



## BP-310

### LABORATORY MICROWAVE OVEN



- 230 volt 50 Hertz input power
- Temperature probe available to laboratory supplied temperature meter
- Infrared temperature sensor available to laboratory supplied temperature meter
- Ashing package with muffle to 1,000 °C

#### **BP-310 LABORATORY MICROWAVE:**

The BP-310 laboratory microwave from Microwave Research and Applications, Inc. is a time and power level process based microwave that incorporates our exclusive True-To-Power™ power control system that controls the microwave power level with an infinite number of power levels. This power adjustment system does not adjust the power level by pulsing the microwave power, but actually changes the instantaneous microwave power level much like a light dimmer switch changes light levels. This level of power control allows almost an infinite control of the microwave power for precise processing for even the most sensitive or small samples. With this level of power control, the BP-310 is ideal for critical processes or small samples that may become damaged by microwaves using on and off pulsing as a means of power control.

#### **CORROSION RESISTANCE:**

The BP-310 is compact and has the corrosion resistance of the electronics, door with its important microwave choke and other sensitive components to make this microwave a good choice for your digestion, extraction, ashing or other heating applications of corrosive or harsh materials. The microwave cavity and housing are stainless steel and there is a high volume fan that pulls fresh air into the microwave cavity, and then sweeps the fumes into a ducted exhaust plenum that can be connected directly into your fume hood system or house air handling system, preventing the build-up of fumes in the cavity. While it is impossible to eliminate the corrosion that occurs during chemical processing, our corrosion resistant treatment significantly extends the life of the microwave.

This microwave is a great choice for many analytical chemical or general laboratory uses! Add a high temperature muffle and this microwave can be used for ashing.

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**POWER CONTROL:**

The BP-310 uses our exclusive True-To-Power™ power control system that allows you to set virtually any power setting from just a few watts to full power without the ON-OFF power cycling or potential damage to small or sensitive samples. It works much like a dining room light dimmer switch, and it changes the microwave power level without ON-OFF pulsing. This allows for a very controllable power level and processing of even extremely small or sensitive samples. The addition of an optional temperature probe allows you to monitor sample temperature during processing.

**SPECIFICATIONS:**

Output power	1000 microwave watts
Required input power	120 volt, 60 Hz., Dedicated 15-amp line
Output power	1,000 watts maximum variable by duty cycling, 5 levels
Dimensions	Outer 20.5" w x 16" d x 12.125" h nominal (W/O handle) Cavity 13.875" w x 14.625" d x 8.125" h nominal
Weight/Shipping weight	40/45 pounds
Operating frequency	2.45 GHz (an internationally regulated ISM frequency)
Cavity exhaust	Powered, 15 cfm. Includes 8 feet of chemical resistant flexible duct to connect to exhaust system. Includes 2 stainless steel clamps for ease of mounting
Cavity and housing material	Corrosion resistant stainless steel
Electronics cooling	High volume for long life
Output power	1000 microwave watts

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