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RAPIDwave Universal Smart Microwave Digestion System

The RAPIDwave Universal Smart Microwave Digestion System is an innovative microwave instrument which integrates an easy to use user-interface with an on board video camera allowing remote viewing of sensors and vessels on an external display.

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The RAPIDwave Universal System, designed in Germany, is ideal for synthesis applications in the high pressure range. In just a few simple steps, the user can choose a preset or customized method via the on board control pad. System data are easily monitored via the 7 inch LCD screen.



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Innovation

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Enhanced Microwave Focusing

Focused Microwave Energy on the sample Homogenous microwave field High Microwave efficiency





Control and Monitoring

Remote observation of vessels and sensors is available through the built in video camera via an optional external monitor All operations are easily performed via the control pad

Safety by Design

Dual Temperature and Pressure control Electronic door lock Cavity 316L Stainless Steel construction

Carousel Design (KJ-180)

Number of vessels	10
Inner Vessel	PTFE
Inner Vessel Volume	100mL
Vessel Sleeve	PEEK
Maximum Operating Pressure	40 bar
Maximum Pressure	100 bar
Maximum Operating Temperature	235 °C
Maximum Temperature	300 °C



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Specifications

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Microwave Resonant Cavity	Custom Designed Microwave Resonant Cavity
Cavity Material	316L Stainless Steel
Volume of Resonant Cavity	34L
Magnetron	2 sets
Maximum Microwave Power Output	1200W
Microwave Frequency	2450MHz
Microwave Emission Mode	Non-pulse Continuous Microwave Output
Microwave Control Mode	High Frequency Closed-loop Feedback (PID) Control
AC Power Input	220-240V/50Hz, 8A
Carousel	10 Vessels Simultaneous Operation (KJ-180)
Maximum Pressure Control System	Pressure Maximum Range: 0-100bar Pressure Measure Accuracy: ±0.1bar Pressure Control Stability: ±0.5bar
Maximum Temperature Control System	Temperature Maximum Range: RT-300°C Temperature Measure Accuracy: ±1°C Temperature Control Stability: ±1°C
Exhaust System	Anti-corrosion Converting-frequency Centrifugal Blower; Maximum Air-flow Capacity: 3.5m ³ /min
Working Environment Temperature	0-40 °C
Relative Humidity	15%-80%RH
Exterior Dimension	502mm × 600mm × 562 mm (W×H×D)
Weight	46Kg

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Statement: Specification may change without notice. Spectrum reserves rights of final explanation. Version: 2016.07

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