DUKANE

Intelligent Assembly Solutions

DPC II Plus

Dynamic Process Controller™ (DPC)

ULTRASONIC GENERATOR/POWER SUPPLY

FEATURES

- **Retrofittable** to existing ultrasonic probe/press systems to bring precise control and monitoring features to applica tions already in production.
- **Timer Module** option provides weld time and hold time control and stores up to eight setup files.
- **Press Module** option controls a Dukane ultrasonic press.
- **Power Signal Module** option enables weld–by–energy mode.
- **Multi–Probe Control Module (MPC)** options permit one DPC to handle up to eight probes in an automation environment.
- **Plug and Weld** system recognizes modules as they are added or removed from system.
- **Process Control Menu** automatically reconfigures itself to accommodate added modules.
- **ISO9001 Certification** assures you of the highest quality and Dukane's commitment to continuous improvement.
- **User Selectable** parts limits – Suspect or Bad.
- **Dukane Exclusive** one touch **hot keys** for quick programing of weld control.
- **Hot Key** One Touch digital amplitude control in 1% – increments 100-40%.
- **End of Weld** ground detect standard.
- **Modular component design** maximizes product flexibility and cost effectiveness by allowing the selection of various power levels and process control features.
- **Standard 19" (48cm) rack mountable** unit for easy system integration at minimal cost.
- **Universal IEC 320 power cord receptacle** accommodates most worldwide power requirements.
- **Auxiliary outputs** such as cycle activation provide easy system integration with automated machinery and PLCs.
- **Power display** for checking acoustic stack characteristics
- **System power output** indicates normal or possible over load operating condition during the weld cycle.
- **System status panel** displays any of six self-diagnostic messages, including Fault, Input Test, Overload, On Line, Overtemperature, or Off Line

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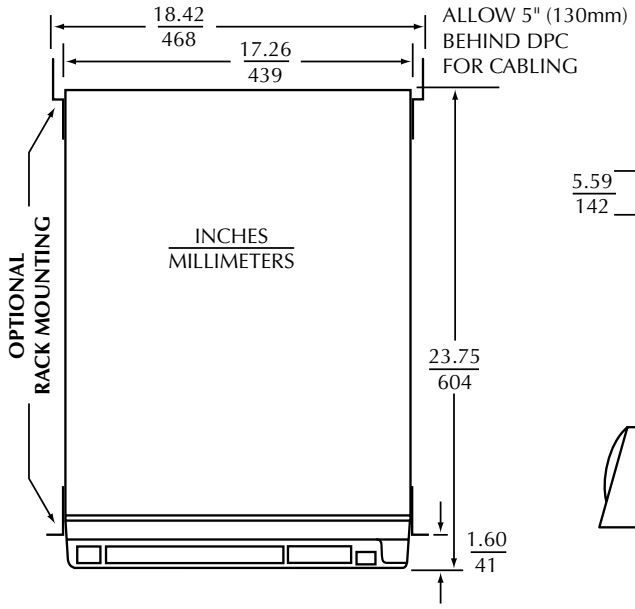
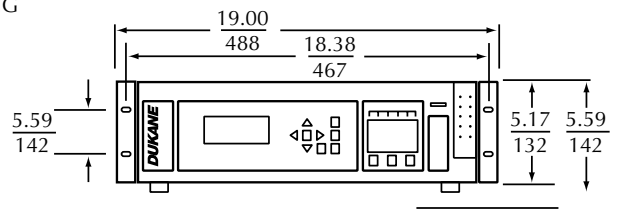
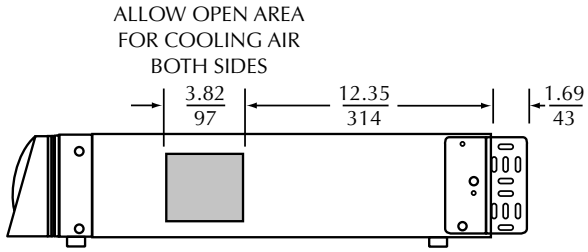
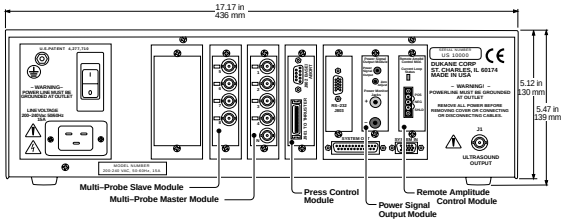
GENERATOR

- **Patented Pulse-Width Modulation** design delivers power more efficiently with substantially less stress on the electrical components for superior performance, reliability, and extended service life
- **Unique Linear Ramp Soft Start** *accelerates* the transducer and tooling up to operating amplitude eliminating mechanical and electrical starting stress
- **AUTO-TRAC tuning** using phase lock loop technology automatically locks the generator to the resonant frequency of the transducer and tooling even under varying conditions of temperature and loading
- **Dukane exclusive FLOW-THROUGH COOLING** provides on demand thermostatically controlled cooling system that separates electronic components from the cooling air flow chamber
- **Electronic overload protection** prevents component failure, reducing costly downtime
- **Advanced transformer and inductor designs** increase efficiency and reliability of electronic components
- **Line regulation** compensates for line fluctuations assuring consistent amplitude
- **Load regulation** assures constant amplitude at various loads improving assembly consistency
- **Universal Voltage Input** automatically compensates for line voltages between 90-130, or 180-260 volts









Electrical Requirements

90–130 Volts AC, 50/60 Hz or 180–260 Volts AC, 50/60 Hz
(Input Power Requirements vary with Frequency Output and the Rated Power of the Generator)
Approximate Weight — 40 pounds (18.2 kg)
Shipping Weight — 50 pounds (22.7 kg)

MODELS

POWER / FREQUENCY	100 W	150 W	350 W	500 W	700 W	1000 W	1200 W	1500 W	1700 W	2200 W
20 kHz				2050			2120		2170	2200
30 kHz								3150		
40 kHz			4035		4070	4100				
50 kHz		5015								
70 kHz	7010									

Note: All specifications are subject to change without notice. Please consult Dukane Ultrasonics for any updated information.