



The Biobase BKMZA Class B Tabletop Autoclave (VM-ACLBKMZA) is an 18-litre pre-vacuum steriliser with a $\varnothing 247 \times 360$ mm S30408 stainless steel chamber, validated for solid, packaged, hollow, and porous instrument loads at 121°C and 134°C. It features a high-efficiency vacuum pump, 3.5-inch LCD, USB data logging, a 0.22 μ m HEPA sterilising air filter ($\geq 99.5\%$ efficiency), and seven programs including HELIX and Bowie-Dick tests. CE certified and suited to dental surgeries, ophthalmology clinics, emergency departments, and small clinical laboratories requiring fully validated Class B

sterilisation.

Class B Pre-Vacuum Sterilisation for All Instrument Load Types

The Biobase BKMZA Class B Tabletop Autoclave (VM-ACLBKMZA) achieves Class B sterilisation through a fractional pre-vacuum process, using a high-efficiency, low-noise vacuum pump to evacuate air from the chamber before steam is admitted. This ensures complete steam penetration into packaged instruments, cannulated hollow loads, and porous materials — dressings, gowns, and wrapped instrument sets — that gravity-displacement autoclaves cannot reliably sterilise. The 18-litre chamber measures $\varnothing 247 \times 360\text{mm}$ and is constructed from S30408 stainless steel, operating at 121°C and 134°C at a working pressure of 0.23 MPa with temperature precision of $\pm 0.1^\circ\text{C}$. Four validated sterilisation programs cover solid instruments, packaged instruments, fabrics and dressings, and an enhanced cycle, with drying time settable between 0 and 20 minutes. Three additional test programs — HELIX test, Bowie-Dick test, and vacuum integrity test — allow staff to validate steriliser performance at any time, supporting compliance with South African infection control requirements.

Data Logging, HEPA Filtration, and Safety Systems

A 3.5-inch LCD displays chamber temperature, pressure, time, and operating status in real time for continuous cycle monitoring. A standard USB port enables sterilisation records to be exported to a USB drive for regulatory audit, traceability, and quality management; an optional mini printer can be connected for paper-based cycle records. A $0.22\mu\text{m}$ HEPA sterilising air filter with filtration efficiency of not less than 99.5% ensures that air re-admitted to the chamber at cycle end is sterile, preventing recontamination of processed instruments during the drying phase. The BKMZA incorporates automatic protection against over-temperature, over-pressure, dry burning, over-current, and electrical leakage events, and includes a built-in waste water collection tank for contained drainage between cycles.

Dimensions, Power, and Clinical Applications

The VM-ACLBKMZA measures 495 × 650 × 410mm (W × D × H) and weighs 50kg, providing a compact tabletop footprint suited to settings with limited bench space. Power consumption is 1.95 kW on AC220V / 50–60Hz, compatible with standard South African electrical supply. CE certified and available in South Africa from Vital Medical, the Biobase BKMZA is suited to dental surgeries, ophthalmology clinics, emergency departments, day procedure facilities, and small clinical or research laboratories requiring validated Class B sterilisation with digital data logging and auditable cycle documentation.

Technical Specifications

Specification	Value
Brand	Biobase
Model	BKMZA
VM SKU	VM-ACLBKMZA
Autoclave class	Class B
Chamber capacity	18 litres
Chamber size	ø247 × 360mm
Chamber material	S30408 stainless steel
Working temperature	121°C / 134°C
Working pressure	0.23 MPa
Designed pressure	-0.1 / 0.28 MPa
Temperature precision	±0.1°C
Sterilisation programs	4 sterilisation + 3 test (HELIX, Bowie-Dick, vacuum integrity)
Drying time	0–20 min (settable)
Display	3.5-inch LCD
Data logging	USB (standard); optional mini printer
Air filter	0.22µm HEPA sterilising filter (≥99.5% efficiency)
Power consumption	1.95 kW
Power supply	AC220V, 50/60Hz
External dimensions (W × D × H)	495 × 650 × 410mm
Net weight	50kg
Certification	CE

SKU: VM-ACLBKMZA