



The Eagle-1 Professional Breathalyser (VM-ATE1) is a high-accuracy fuel cell breathalyser with a measurement range up to 630 mg/100ml at $\pm 5\%$ accuracy and an approximately 5-second response time, a built-in thermal printer for immediate printed records, and a 2.8" touchscreen interface. It stores up to 40,000 test records internally and supports USB/PC data export for audit trail management. Operating across -5°C to $+45^{\circ}\text{C}$ on a rechargeable lithium battery ($\sim 2,000$ mAh), the VM-ATE1 is designed for law enforcement, mining, transport, and workplace alcohol compliance programmes requiring professional evidential breathalyser capability.

Fuel Cell Sensor for Accurate, Alcohol-Specific Breath Analysis

The Eagle-1 Professional Breathalyser (VM-ATE1) uses an advanced fuel cell sensor to deliver highly accurate, alcohol-specific breath analysis results that are unaffected by other breath contaminants — a critical requirement in professional and evidential testing environments where result integrity cannot be compromised. The measurement range extends to 630 mg/100ml with an accuracy specification of $\pm 5\%$, and the response time is approximately 5 seconds, enabling fast throughput in high-volume testing scenarios. Fuel cell sensor technology distinguishes the Eagle-1 from semiconductor-based devices, providing greater measurement stability and specificity across repeated testing sessions in operating temperatures ranging from -5°C to $+45^{\circ}\text{C}$.

Built-In Thermal Printer, Touchscreen, and Dual Testing Modes

The 2.8" colour touchscreen provides an intuitive, fast-response operator interface for configuring tests and reviewing results without reference to a separate device. The built-in thermal printer produces immediate printed records at the point of testing — eliminating the need for manual result transcription and generating a tamper-evident hard copy for chain-of-custody documentation, regulatory compliance, and incident reporting. Dual testing modes, automatic and manual, allow operators to adapt the protocol to programme requirements, whether conducting rapid high-volume screening or a more controlled, documented evidential test.

Memory, Connectivity, Power, and Applications

The VM-ATE1 stores up to 40,000 test records internally, making it suitable for large-scale daily testing programmes that require comprehensive, auditable records without frequent data offloads. USB/PC connectivity enables bulk data download for audit trail management and organisational reporting. A rechargeable lithium battery of approximately 2,000 mAh powers extended testing sessions without requiring mains access, supporting field deployment and remote site use. Available in South Africa from Vital Medical, the Eagle-1 is suited to law enforcement agencies, mining operations, transport and logistics companies, occupational health departments, and workplace alcohol compliance programmes that require professional-grade evidential breathalyser capability.

Technical Specifications

Specification	Value
Model	Eagle-1
VM SKU	VM-ATE1
Sensor type	Fuel cell (alcohol-specific)
Measurement range	Up to 630 mg/100ml
Accuracy	±5%
Response time	~5 seconds

Specification	Value
Display	2.8" colour touchscreen
Memory	40,000 records
Testing modes	Automatic and manual
Printer	Built-in thermal printer
PC connectivity	USB
Battery	Rechargeable lithium (~2,000 mAh)
Operating temperature	-5°C to +45°C

SKU: VM-ATE1