
# miniiSED® QUICK START GUIDE

## FOR IN VITRO DIAGNOSTIC USE ONLY

ALCOR SCIENTIFIC

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## Important Note:

The Quick Start Guide is intended to help with initial setup and basic function of the miniiSED analyzer.

For the complete instructions for use, please request the **miniiSED® Analyzer Operator's Manual (1017-09-001)** by contacting ALCOR using any of the methods shown in Section 5**.**

The rate at which red blood cells aggregate in whole blood has a direct effect on the resulting sedimentation rate. Sedimentation rate is therefore an indirect representation of the rate of aggregation. The miniiSED Automated Erythrocyte Sedimentation Rate Analyzer uses photometrical rheology to directly measure the aggregation of red blood cells. Once the sample is automatically processed and in position, a sensitive optical detector in the miniiSED follows the progress of aggregation over time. This produces a signal that is a direct representation of the aggregation. The magnitude of time-dependent change is correlated to the Westergren method.

## 1.1. Parts identification

### 1.1.1. Front of miniiSED

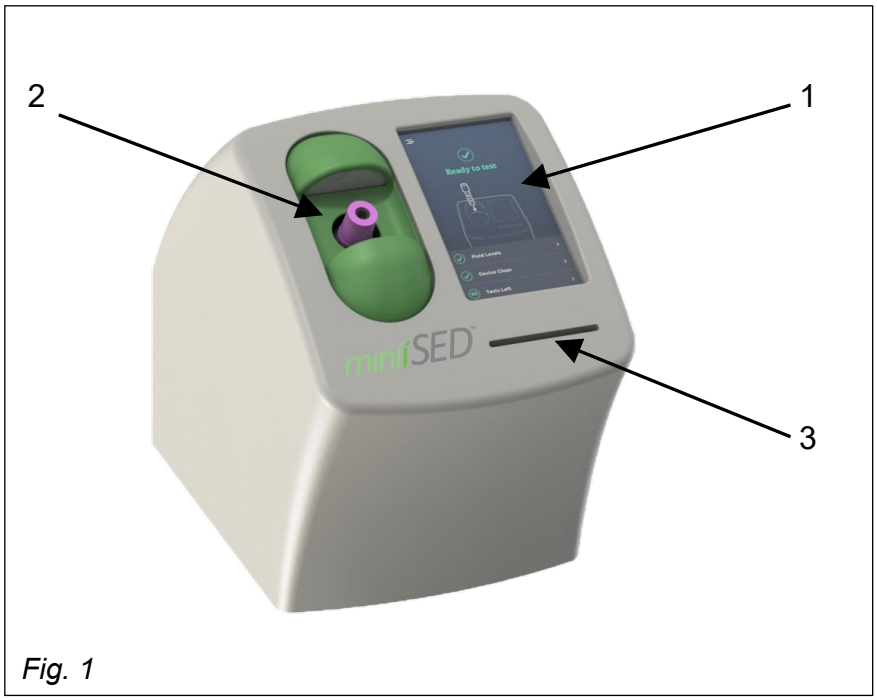


*Fig. 1*

| | |
|---|---|
| 1 | Touch Screen |
| 2 | Sample Loading Port |
| 3 | Smart Card Reader |
| 4 | Ethernet Connection Port |
| 5 | USB Connection Ports (2) |
| 6 | On/Off Switch |
| 7 | Power Connection Port (24VDC, 2A) |
| 8 | miniiWASH Connection Port |
| 9 | miniiWASTE Connection Port |

### 1.1.2. Rear of miniiSED

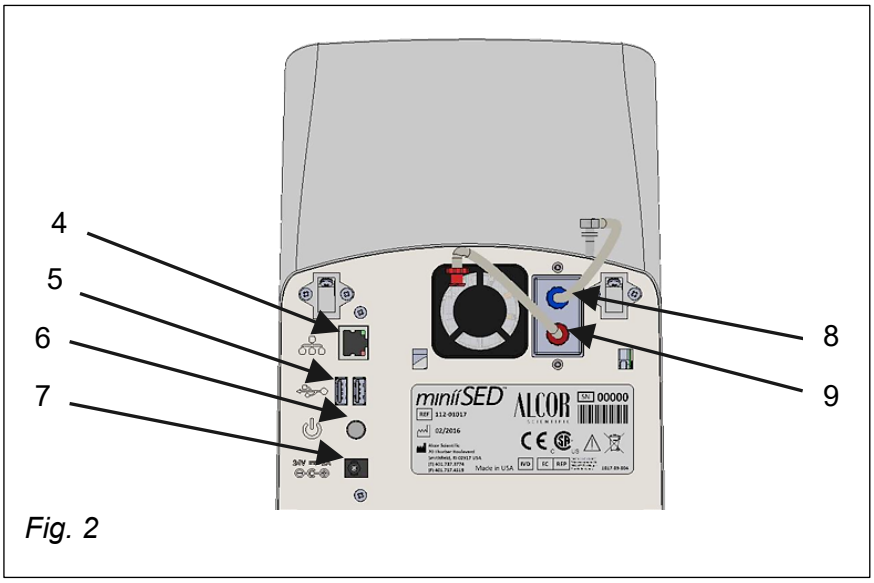


*Fig. 2*

## 2. Unpacking and installation

### 2.1. Precautions

**CAUTION!**

The instrument weighs approximately 10 lbs. Use safe lifting techniques and proper techniques when handling heavy objects. If necessary, obtain assistance to safely lift the instrument.

**CAUTION!**

If using a utility knife, extend/retract the blade to appropriate length to avoid cutting any internal components.

### 2.2. Unpacking the instrument

Inspect the shipping container for any obvious signs of mishandling or shipping damage. If damage is found, retain all package materials and immediately file a claim with your shipping carrier.

2.2.1. Position the box upright and open the top flaps (Fig. 3)

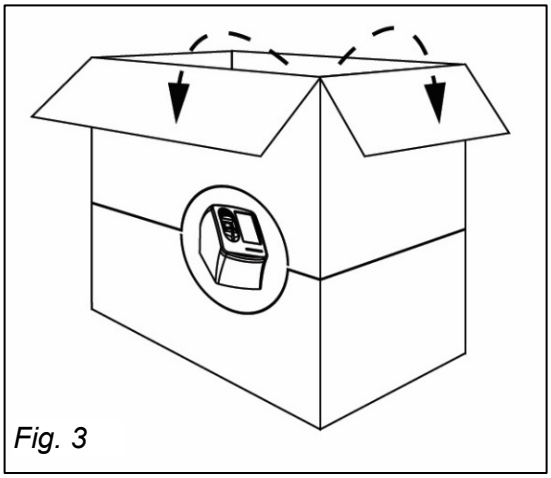

*Fig. 3*

2.2.2. Remove the Power Supply and set aside (Fig.4)

2.2.3. Remove the miniiWASH and miniiWASTE Bottles and Bottle Tray and set aside (Fig. 4)

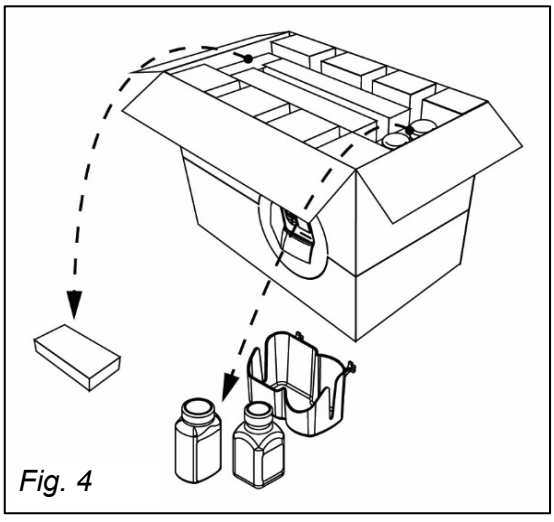

*Fig. 4*

2.2.4. Rotate the box on its side (Fig.5)

2.2.5. Slowly slide the instrument and surrounding foam out of the box using the brown tube found between the foam panels (Fig.5)

2.2.6. Remove the Accessory Bag and set aside (Fig.5)

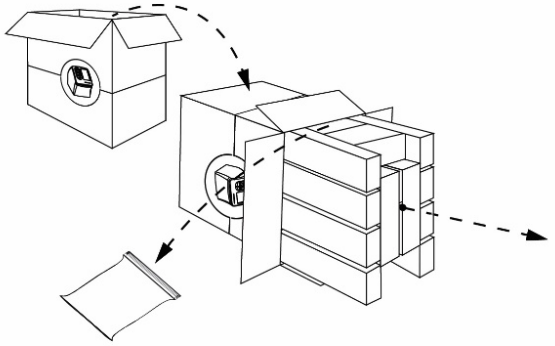

*Fig. 5*

2.2.7. Remove the foam panels from the sides of the instrument (Fig.6)

2.2.8. Place the instrument on a secure, flat surface

2.2.9. Remove the instrument from the protective bag

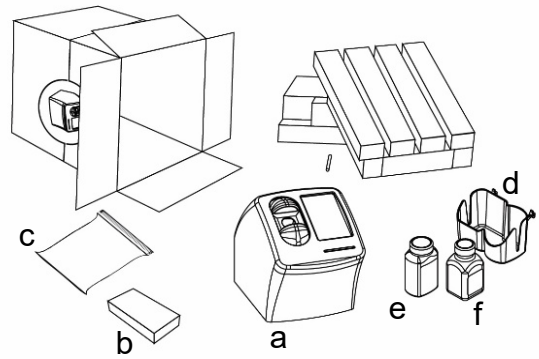


*Fig. 6*

2.2.10. Save the box and foam pieces for future use

## 2.3. Contents of box

Refer to Fig. 6 above

**a.** miniiSED analyzer (1)

**b.** Power supply (1)

**c.** Accessory bag (1), containing:

- Power cord (1)
- miniiWASH connection tube (blue) and miniiWASH Bottle Cap (1 each)
- miniiWASTE connection tubes (red) and miniiWASTE Bottle Cap (1 each)
- Warranty and Quick Start Guide (1 each)

**d.** Bottle tray (1)

**e.** Pre-filled miniiWASH bottle (1)

**f.** Empty miniiWASTE bottle (1)

## 2.4. Bottle connections

2.4.1. Attach the Bottle Tray to the back of the miniiSED

2.4.2. Connecting the miniiWASTE Bottle (Fig. 7, 8):

2.4.2.1. Connect the plain end of the miniiWASTE connection tube (has red connector at other end) to the red miniiWASTE Connection Port on the back of the miniiSED.

2.4.2.2. Connect the other end of the miniiWASTE connection tube to the miniiWASTE bottle by replacing the plain cap with the miniiWASTE Bottle Cap supplied.

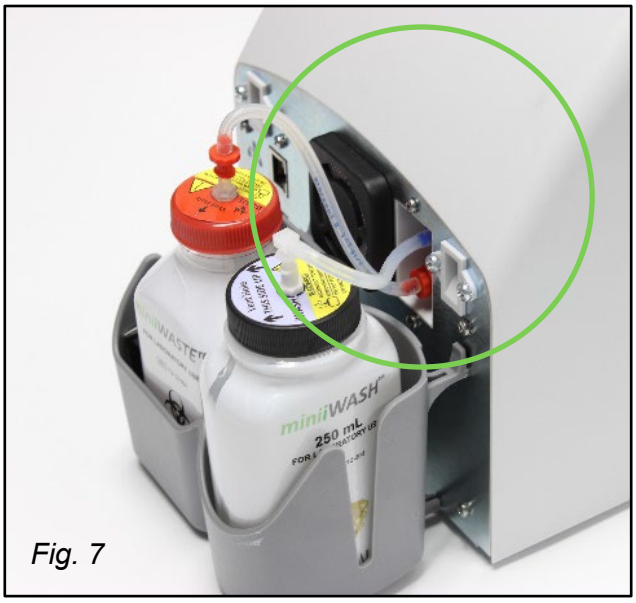

*Fig. 7*

2.4.3. Connecting the miniiWASH Bottle (Fig. 7, 8):

2.4.3.1. Connect the plain end of the miniiWASH connection tube (has white connector at the other end) to the blue miniiWASH Connection Port on the back of the miniiSED.

2.4.3.2. Connect the other end of the miniiWASH connection tube to the miniiWASH bottle by replacing the plain cap with the miniiWASH Bottle Cap supplied.

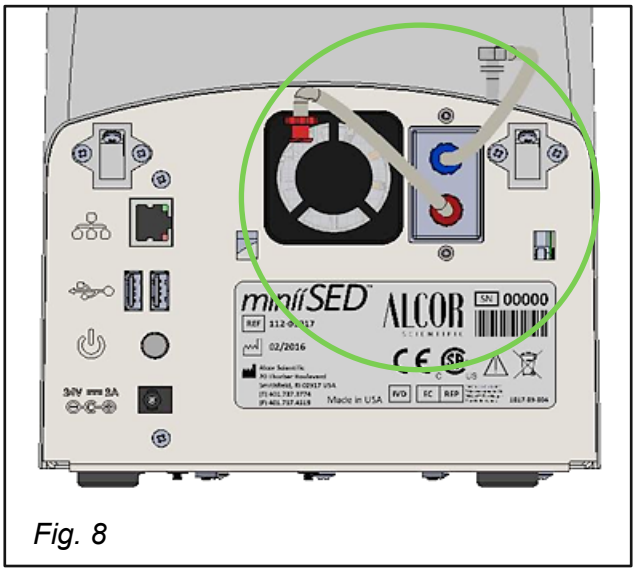

*Fig. 8*

2.4.4. Place both connected bottles into the Bottle Tray (Fig. 7).

## 2.5. Power connection

2.5.1. Precautions and warning

**CAUTION!**
Operate the instrument on a dry, level surface free of vibration. Failure to do so may cause injury or malfunction to the instrument.

**CAUTION!**
Always keep a distance of at least four (4) inches (10cm) between the rear of the instrument and the wall to allow for proper ventilation.

2.5.2. Connecting the power supply

2.5.2.1. Connect the Power Cord to the Power Supply (Fig. 9).

2.5.2.2. Connect the Power Supply to the Power Connection Port located on the back of the miniiSED.

2.5.2.3. Place the instrument in its permanent operating location (indoor use only) and plug the Power Cord into a standard wall outlet.

2.5.2.4. To power the unit on, press the On/Off switch located on the back of the instrument.

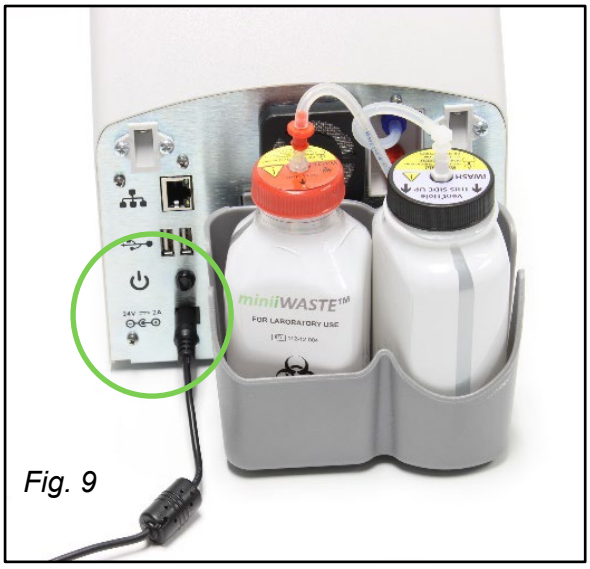

*Fig. 9*

2.5.3. Powering on

2.5.3.1. To power the unit on, press the On/Off switch located on the back of the instrument (Fig. 9)

2.5.3.2. Once the power button has been pressed the instrument will produce an audible beep, after which the instrument is non-functional while the operating system boots up. This boot-up process takes about 10-15 seconds.

# 3. User Interface

All instrument functions are accessed using the analyzer touch screen.

## 3.1. Initial set up

### 3.1.1. Selecting the language and date/time format

The miniiSED will recognize when it is being powered up for the first time and will guide the user through the initial set up process of selecting a language (Fig.10) and the date/format (Figs.11-12).

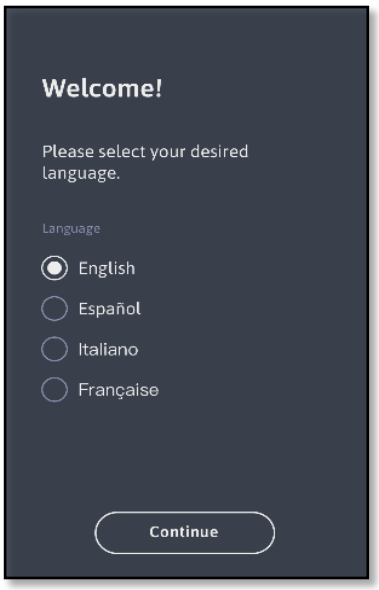


*Fig. 10*

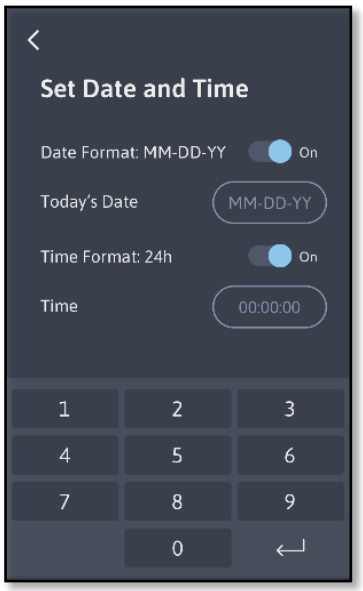


*Fig. 11*

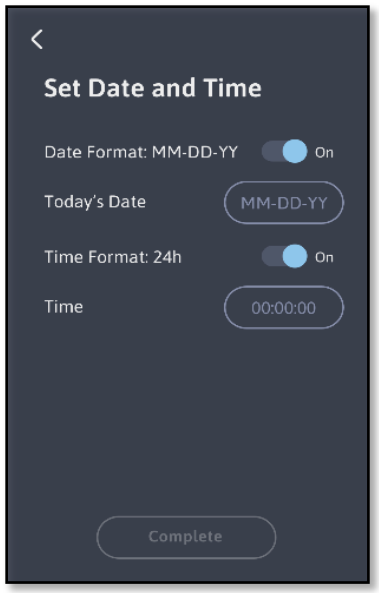


*Fig. 12*

Once set up is complete the analyzer is ready for basic operation (Fig.13).

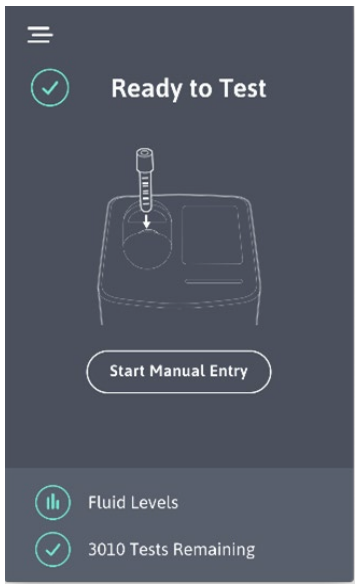


*Fig. 13*

# 4. Basic Operation

## 4.1. Tube compatibility and sample requirements

- any standard 13x75mm lavender top EDTA tube; and
- BD Microtainer MAP Tube or Greiner Bio-One pediatric tubes
- 100uL sample for testing
- 500uL minimum collection volume for standard tubes (for non-standard tubes, please refer to the manufacturer's recommendations)

Note: To ensure accurate results patient samples must be well mixed prior to testing. If automated mixing is not available (or enabled) on the analyzer, samples must be mixed manually or by mechanical rocker for a minimum of three (3) minutes before testing. Testing should occur immediately after mixing to ensure accuracy of the results.

## 4.2. Running samples

Test credits are required for operation. The instrument is loaded with a predetermined quantity of credits for initial set up and use, however additional credits in the form of 'test cards' must be purchased. For information on loading additional test credits, please refer to the complete operator manual.

4.2.1. Insert the closed, primary tube, with the barcode facing down, into the loading port of the analyzer, as indicated (Fig. 14)

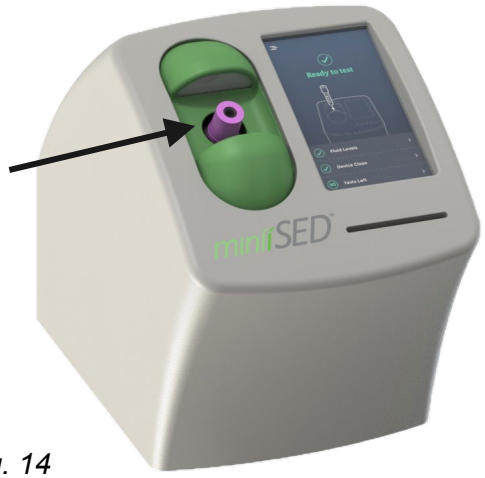


*Fig. 14*

4.2.2. Select 'Confirm' on the touch screen to confirm that the sample has been adequately mixed prior to insertion (Fig. 15)

4.2.3. Note: If the sample was not properly mixed, remove the tube from the analyzer for external mixing prior to testing.

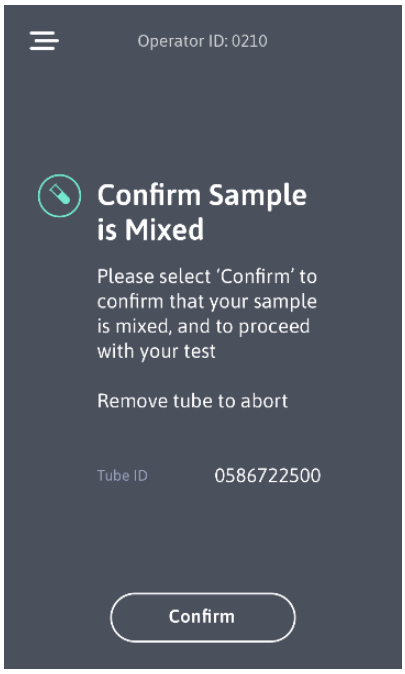


*Fig. 15*

4.2.4. Once sample mixing has been confirmed, the tube is moved into the analyzer and the testing process begins (Fig. 16)

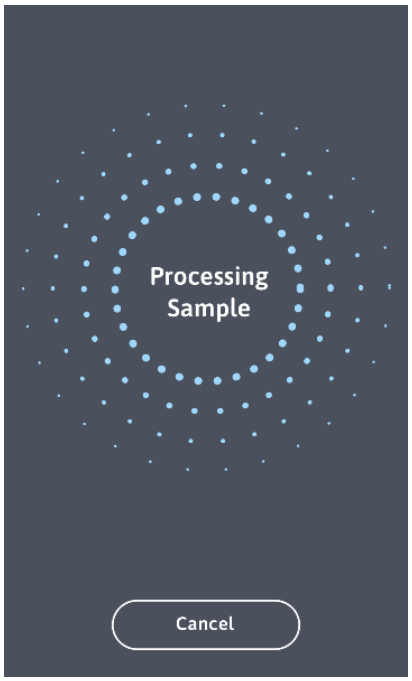


*Fig. 16*

4.2.5. When testing is complete, the tube is returned to the loading port for retrieval and the test result is displayed on the touch screen (Fig. 17).

4.2.6. The instrument will return to the home screen once the tube has been removed.

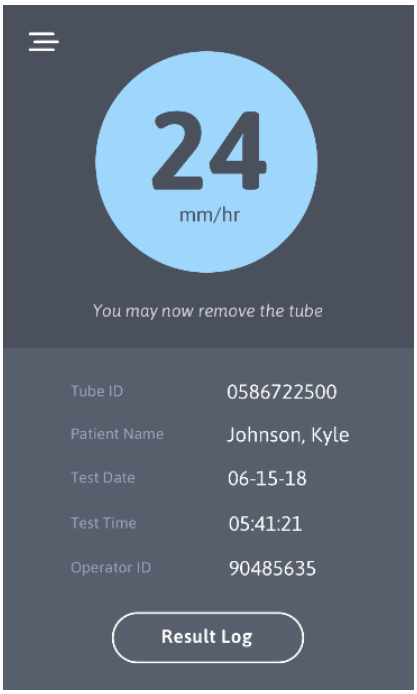


*Fig. 17*

## 5. Technical Support

If you experience any problems while operating the instrument, please contact ALCOR Scientific or your local authorized ALCOR Scientific Distributor.

ALCOR Scientific offers Technical Support Monday - Friday 8:30am-5:00pm EST (excluding all USA Federal Holidays). Technical Support can be reached by any of the following:


**Toll Free:** (800) 495-5270

**Fax:** + 1 (401) 737-4519

**International:** + 1 (401) 737-3774

**Mail:** ALCOR Scientific
20 Thurber Boulevard
Smithfield, RI 02917
USA

**Email:** techservice@alcorscientific.com


**WARNING!**
In the event that the instrument must be returned for service, remove all fluid containers prior to shipment.

**CAUTION!**
Remove any liquid waste or on-board sample tubes and decontaminate before returning for service.

Any instrument containing accumulated blood must be cleaned prior to shipment to the manufacturer. This decontamination is required by Federal Law (Title 48 and 49 of the Code of Federal Regulations) in accordance with the Environmental Protection Agency Regulations for Biohazard Waste Management.

## 6. Technical Specifications

| | |
|---|---|
| **Name of Device** | miniiSED® |
| **Type of Device** | Automated analyzer for the determination of erythrocyte sedimentation rate of human whole blood |
| **Principle of Measure** | Photometric Rheoscope |
| **Sample Requirements** | 100µL EDTA anticoagulated whole blood (500µL dead volume) |
| **Analytical Range** | 1-130mm/hr |
| **Results** | Displayed; first result available in approximately 20 seconds once processing is started |
| **Ethernet Port** | For manufacturing connection |
| **Barcode** | Internal |
| **Printer** | Accessory |
| **Operating Environment** | 10˚ to 30˚ C, Indoor Use, Pollution Degree - 2 |
| **Storage/Transport Environment** | -20˚ to 60˚ C |
| **Humidity** | 15% to 85% (non-condensing) |
| **Power Supply** | Transformer: 100-240 VAC, 50/60Hz; Device: 24VDC, 2A |
| **Power Consumption** | 60W |
| **Frequency** | 50/60 Hz |
| **Over Voltage Category** | Category II |
| **Dimensions (L x W x H)** | 36 x 19 x 24 cm<br>14 x 7.5 x 9.5 in |
| **Weight** | 4.5 kgs<br>10.0 lbs. |
| **Operational Altitude** | 4000 Meters |
| **Storage Altitude** | 4000 Meters |
| **Restrictions** | For Professional Use Only |

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