

TECHNICAL SPECIFICATIONS

iSED® Automated ESR Analyzer



The iSED® is a 20 position fully automated ESR analyzer that maximizes laboratory efficiency with continuous, random access and high throughput up to 180 samples per hour.

Device Specifications

Device Description	Automated benchtop analyzer for the determination of erythrocyte sedimentation rate of human whole blood
Principle of Measure	Photometric Rheoscope
Dimensions (L x W x H)	36 x 27 x 34 (cm) 14.3 x 10.5 x 13.4 (in)
Weight	13.6 kgs; 30lbs
Analytical Range	1-130mm/hr
Test Time	20 seconds
Time to First Result	3 minutes, 20 seconds
Results	Results can be printed, saved to on-board storage and/or transmitted via LIS
Supported Languages	English, French, Italian, German, Spanish, Portuguese (BR, PT)

Sample Handling

Test Throughput	Up to 180 results / hour
Sample Capacity	20
Random Access	Yes
Primary Tube Sampling	Yes, via cap piercing
Supported Tubes	13X75mm and pediatric EDTA with pierceable cap*
Mixing	Internal; automated
Sample Type	K2/K3 EDTA whole blood
Sample Testing Volume	100µL
Minimum Sample Volume	Up to 500µL (varies by sample tube type*)

Maintenance

Daily	None required
Preventive	Deep Clean: 7 minute, automated process every 30 days or 1,000 samples

General Specifications

Power Supply	100-240 VAC
Power Consumption	160W
Water Requirements	None; on-board, pre-packaged iWASH®
Drain Requirements	None; on-board, self-contained iWASTE®
LIS Connectivity	Serial RS232 DB9 port**; uni-directional
Barcode Reader	Internal
Printer	Internal
Operating Environment	10° - 30° C 50° - 86° F
Storage/Transport Environment	-20° - 65° C -4° - 149° F
Humidity	15% - 85% (non-condensing)
Frequency	50-60 Hz
Overvoltage Classification	Category I
Operational Altitude	0 - 3000 Meters
Storage Altitude	3000 Meters
Degree of Pollution	2
Compliance	Complies with international environmental, health & safety standards, including UL, CE & RoHS
Restrictions	For Professional Use Only

Quality Control/Calibration

QC Material	Bi-level, human-based, whole blood controls in ready to use, barcode labeled, 4.0mL test tubes
Refrigeration	Not required
Shelf Life	Up to 18 months, non-refrigerated
Open Vial Stability	Up to 60 days, non-refrigerated
Quality Assurance Program	Available
Calibration	Not required

*Refer to Alcor Diagnostics Sample Tube Compatibility Chart (100-07-003) for full specifications for >20 validated sample tubes.

**Refer to iSED Automated Erythrocyte Sedimentation Rate Analyzer Communication Protocol (112-09-020) for detailed LIS connectivity instructions.