Intelligent Assembly Solutions

**DPC I**

**Dynamic Process Controller™ (DPC)**

**ULTRASONIC GENERATOR/POWER SUPPLY**

**FEATURES**

- **Modular component design** maximizes product flexibility and cost effectiveness by allowing the selection of various power levels

- **CE Compliant** The DPC I is a CE compliant version that included in both the vertical and horizontal models. For the OEM channel, it is also available in a **non-CE** compliant version

- **System status outputs** designed for integration into automated machines

- **System status panel** displays any of six self-diagnostic messages, including Fault, Input Test, Overload, On Line, Overtemperature, or Off Line

- **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** provides a controlled activation of the amplitude during the beginning of the weld portion of a welding cycle. By controlling the ramp up time of the amplitude, stresses on the part being welded can be reduced.

- **Adjustable amplitude** 100% to 40%, allows for fine tuning of the weld process

- **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

- **Universal Voltage Input** automatically compensates for line voltages between 90-130, or 180-260 volts

- **Line regulation** compensates for line fluctuations assuring consistent amplitude

- **Load regulation** assures constant amplitude at various loads improving assembly consistency

- **Diagnostic interface capabilities** are available that utilize the optional 43A1570 DPC Driver Board Setup Module. This feature allows the user to monitor and adjust factory default settings that expand your ability to fine tune the welding process.

www.dukcorp.com/us  •  e-mail: ussales@dukcorp.com

Dukane Corporation  •  Ultrasonics Division  •  2900 Dukane Drive  •  St. Charles, Illinois 60174 USA  •  TEL (630) 797-4900  •  FAX (630) 797-4949
**MODELS**

<table>
<thead>
<tr>
<th>POWER / FREQUENCY</th>
<th>100 W</th>
<th>150 W</th>
<th>350 W</th>
<th>500 W</th>
<th>700 W</th>
<th>1000 W</th>
<th>1200 W</th>
<th>1500 W</th>
<th>1700 W</th>
<th>2200 W</th>
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<tbody>
<tr>
<td>20 kHz</td>
<td>2050</td>
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<td>2120</td>
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Custom configurations and Private labeling available.

DPC I Vertical Mount

Control Panel of the DPC1

DPC I Horizontal Mount

Access door of the DPC1 allows easy testing and adjusting of, Input and Output status signals, Amplitude/Frequency settings, and easy connection to the optional Test Setup box.

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