Automated Coagulation Timer

MEDTRONIC ACT PLUS

ABOUT

The **Medtronic ACT Plus** is an automated coagulation timer used to measure activated clotting time (ACT) from whole blood samples. It is designed for point-of-care testing in settings such as cardiovascular surgery, cardiac catheterization labs, critical care, dialysis, and ECMO. Its dual-well design allows two tests to run at the same time, while electromechanical clot detection measures the clotting endpoint as it occurs. Results appear on the digital clot time display and LCD screen, and the portable unit weighs approximately 11.5 lbs. The system also supports patient and quality control record storage, operator identification, and data transfer.







FEATURES

Dual-Well Testing: Runs two tests simultaneously, allowing results to be compared.

Real-Time Clot Detection: Uses electromechanical detection to identify the clotting endpoint in the blood sample.

Multiple Cartridge Types: Supports high-range ACT, low-range ACT, recalcified ACT, and heparinase testing.

Data Storage: Stores up to 1,000 patient and quality control records and supports up to 600 operator IDs.

Quality Control and User Lockout: Configurable settings help manage quality control requirements and restrict testing based on operator access.

Medtronic ACT Plus Coagulation Analyzer

SPECIFICATIONS

DIMENSIONS

Height: 11.9 in (30.2 cm)

Width: 9.0 in (22.9 cm)

Depth: 13.6 in (34.5 cm)

Weight: 11.5 lb (5.22 kg)

TESTING

Clot Detection: Real-time clot detection (not an algorithm-calculated result)

Dual-Channel Cartridges: Two-channel design verifies each result without retesting

High Range ACT (HR-ACT): For fresh whole blood in cardiovascular surgery, vascular surgery, and PTCA

Low Range ACT (LR-ACT): For fresh whole blood in dialysis, ECMO, and therapeutic heparin monitoring

Recalcified ACT (RACT): For citrated whole blood in dialysis and therapeutic heparin monitoring

Heparinase Test (HTC): Identifies the presence of heparin, helps determine when to pull a sheath, and detects heparin rebound

DATA MANAGEMENT

Record Storage: Up to 1,000 patient and QC records

Operator IDs: Up to 600

Security: QC lockout and user lockout

LIS Connectivity: Connects to point-of-care LIS interfaces, including MAS RALS-Plus, TELCOR Quick-Linc, and AegisPOC (check availability by country)

Bar Code Scanner: Optional scanner for cartridge, control, patient, and user IDs

DATA PORTS

Serial Data Port: 19200 baud, 8 data bits, 1 stop bit, no parity

Bar Code Scanner Port: Used with the optional ACT Plus Bar Code Scanner

USB: For use with a Medtronic-approved USB storage device

Floppy Drive: PC-compatible 3.5 in, 1.44 MB floppy disk

POWER

Voltage: 100 – 240 VAC, single phase

Frequency: 50 – 60 Hz

Maximum Current: 1.0 A