

Portable Strain Gage Welding and Soldering Unit

FEATURES

- Separate visual and audible indicators monitor welder status.
- Weld energy is continuously adjustable from 3 to 50 joules, making the Model 700 an excellent choice for installing weldable strain gages and temperature sensors, as well as small thermocouples and light-gage metal.
- Supplied with a lightweight soldering pencil. A frontpanel control adjusts soldering tip temperature for a wide range of soldering applications in the field or in the laboratory.
- "Low-battery" light to warn the user when the internal, sealed lead-acid battery requires charging. A battery charger is included to provide for full battery charge with no danger of overcharging. Indicator lights monitor battery charge rate.
- Convenient storage space for cables, battery charger and instruction manual



SPECIFICATIONS

All specifications are nominal or typical at +23°C unless noted.

PARAMETER	SPECIFICATION
General	
Power for recharging	115 VAC or 230 VAC, 50-60 Hz. Uses external AC transformer (provided)
Operating and Storage Temperature Range	0°F to +120°F (–20°C to +50°C)
Size	9 L x 9 W x 9-3/4 H in (230 x 230 x 250 mm)
Weight	21 lb (9.5 kg)
Welding Specifications	
Weld Energy Range	3 to 50 joules, continuously adjustable by front-panel control Maximum open-circuit voltage less than 25 VDC
Maximum Weld Repetition Rate	20 per minute at 30 joules, typical
Number of Welds per Battery Charge	Approximately 2000 at weld energy setting of 30 joules. This is equivalent to around 30 Micro-Measurements linear weldable gages.
Battery Charge Time: (from full discharge)	12 hours to 75% full charge; 18 hours to full charge
Battery	One sealed, rechargeable lead-acid (non-liquid) type, 12 volt, 5 ampere-hour
Welding Probe	Manually fired with trigger control and "steady-rest"
Welding Cables	Two 5 ft (1.5 m), fully flexible
Weld Energy Monitor	Calibrated front-panel control with READY and WAIT indicators; audible indication selectable



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Soldering Specifications	
Temperature Control	Continuously variable with bands indicating melting range of solders
Soldering Pencil	1.1 oz (31 gm), rated at 25 watts, 12 volt operation. Tip temperature adjustable from +200°F to +900°F (+90°C to +480°C).
Duration	4 hours using +361°F (+183°C) melting point solders (with initial full charge)
Accessory	Model 700-A103 Spot Welding Probe Set: Recommended for spot welding instrument leadwires to ZC Series high-temperature gages ribbons.



PART NUMBER	DESCRIPTION
MM120-002225	700 WELDER COMPLETE UNIT
REPLACEMENT PARTS	
MM100-121073	700-A STRAIGHT PROBE TIP
MM100-121183	700-B BENT PROBE TIP
MM200-131524	700 HANDLE ASSEMBLY WITH CABLE
MM23X900002	700 REPLACEMENT BATTERY
MM100-123329	SOLDER PENCIL ASSEMBLY
MM100-122961	700 DESKTOP POWER SUPPLY



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