

# CD DPM2 Welders

## Dual Pulse Capacitive Discharge Spot Welders



### Applications:

- Battery pack welding
- Cross wire welding
- Thermocouple welding
- Electronic components
- Copper, aluminum, brass, and steel thin sheet and wire
- Miscellaneous resistive welding applications

### Features:

- Available with 160, 320, 630, 1,000ws of energy
- Dual Pulse operation removes surface inconsistencies and contaminants
- Single or Dual Pulse operation
- Infinitely adjustable pulse width
- Up to 275 welds/min
- Intuitive user interface



## Sunstone CD DPM2 Welders

The CD DPM2 Dual Pulse Capacitive Discharge Fine-Spot Resistance Welders are the ideal resistance spot welding equipment. These fine-spot resistance welders combine affordability and power. The CD DPM2 is available with 160, 320, 630, and 1,000 watt seconds of energy.

The welder's Dual Pulse Feature aids in the welding process. The first pulse heats the weld area to eliminate contaminants and then seats the weld electrodes. The second is a higher energy pulse that performs a clean, strong weld. Both pulses occur within milli-seconds.

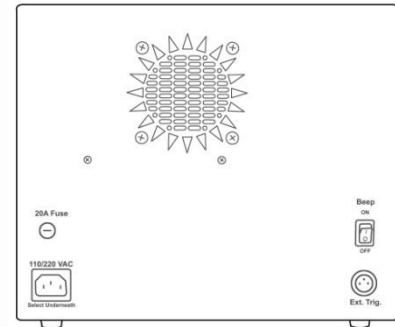
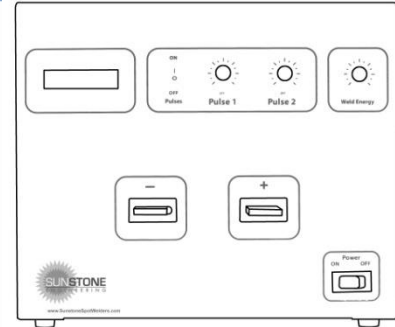
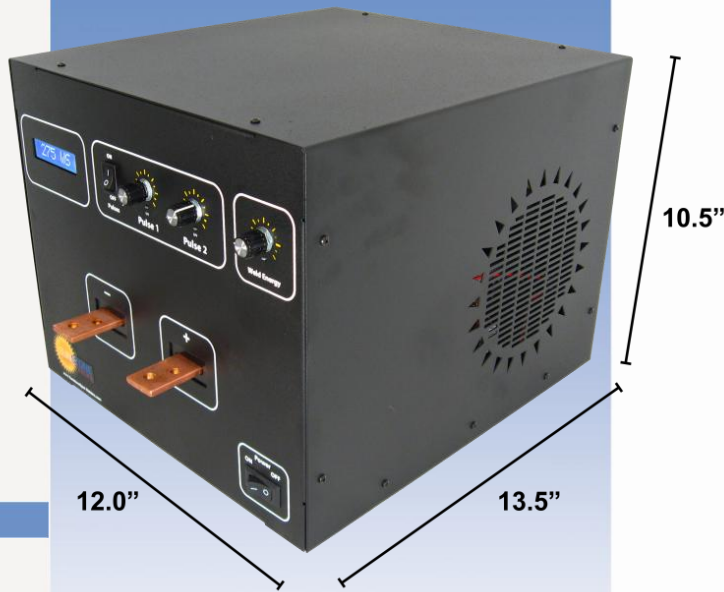
Sunstone's new digital energy read-out display allows for fine tuning of total weld energy, individual pulse energy, along with ensuring for precise repeatability.

When combined with Sunstone's new line of weld heads, CD DPM2 welders can perform strong, precise, and repeatable welds.

### Sunstone Engineering R&D Corporation

1693 American Way Unit 5  
Payson, UT 84651 USA  
Phone: 801.658.0015

## Dual Pulse Capacitive Discharge Welders



### Specifications

**Table 1: Peak weld current shown by model number and external cabling gauge number (AWG). Four and eight AWG cabling is typically seen when using hand held attachments.**

Model	1 AWG 1mOhm Load 4 feet	4 AWG 1.6mOhm Load 6 feet	8 AWG 4mOhm Load 6 feet
CD160 DPM2	10000	7692	4000
CD320 DPM2	10000	7692	4000
CD630 DPM2	11150	8577	4460

\*Minimum Load = 1mOhm, using a smaller load may damage the welder.

**Table 2: Sunstone Dual Pulse general technical specifications.**

Feature	CD160 DPM2 / CD320 DPM2 / CD630 DPM2
Dual Pulse	Yes
Pulse 1 Energy Adjustment (% of set-point energy)	0% - 30%
Pulse 2 Energy Adjustment (% of set-point energy)	0%-99%
Peak Current	10,000-11,150 Amps



## Dual Pulse Capacitive Discharge Welders

**Table 3: Weld speed in welds per minute by Dual Pulse model number at maximum energy**

Pulse width (max energy set-point)	CD160 DPM2 Welds/Min (pulse energy)	Rate CD320 DPM2 Welds/min (pulse energy)	Rep Rate CD630 DPM2 Welds/min (pulse energy)
10%	275 (15ws)	240 (30ws)	140 (65ws)
25%	200 (40ws)	150 (80ws)	90 (160ws)
50%	175 (80ws)	100 (160ws)	55 (315ws)
100%	125 (160ws)	60 (320ws)	27 (630ws)

**Table 4: Weld pulse characteristics.**

Model	Min and Max Output	Pulse Width		Rise Time (to max voltage)	Min Pulse Height	Max Pulse Height
		Min	Max			
CD160 DPM2	5 ws - 160 ws	Min	0.12ms	0.2 ms	2.2 V	20 V
		Max	6 ms			
CD320 DPM2	5 ws - 320ws	Min	0.12ms	0.2 ms	2.2 V	20 V
		Max	11 ms			
CD630 DPM2	5 ws - 630 ws	Min	0.12ms	0.2 ms	2.2 V	23 V
		Max	24 ms			

**Table 5: Sunstone Dual Pulse welder physical characteristics.**

	CD160 DPM2		CD320 DPM2		CD630 DPM2	
	Inches	cm	Inches	cm	Inches	cm
<b>Height</b>	10.5	26.7	10.5	26.7	10.5	26.7
<b>Width</b>	12.0	30.5	12.0	30.5	12.0	30.5
<b>Depth</b>	13.5	34.3	13.5	34.3	13.5	34.3
<b>Weight</b>	31 lbs	(15 kg)	34 lbs	(16 kg)	39 lbs	(18 kg)



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