



MICROWAVE DIGESTER

MICROWAVE DIGESTER

A well-known method for preparing solid materials into solutions fit for examination by ICP-AES, ICP-MS, atomic absorption spectroscopy, or polarography is microwave digestion.

Used in Pharmaceutical Analysis, Agricultural, Environmental Analysis, Biological Sciences.

Also known as Microwave Digester, Microwave Extraction.

BMWD-101 MICROWAVE DIGESTER



Compatible with 6 position rotor which meets different digestion demands.

Equip with 316L stainless explosion-proof cavity, coated with multilayer anticorrosive and heat resisting coatings, which greatly prolongs its service life and ensure the safety of operation.

SPECIFICATIONS

Model	BMWD-101
Vessel Quantity	6
Temperature Monitoring System	Contactless IR sensor All vessels scanning monitoring
Pressure Monitoring System	Contactless pressure sensors. All vessels scanning monitoring
Working Pressure Range	0-6MPa
Working Temperature Range	50-400 °C Accuracy: ±0.1 °C
Vessel Volume	100mL
Display	Smart 7 inch color touch screen
Rotation	360° continuous rotation
Microwave Power	0 ? 1000 W (Adjustable)
Microwave Frequency	2450MHz
Cavity Volume	35L
Microwave Leakage	<5mw/cm ²
Power	AC 220V ± 10%,10A, 50/60Hz
Dimension (LxWxH)	490x560x533 mm
Weight	40 kg

OPTIONAL ACCESSORIES

Accessory Code	Name	Sample quantity	Aperture and Hole depth	Temperature Control Range
7600606006	Heating Blocks	12	Φ 39x65mm	Room Temperature - 250°C

BMWD-102 MICROWAVE DIGESTER



Compatible with 8 position rotor which meets different digestion demands.

Equip with 316L stainless explosion-proof cavity, coated with multilayer anticorrosive and heat resisting coatings, which greatly prolongs its service life and ensure the safety of operation.

SPECIFICATIONS

Model	BMWD-102
Vessel Quantity	8
Pressure Monitoring System	Contactless pressure sensors. All vessels scanning monitoring
Working Pressure Range	0-6MPa
Working Temperature Range	50-400 °C Accuracy: $\pm 0.1^{\circ}\text{C}$
Vessel Volume	100mL
Display	Smart 7 inch color touch screen
Rotation	360° continuous rotation
Microwave Power	0 ? 1000 W (Adjustable)
Microwave Frequency	2450MHz
Cavity Volume	35L
Microwave Leakage	<5mw/cm ²
Power	AC 220V $\pm 10\%$, 10A, 50/60Hz
Dimension (LxWxH)	490x560x533 mm
Weight	40 kg

OPTIONAL ACCESSORIES

Accessory Code	Name	Sample quantity	Aperture and Hole depth	Temperature Control Range
7600607006	Heating Blocks	12	Φ 39x65mm	Room Temperature - 250°C

BMWD-103 MICROWAVE DIGESTER



Compatible with 10 position rotor which meets different digestion demands.
Equip with 316L stainless explosion-proof cavity, coated with multilayer anticorrosive and heat resisting coatings, which greatly prolongs its service life and ensure the safety of operation.

SPECIFICATIONS

Model	BMWD-103
Vessel Quantity	10
Pressure Monitoring System	Contactless pressure sensors. All vessels scanning monitoring
Working Pressure Range	0-6MPa
Working Temperature Range	50-400 °C Accuracy: ±0.1 °C
Vessel Volume	100mL
Display	Smart 7 inch color touch screen
Rotation	360° continuous rotation
Microwave Power	0 ? 1000 W (Adjustable)
Microwave Frequency	2450MHz
Cavity Volume	35L
Microwave Leakage	<5mw/cm ²
Power	AC 220V ± 10%, 10A, 50/60Hz
Dimension (LxWxH)	490x560x533 mm
Weight	40 kg

OPTIONAL ACCESSORIES

Accessory Code	Name	Sample quantity	Aperture and Hole depth	Temperature Control Range
7600608006	Heating Blocks	12	Φ 39x65mm	Room Temperature - 250°C

BMWD-104 MICROWAVE DIGESTER



Vessel quantity of 6.

Vertical design for even distribution of microwave.

316L industrial stainless steel cavity with multilayer teflon coating avoids acid corrosion, also improves cooling efficiency.

Pre-installed general standard methods, users can also create, save, modify and delete the method.

SPECIFICATIONS

Model	BMWD-104
Vessel Quantity	6
Temperature Monitoring System	Temperature Monitoring: Contactless IR Sensor Scan monitoring for each vessel Temperature Controlling Range: 50-400 °C Temperature Accuracy: ±0.1 °C Display Accuracy: ±0.1 °C
Pressure Monitoring System	Pressure monitoring: Contactless Sensor Scan monitoring for each vessel Pressure Controlling Range: 0-15MPa Pressure Accuracy: ±0.01MPa Display Accuracy: ±0.01Mpa
Vessel Volume	100mL
Sample Vessel Material	Imported TFM
Protection Vessel Material	Peek+Glass Fiber
Display	7 inch color touch screen
Rotation	360° continuous rotation
Microwave Power	0 ~ 1000 W (Adjustable)
Microwave Tank	316L Stainless Steel tank With Corrosion Proof Coating
Microwave Leakage	<5mw/cm ²
Air Exhaust	High Power Corrosion-Proof Air Blower
Power	AC 220V ± 10%,10A, 50/60Hz
Dimension (LxWxH)	490x560x630 mm
Weight	47 kg

OPTIONAL ACCESSORIES

Accessory Code	Name	Sample quantity	Aperture and Hole depth	Temperature Control Range
7600609006	Heating Blocks	12	Φ 39x65mm	Room Temperature -250°C

BMWD-105 MICROWAVE DIGESTER



Vessel quantity of 8.

Vertical design for even distribution of microwave.

316L industrial stainless steel cavity with multilayer teflon coating avoids acid corrosion, also improves cooling efficiency.

Pre-installed general standard methods, users can also create, save, modify and delete the method.

SPECIFICATIONS

Model	BMWD-105
Vessel Quantity	8
Temperature Monitoring System	Temperature Monitoring: Contactless IR Sensor Scan monitoring for each vessel Temperature Controlling Range: 50-400 °C Temperature Accuracy: ±0.1 °C Display Accuracy: ±0.1 °C
Pressure Monitoring System	Pressure monitoring: Contactless Sensor Scan monitoring for each vessel Pressure Controlling Range: 0-15MPa Pressure Accuracy: ±0.01MPa Display Accuracy: ±0.01Mpa
Vessel Volume	100mL
Sample Vessel Material	Imported TFM
Protection Vessel Material	Peek+Glass Fiber
Display	7 inch color touch screen
Rotation	360° continuous rotation
Microwave Power	0 ~ 1000 W (Adjustable)
Microwave Tank	316L Stainless Steel tank With Corrosion Proof Coating
Microwave Leakage	<5mw/cm ²
Air Exhaust	High Power Corrosion-Proof Air Blower
Power	AC 220V ± 10%,10A, 50/60Hz
Dimension (LxWxH)	490x560x630 mm
Weight	47 kg

OPTIONAL ACCESSORIES

Accessory Code	Name	Sample quantity	Aperture and Hole depth	Temperature Control Range
7600610006	Heating Blocks	12	Φ 39x65mm	Room Temperature -250°C

BMWD-106 MICROWAVE DIGESTER



Vessel quantity of 10.

Vertical design for even distribution of microwave.

316L industrial stainless steel cavity with multilayer teflon coating avoids acid corrosion, also improves cooling efficiency.

Pre-installed general standard methods, users can also create, save, modify and delete the method.

SPECIFICATIONS

Model	BMWD-106
Vessel Quantity	10
Temperature Monitoring System	Temperature Monitoring: Contactless IR Sensor Scan monitoring for each vessel Temperature Controlling Range: 50-400 °C Temperature Accuracy: ±0.1 °C Display Accuracy: ±0.1 °C
Pressure Monitoring System	Pressure monitoring: Contactless Sensor Scan monitoring for each vessel Pressure Controlling Range: 0-15MPa Pressure Accuracy: ±0.01MPa Display Accuracy: ±0.01Mpa
Vessel Volume	100mL
Sample Vessel Material	Imported TFM
Protection Vessel Material	Peek+Glass Fiber
Display	7 inch color touch screen
Rotation	360° continuous rotation
Microwave Power	0 ~ 1000 W (Adjustable)
Microwave Tank	316L Stainless Steel tank With Corrosion Proof Coating
Microwave Leakage	<5mw/cm ²
Air Exhaust	High Power Corrosion-Proof Air Blower
Power	AC 220V ± 10%, 10A, 50/60Hz
Dimension (LxWxH)	490x560x630 mm
Weight	47 kg

OPTIONAL ACCESSORIES

Accessory Code	Name	Sample quantity	Aperture and Hole depth	Temperature Control Range
7600611006	Heating Blocks	12	Φ 39x65mm	Room Temperature -250°C

100 MICROWAVE DIGESTER



Vessel quantity of 12.

Vertical design for even distribution of microwave.

316L industrial stainless steel cavity with multilayer teflon coating avoids acid corrosion, also improves cooling efficiency.

Pre-installed general standard methods, users can also create, save, modify and delete the method.

SPECIFICATIONS

Model	BMWD-107	BMWD-108
Vessel Quantity	12	
Temperature Monitoring System	Temperature Monitoring: Contactless IR Sensor Scan monitoring for each vessel Temperature Controlling Range: 50-400 °C Temperature Accuracy: ±0.1 °C Display Accuracy: ±0.1 °C	Contactless IR sensor
Pressure Monitoring System	Pressure monitoring: Contactless Sensor Scan monitoring for each vessel Pressure Controlling Range: 0-15MPa Pressure Accuracy: ±0.01MPa Display Accuracy: ±0.01Mpa	-
Vessel Volume	100mL	
Sample Vessel Material	Imported TFM	-
Protection Vessel Material	Peek+Glass Fiber	-
Display	7 inch color touch screen	-
Rotation	360° continuous rotation	-
Microwave Power	0 ~ 1000 W (Adjustable)	0-2000W Adjustable/ 0-3000W Adjustable
Microwave Tank	316L Stainless Steel tank With Corrosion Proof Coating	-
Microwave Leakage	<5mw/cm ²	-
Air Exhaust	High Power Corrosion-Proof Air Blower	-
Power	AC 220V ± 10%,10A, 50/60Hz	-
Dimension (LxWxH)	490x560x630 mm	-
Weight	47 kg	-
Vessel material	-	Inner.Imported TFM Outer.Imported PEEK+Glass Fiber
Temperature Control	-	Scanning control of each vessel
Temperature Control Range	-	50-400 °C
Maximum Working Temperature	-	250 °C
Temperature Control Accuracy	-	±0.3 °C
Inner Vessel Temperature Limit	-	300 °C
Pressure Testing	-	Contactless pressure sensor
Pressure Control range	-	0-10MPa
Pressure Control Accuracy	-	0.01MPa
Maximum Working Pressure	-	6 MPa

Microwave Frequency	-	2450Hz
Rotation Mode	-	360° Continuous Rotation
Microwave Leak	-	<5mw/cm2

OPTIONAL ACCESSORIES

Accessory Code	Name	Sample quantity	Aperture and Hole depth	Temperature Control Range	For Models
7600612006	Heating Blocks	12	Φ 39x65mm	Room Temperature -250°C	BMWD-107
7600613006	Heating Blocks	20	Φ 41x150mm	Room Temperature -250°C	BMWD-108



BMWD-107



BMWD-108

BMWD-109 MICROWAVE DIGESTER



Automatic vent and self-resealing structure release pressure and instantly reseal when a sudden over-pressure situation occurs.

Contact-less Temperature and Pressure Monitoring System.

With Vessel Quantity of 18, it can edit and store 255 types of programs according to user's requirements.

SPECIFICATIONS

Model	BMWD-109
Vessel Quantity	18
Vessel Volume	100mL
Vessel material	Inner.Imported TFM Outer.Imported PEEK+Glass Fiber
Temperature Monitoring System	Contactless IR sensor
Temperature Control	Scanning control of each vessel
Temperature Control Range	50-400 °C
Maximum Working Temperature	250 °C
Temperature Control Accuracy	±0.3 °C
Inner Vessel Temperature Limit	300 °C
Pressure Testing	Contactless pressure sensor
Pressure Control range	0-10MPa

Pressure Control Accuracy	0.01MPa
Maximum Working Pressure	6 MPa
Microwave Frequency	2450Hz
Rotation Mode	360° Continuous Rotation
Microwave Leak	<5mw/cm2
Microwave Power	0-2000W Adjustable/ 0-3000W Adjustable

OPTIONAL ACCESSORIES

Accessory Code	Name	Sample quantity	Aperture and Hole depth	Temperature Control Range
7600614006	Heating Blocks	20	Φ 41x150mm	Room Temperature -250°C

BMWD-110 MICROWAVE DIGESTER



Special Designed Sample Digestion Vessel.

Contact-less Temperature and Pressure Monitoring System.

With vessel quantity of 40, It can edit and store 255 types of programs according to user's requirements.

SPECIFICATIONS

Model	BMWD-110
Vessel Quantity	40
Vessel Volume	50mL
Vessel material	Inner.Imported TFM Outer.Imported PEEK Glass Fiber
Temperature Monitoring System	Contactless IR sensor
Temperature Control	Scanning control of each vessel
Temperature Control Range	50-400 °C
Maximum Working Temperature	250 °C
Temperature Control Accuracy	±0.3 °C
Inner Vessel Temperature Limit	300 °C
Pressure Testing	Contactless pressure sensor
Pressure Control range	0-10MPa
Pressure Control Accuracy	0.01MPa
Maximum Working Pressure	6 MPa
Microwave Frequency	2450Hz
Rotation Mode	360° Continuous Rotation
Microwave Leak	<5mw/cm2
Microwave Power	0-3000W Adjustable

OPTIONAL ACCESSORIES

Accessory Code	Name	Sample quantity	Aperture and Hole depth	Temperature Control Range
7600615006	Heating Blocks	20	Φ 32x118mm	Room Temperature -250°C

BMWD-201 MICROWAVE DIGESTER



Video monitoring function.

More than ten safety protection measures to ensure experiment safety, including temperature control system, pressure control system, explosion-proof security doors, thicken cavity with multi-layer TEFLON coating.

High-power exhaust system, program with suspend or start at any time.

SPECIFICATIONS

Model	BMWD-201
Vessel Quantity	12
Vessel Volume	100mL
Vessel Pressure Capacity	80Mpa
Cavity	48L Resonant Cavity
Microwave Cavity Material	SS316 with 10 layers Teflon
Teflon Coating	10 layers
Digestion Method	50 preinstalled methods, programmable 100 methods.
Maximum Working Temperature	305 °C
Temperature Control Accuracy	±0.1 °C
Pressure Accuracy	±0.01MPa
Temperature Sensor	Optical Fiber Sensor
Cooling Method	Forced air cooling
Interface	USB, RS232
Maximum Output Power	1600W
Power Supply	AC220V ± 10%, 50Hz
External Size(WxDxH)	600x685x660 mm
Weight	105 kg
Accessory	2.5 kg (820x300x130 mm) ; 5.5 kg (540x480x170 mm) ; 12.5 kg; 2.5 kg (480x550x300 mm)

BMWD-202 MICROWAVE DIGESTER



More than ten safety protection measures to ensure experiment safety, including temperature control system, pressure control system, explosion-proof security doors, thicken cavity with multi-layer TEFLON coating.

High-power exhaust system, program with suspend or start at any time.

SPECIFICATIONS

Model	BMWD-202
Vessel Quantity	12
Vessel Volume	100mL
Vessel Pressure Capacity	75Mpa
Cavity	48L Resonant Cavity
Microwave Cavity Material	SS316 with 8 layers Teflon
Teflon Coating	8 layers
Digestion Method	20 preinstalled methods, programmable 50 methods.
Maximum Working Temperature	305 °C
Temperature Control Accuracy	±0.1 °C
Pressure Accuracy	±0.01MPa
Temperature Sensor	Optical Fiber Sensor
Cooling Method	Forced air cooling
Maximum Output Power	1600W
Power Supply	AC220V ± 10%, 50Hz
External Size(WxDxH)	600x685x660 mm
Weight	105 kg

BMWD-203 MICROWAVE DIGESTER



All-steel industrial grade chamber, anti-corrosion and durable use.

Aerospace composite fiber outer vessel , anti-explosion and anti-corrosion.

Multi-functional safety bolt design, instead of safety membrane and other consumables.

Precise pressure controlled by piezoelectric crystal without cross-contamination problem.

SPECIFICATIONS

Model	BMWD-203
Vessel Quantity	6
Vessel Volume	100mL
Vessel material	Aerospace composite fiber for outer Vessel, Modified TFM material for inner Vessel
Temperature Range	0-300 °C
Temperature Control Accuracy	±1 °C
Temperature Sensor	High-precision platinum resistor temperature sensor
Pressure Control range	0-10MPa
Pressure Control Accuracy	±0.01MPa
Pressure Sensor	Piezoelectric crystal pressure sensor
Chamber Exhaust System	High-power anti-corrosion axial fan, exhaust speed: 3.1m ³ /min
Digestion Method	Internal software, up to 20 methods can be stored
Display	LCD display
Maximum Output Power	1000W
Power Supply	AC220V ± 10%, 50Hz
External Size(WxDxH)	450x515x510 mm
Package Size(WxDxH)	Main Body:710x670x700 mm, Accessory: 490x420x310 mm
Gross Weight	Main Body: 63.5kg, Accessory: 9kg

BMWD-204 MICROWAVE DIGESTER



Anti-corrosion design: TEFLON coating on the surface, acid/alkali proof.

Heating uniform and fast: Adopt graphite block (antioxidant), heating faster and energy transfer faster, temperature between holes more uniform.

Safety protection: adopt unique air duct insulation tech, keep the temperature ultralow, protect operator

SPECIFICATIONS

Model	BMWD-204
Temperature Range	RT +5 ± 450 °C
Temperature Accuracy	±1 °C (450 °C)
Heating Method	Infrared heating and high-purity graphite conduction
Heating Insulation Method	Unique air duct insulation technology
Digestion Tube Capacity	300ml
Max.Capacity	20pcs/batch
Power Supply	AC220V±10%,50Hz
Power Consumption	3600W
External Size(WxDxH)	515x458x730 mm

Package Size(WxDxH)	890x600x630 mm
Gross Weight	57kg

BMWD-205 MICROWAVE DIGESTER



The temperature in the furnace is continuously adjustable, the temperature is constant, and the instrument is easy to operate.

The surface of the whole machine is sprayed with Teflon, which is resistant to strong acid and alkali corrosion, and

protects the safety of experimenters and equipment.

Heating element detection technology, automatic alarm prompt for abnormal situation.

The whole machine has multiple protections such as overvoltage, overcurrent and overheating.

The heat conduction efficiency is high and all parts of the sample are heated evenly ,which prevents the loss of heat to the greatest extent.

SPECIFICATIONS

Model	BMWD-205
Vessel Quantity	12pcs
Accuracy	±1 °C
Maximum Working Temperature	240 °C
Hole Diameter	39.5 mm
Hole Depth	107 mm
Power	1500W
Power Supply	Standard: 220V 50Hz, optional: 110V 60Hz (external transformer)
Packing Size	535x420x345 mm
Gross Weight	26.2kg

BMWD-206 MICROWAVE DIGESTER



Comprehensive safety guarantee, combined with anti-corrosion capability

Dual magnetron inverter control system ensures consistent sample digestion

Two LCD screen, displaying real-time operation and experiment status

Full-vessel precise temperature control and monitoring, ensuring safety and digestion performance.

Smart software operation

SPECIFICATIONS

Model	BMWD-206
Vessel Quantity	40pcs
Vessel Volume	55mL
Vessel material	TFM
Temperature Range	0-300 °C
Temperature Control Accuracy	±1 °C
Pressure Control range	0-15MPa
Pressure Control Accuracy	±0.01MPa
Display	LCD
Working Conditions	0-40 °C, 15-80% RH
Microwave Cavity	Grade 316L stainless steel microwave resonant cavity
Furnace Exhaust System	Automatically adjusted air volume; cooling to room temperature in less than 15 minutes
Software System	Android operating system (8G memory),built- in video SOP,application method library, electronic door lock, etc.
Power	3800W
Power Supply	Standard: 220V 50Hz, optional: 110V 60Hz (external transformer)
Package Size(WxDxH)	Main unit: 740x740x820 mm Accessory: 750x480x640 mm Accessory: 500x510x580 mm
Gross Weight	85kg 35kg 22kg



Biolab Scientific Ltd.

3660 Midland Avenue, Suite 300, Toronto, Ontario M1V 0B8, Canada

Email: info@biolabscientific.com | Website: www.biolabscientific.com