



Microwave Digestion System

LMWD-A1 Series

Microwave Digestion System

Labtron's range of microwave digestion system provides an unparalleled experience of safety and performance for your routine protocols with dependability. Fabricated with an aspiration of reliability, user friendliness and work place efficient, its cutting edge design and resilience brings an increased output to your work environment.

Microwave Digestion System LMWD-A1 series

Microwave Digestion System LMWD-A1 series are designed for smooth operation experience with great value for money and are compact making it ideal virtually for any laboratory setting. These are programmable, easy to use, low maintenance units with an exceptional feature of its outer material which is explosion proof making it safe for users.

Features

- Dense and durable pressure vessels
- Multiple safety protection functions including temperature and pressure control, explosion-proof security doors, real-time temperature
- Multiple layers of TEFLON coating of the cavity, high-power exhaust system
- Uniform sample digestion
- Real time pressure and temperature curve with 7" LCD touch screen
- Optical fiber temperature control system which avoids sparks and eliminates microwave interference, providing safe and precise digestion temperature control.
- High power exhaust programme
- Double magnetron variable frequency control system: Providing a uniform and accurate microwave field
- Easy control of the system due to additional unique Wi-Fi control module

Applications

Used in the food, textile, plastic, geology, metallurgy, coal, bio-pharmaceutical, petrochemical, environmental monitoring, wastewater treatment, battery manufacturing, cosmetics and other fields.

Specification

Model No.	LMWD - A10
Cavity	48 L Resonant Cavity
Teflon Coating	10
Power Output	1600 W
Digestion Method	20 preinstalled methods, programming 50 method
Max. Temperature	305°C
Temperature Accuracy	± 1°C
Temperature Sensor	Optical fiber sensor
Running Abnormal Monitoring	No
Vessel Pressure Capacity	75 MPa
Vessel Quantity	1 - 12 / batch
Vessel Volume	100 mL
Microwave Cavity	SS316 with 8 layer Teflon
Cooling Method	Forced Air Cooling
Interface	No
Wi-Fi Module	No
Power Supply	220 VAC ± 10 % 50 Hz
Detection Of Abnormal Voltage	Yes
Video Monitoring	No
Dimension	770 x 700 x 890 mm
Weight	80 kg

Specification

Model No.	LMWD – A11
Cavity	48 L Resonant Cavity
Teflon Coating	10
Power Output	1600 W
Digestion Method	50 preinstalled methods, programming 100 method
Max. Temperature	305 °C
Temperature range	-40°C – 305 °C
Temperature Accuracy	± 1 °C
Temperature Sensor	Optical fiber sensor
Running Abnormal Monitoring	Yes
Pressure accuracy	± 0.01 MPa
Max. pressure	80 MPa
Vessel Pressure Capacity	80 MPa
Vessel Quantity	1 - 12 / batch
Vessel Volume	100 mL
Microwave Cavity	SS316 with 10 layer Teflon
Cooling Method	Forced Air Cooling
Interface	USB RS232
Wi-Fi Module	Optional
Display	7" LCD screen
Control Mode	Touch screen
Power Supply	220 VAC ± 10 % 50 Hz
Detection Of Abnormal Voltage	Yes
Video Monitoring	Yes
Dimensions	520 x 593 x 660 mm
Weight	67 kg

Specification

Model No.	LMWD-A12
Microwave Frequency	2450MHz
Installed Power	1800W
Maximum Output Power	1000W, non-pulse continuous automatic variable frequency control
Turntable Design	Load 8MP-100 closed digestion vessels at same time
Pressure Measurement And Control System	Piezoelectric crystal pressure sensor, pressure control range :0-10MPa (1500 psi), accuracy ± 0.01 MPa
Temperature Measurement And Control System	High-precision platinum resistor temperature sensor, temperature range: 0 – 300°C, accuracy $\pm 1^{\circ}\text{C}$
Outer Vessel Material	Explosion-proof outer vessel made of aerospace composite fiber
Inner Vessel Material	TFM material
Chamber Exhaust System	High-power anticorrosion axial fan, exhaust speed: 3.1m ³ /min
Operating Temperature	0 – 40°C
Working Humidity	15-80%RH
Power	220 – 240 V; AC 50 / 60 Hz
Whole Physical Size(WxDxH)	450x515x510mm
Net Weight	40kg