



11-Parameter Reflectance Urinalysis with White LED Optical System

The Contec BC400 Urine Analyser (VM-UABC40011) is a semi-automated desktop instrument that measures eleven clinically significant urinary parameters from a single test strip in a single analysis run: glucose (GLU), bilirubin (BIL), specific gravity (SG), ketones (KET), blood (BLD), protein (PRO), urobilinogen (URO), nitrites (NIT), leukocyte esterase (LEU), vitamin C (VC), and pH. Measurement is performed by reflectance photometry using a high-luminance white LED light source, which reads the colour-change reactions on the reagent pad surface of the test strip and converts reflectance data into quantitative and semi-quantitative results. The white LED optical element provides a long service life and delivers stable, consistent readings across the full measurement range, reducing inter-reading variability compared to older tungsten or halogen optical systems.

Operating Modes, Display, and Data Connectivity

The BC400 supports three operating modes — One-Step, Slowly-Series, and Quickly-Series — allowing clinicians to select the workflow that best matches their patient volume and throughput requirements. Results are displayed on a 2.4-inch LCD with selectable language (Chinese or English) and selectable reporting units across three systems — international, conventional, or symbol — to align with local clinical reporting standards. An automatic monitoring mode provides audible prompts throughout the test cycle, guiding the operator and confirming completed analysis without requiring continuous manual attention. The instrument is compatible with 8-, 10-, and 11-parameter test strips, supporting flexibility as clinical testing requirements change. MicroUSB and Bluetooth interfaces enable data transfer to connected printers or electronic record systems, supporting laboratory information system (LIS) integration and paperless point-of-care workflows.

Clinical Settings and South African Availability

The VM-UABC40011 is designed for routine urinalysis across a range of healthcare environments: hospitals, community health centres, general practice clinics, occupational health facilities, and point-of-care settings where laboratory infrastructure is limited. The automated test monitoring and accessible interface reduce operator training requirements, making the BC400 suitable for nursing staff, allied health professionals, and clinic assistants as well as laboratory technicians. Its compact desktop form factor fits standard clinic workbenches without requiring dedicated laboratory space or infrastructure. Available in South Africa from Vital Medical, the Contec BC400 provides accessible, multi-parameter urinalysis for facilities requiring reliable diagnostic screening across a broad clinical caseload.

Technical Specifications

Specification Value

Brand Contec Medical Systems

Model BC400

VM SKU VM-UABC40011

Parameters tested 11 — GLU, BIL, SG, KET, BLD, PRO, URO, NIT, LEU, VC, pH

Light source High-luminance white LED

Measurement method Reflectance photometry

Display 2.4-inch LCD

Operating modes One-Step, Slowly-Series, Quickly-Series

Strip compatibility 8-, 10-, and 11-parameter test strips

Connectivity MicroUSB, Bluetooth

Reporting units International, conventional, or symbol system

Language options Chinese, English

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