

The **HP** and **PG** series hand probes feature an ergonomical soft grip design with hangers for use on counterbalanced devices. A robust resonant mount is designed for years of trouble-free operation. Fittings for air-cooling come standard on all units. These probes are perfect for manual spot welding, staking, cutting and inserting applications.

The **iQ** series **HP-E** generators come standard with both time and energy control. The display is a high-resolution graphic multicolor LCD with large easy-to-read text. One-touch hot keys along with a multilingual menu make programming and operation virtually effortless. Built-in circuit protection and visual fault status readouts ensure reliability even in the toughest work environments. The compact size and built-in handle allow for portability.

## **FEATURES**

- **Soft grip lightweight** ergonomically friendly hand probes.
- Time, energy and manual weld modes with process limits.
- **Amplitude adjustment** in 1% increments from 100% to 20%.
- Trigger by Power patented feature for greater weld consistency.
- Eight programmable setups.
- Audible end of cycle notification alerts operator cycle is complete.
- Latch on fault with a visual and audible alarm that is menu selectable.
- **Power bar** graph with last cycle memory.
- High-resolution multicolor LCD with a multilingual menu for quick, easy programming.
- **Real time** in cycle menu displays frequency, power, and time.
- 100% digital controls of all power supply functions and parameters.
- Digi-Trac tuning automatically tracks the resonant frequency digitally. It adjusts the output frequency to match the hand-held device. This is done for every weld cycle and eliminates the need to manually tune the generator.
- Ultrasonic overload protection, with fault indication for ease of troubleshooting. The overload power limit is based on true RMS power output level.

## iQ Series

**ULTRASONIC HAND HELD SYSTEMS** 

HP-E



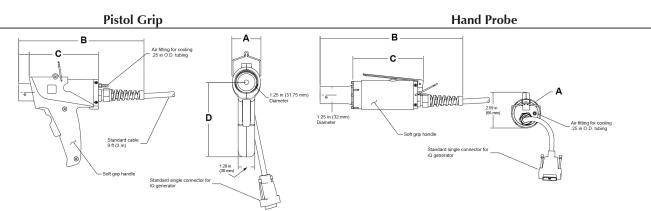


High Resolution Display
Status Indication
Stack Frequency Display
Power Draw
Current Setup
Power Graph Bar %

INFO - Intuitive Navigation
SETUP - 8 Programmable Setups
AMP - Front Panel Digital
Amplitude adjustment 100%-20%
TRIGGER - Trigger by power mode
TIME - Weld by Time Mode with
Secondary Control of Energy
ENERGY - Weld by Energy Mode
with Secondary Control of Time
HOLD - Programmable Hold Time

## **FEATURES CONTINUED**

- Patented pulse-width modulation design delivers power more efficiently with substantially less stress on electrical components for superior performance, reliability, and extended life.
- Linear ramp soft-start algorithm allows the acoustic stack to be brought to operating amplitude smoothly, minimizing start-up surges and abnormal stress to the stack and power supply.
- **Line voltage regulation** compensates for line fluctuations assuring consistent amplitude.
- Load regulation provides constant ultrasound amplitude automatically regardless of power draw. The ultrasonic output amplitude level is held to within 1% to provide weld process consistency.
- Highest power density per unit volume. Most power in the smallest package at highest duty cycle.
- **0.5 ms sampling rate,** fastest in the industry.



System Model	Generator Model #	Probe Part #	Line Voltage	Freq. kHz	Probe Weight Ib (kg)	A Diameter in (mm)	B Length With Strain Relief in (mm)	C Body Length in (mm)	D Handle Length in (mm)	Probe Cable Length
HP 20.61-P	20HP060-1H	41PG20S	100-120 VAC	20	1.80 (0.82)	1.90 (48)	8.75 (222)	5.10 (130)	5.38 (137)	9 ft (2.7 m)
HP 20.61-H	20HP060-1H	41HP20S	100-120 VAC	20	1.60 (0.73)		10.00 (254)	5.02 (128)	na	
HP 20.62-P	20HP060-2H	41PG20S	200-240 VAC	20	1.80 (0.82)		8.75 (222)	5.10 (130)	5.38 (137)	
HP 20.62-H	20HP060-2H	41HP20S	200-240 VAC	20	1.60 (0.73)		10.00 (254)	5.02 (128)	na	
HP 30.61-P	30HP060-1H	41PG30S	100-120 VAC	30	2.50 (1.13)	2.21 (56)	8.22 (209)	3.82 (97)	5.79 (147)	
HP 30.61-H	30HP060-1H	41HP30S	100-120 VAC	30	1.40 (0.64)	1.90 (48)	9.00 (229)	5.10 (130)	na	
HP 30.62-P	30HP060-2H	41PG30S	200-240 VAC	30	2.50 (1.13)	2.21 (56)	8.22 (209)	3.82 (97)	5.79 (147)	
HP 30.62-H	30HP060-2H	41HP30S	200-240 VAC	30	1.40 (0.64)	1.90 (48)	9.00 (229)	5.10 (130)	na	
HP 35.61-P	35HP060-1H	41PG35S	100-120 VAC	35	2.50 (1.13)	2.21 (56)	8.53 (217)	3.82 (97)	5.79 (147)	
HP 35.61-H	35HP060-1H	41HP35S	100-120 VAC	35	1.40 (0.64)	1.90 (48)	9.15 (232)	5.10 (130)	na	
HP 35.62-P	35HP060-2H	41PG35S	200-240 VAC	35	2.50 (1.13)	2.21 (56)	8.53 (217)	3.82 (97)	5.79 (147)	
HP 35.62-H	35HP060-2H	41HP35S	200-240 VAC	35	1.40 (0.64)	1.90 (48)	9.15 (232)	5.10 (130)	na	
HP 40.61-P	40HP060-1H	41PG40S	100-120 VAC	40	1.65 (0.75)	2.10 (53)	8.20 (208)	5.02 (128)	5.38 (137)	
HP 40.61-H	40HP060-1H	41HP40S	100-120 VAC	40	1.35 (0.61)	1.90 (48)	8.58 (218)	4.80 (122)	na	
HP 40.62-P	40HP060-2H	41PG40S	200-240 VAC	40	1.65 (0.75)	2.10 (53)	8.20 (208)	5.02 (128)	5.38 (137)	
HP 40.62-H	40HP060-2H	41HP40S	200-240 VAC	40	1.35 (0.61)	1.90 (48)	8.58 (218)	4.80 (122)	na	

## Generator 40HP60-1E

