

PAS PLASTIC ASSEMBLY SYSTEMS

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.

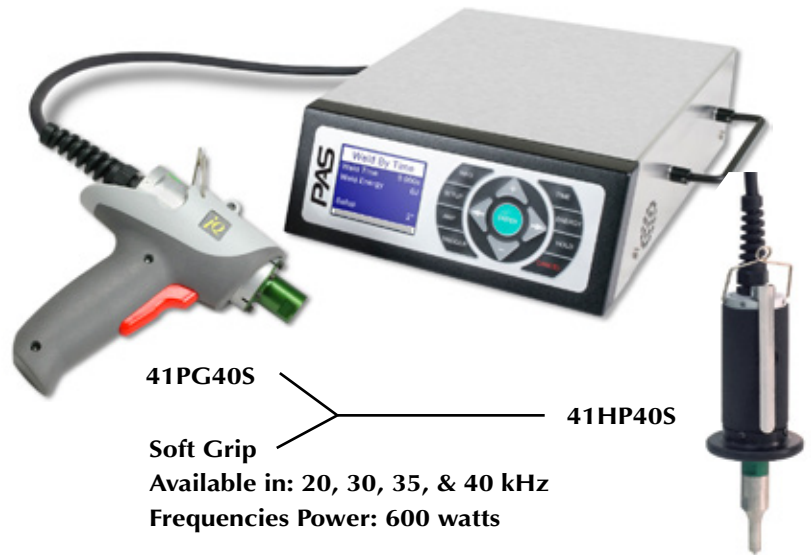
The **iQ** series **HP-E** generators come standard with both time and energy control. The display is a high-resolution graphic multicolor LCD with large easy-to-read text. One-touch hot keys along with a multilingual menu make programming and operation virtually effortless. Built-in circuit protection 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



41PG40S

41HP40S

Soft Grip

Available in: 20, 30, 35, & 40 kHz

Frequencies Power: 600 watts



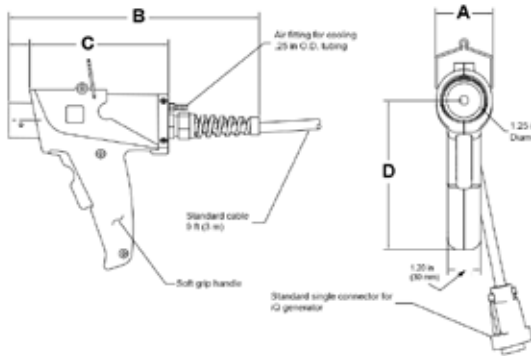
High Resolution Display
Status Indication
Stack Frequency Display
Power Draw
Current Setup
Power Graph Bar %

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

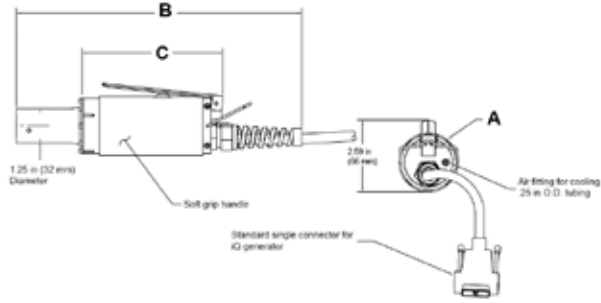
FEATURES CONTINUED

- **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.

Pistol Grip



Hand Probe



| System Model | Generator Model # | Probe Part # | Line Voltage | Freq. kHz | Probe Weight lb (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

