10 unit offers precision linear technology for low current applications.

The m1-40 uses a hybrid fast response twin loop HFDC system for higher current applications.



### All m1 series products feature :

- ✓ Very high speed closed loop output control for consistent welding process definition and control.
- ✓ Constant Current, Voltage and Power modes with programmable double pulse combinations.
- ✓ Advanced component conditioning functions.
- ✓ Simple to use, intuitive menu.
- ✓ Compact, high performance and low cost
- ✓ Single phase 95VAC to 265VAC operation



- Built in graphical process monitoring with Pass/Fail limit checking and trend plotting/data logging.
- Programmable part & weld checking.

## m1-10 : 1000 Amp Precision Linear DC Welding power supply



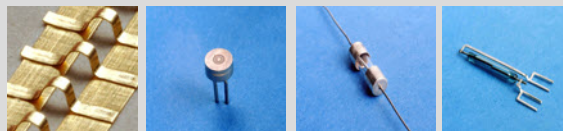
*A versatile Linear supply for precision joining below 1000 Amps*

### Typical Applications

- Gold ribbon welding
- Micro circuit welding
- Solar cell assembly
- Sensor and component welding
- Detonator and bridge wire welding

### m1-10 product features

- Precision control, ultra fast response for low current applications
- Ideal replacement for MCW-550 & Unibond™ systems



## m1-40 : 4000 Amp Hybrid HFDC Welding power supply



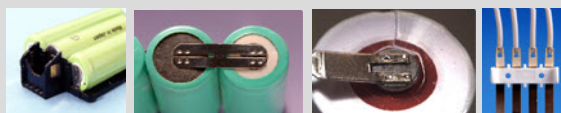
*A high power HFDC based supply for conductive component*

### Typical Applications

- Battery and battery pack assembly
- Miniature contact welding
- Automotive electronics
- Wire and lead termination
- Lamp manufacture
- Conductive material welding

### m1-40 product features

- Short high current pulse capability for conductive material joining.
- Ideal replacement for capacitor discharge equipment
- Hybrid HFDC for very fast response



## m1 Standard Specifications

### Standard Features

Maximum Output Current (A)  
Maximum Output Voltage at Full Load  
Maximum Output Power  
Duty Cycle at:  
- 4000 Amps  
- 3000 Amps  
- 2000 Amps  
- 1000 Amps  
- 500 Amps  
Control Modes  
Output Accuracy

### M1-10

1000 Amps DC  
5 V DC at maximum current  
5 KW  
-  
-  
-  
40ms / second  
100ms / second  
Current, voltage and power  
± 1% of set value or ± 1 Amp

### M1-40

4000 Amps DC  
4 V DC at maximum current  
16 kW  
5 ms / second  
20 ms / second  
30 ms / second  
70 ms / second  
Current, voltage and power  
±1% of set value or ± 20 Amps

### Programmed Values

Squeeze Time  
Upslope Time Pulse 1  
Peak Time Pulse 1  
Downslope Time Pulse 1  
Delay Time Between Pulses  
Upslope Time Pulse 2  
Peak Time Pulse 2  
Downslope Time Pulse 2  
Process Monitor Limits

0.1 – 999 ms  
0.1 – 999 ms  
0.1 – 999 ms  
0.1 – 999 ms  
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0.1 – 999 ms  
0.1 – 999 ms  
0.1 – 999 ms  
0.1 – 999 ms  
Voltage and Current

0.1 – 999 ms  
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0.1 – 999 ms  
0.1 – 999 ms  
0.1 – 999 ms  
0.1 – 999 ms  
0.1 – 999 ms  
0.1 – 999 ms  
Voltage and Current

### Input Requirements

Input Voltage  
Control I/O  
Serial Communications

95 – 260 VAC  
Single phase  
Options: RS232,  
RS422/485, CAN

95 – 260 VAC  
Single phase  
Options: RS232,  
RS422/485, CAN

### Dimensions

Width (mm)  
Height (mm)  
Depth (mm)  
Weight (Kg)

170 mm  
275 mm  
470 mm  
16.5kg

170 mm  
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470 mm  
16.5Kg



*Representative / Distributor*

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Design and manufacture  
of precision welding equipment  
and sub-contract micro-welding  
services