

# EMMS Stat Data Link™

GLU KET LAC Hb/Hct

## The Future of Pre-Hospital Testing



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Fingerstick capillary blood testing for Hemoglobin, Hematocrit,  
Lactate, Glucose, and Ketone

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Early triage and treatment of ambulance and emergency patients

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Results as fast as 6 seconds with laboratory quality accuracy

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Durable carrying case holds meters, single-use  
biosensors, controls, and lancets

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Meters store and transmit patient data

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**EMS Stat Analyzers can measure lactate, hematocrit, hemoglobin, glucose, and ketone from a capillary blood drop. Results are available in seconds by using single-use biosensors and portable meters. EMS Stat Analyzers offers simple, fast, and accurate testing in the field. Two meter systems are available. One provides patient data storage plus wireless connectivity to external data managers, the other provides data storage only.**

## Test Menu

EMS Stat Analyzers provide important tests to help patient assessment, and emergency management. These tests can also help determine the appropriate transport site for patients with trauma, sepsis, or other specialized needs.

### Lactate

Elevated blood lactate is a rapid, sensitive indicator of tissue hypoxia, sepsis, septic shock, and hypovolemic shock.<sup>7-9</sup> For ambulance patients, lactate testing provides:

- Early, more sensitive detection of sepsis and septic shock than vital signs alone<sup>8</sup>
- Identification of patients with sepsis who might benefit from early goal-directed therapy and advanced activation of medical staff at the transport site<sup>10,11</sup>
- Evaluation of trauma, critical illness, hemorrhage, acute coronary syndrome, acute respiratory failure, and chest and abdominal pain<sup>11,13</sup>

### Glucose

Abnormal glucose levels are frequently encountered in ambulance patients. Medical conditions that warrant pre-hospital blood glucose testing include diabetes, altered mental state, seizure, acute coronary syndrome, organ injury, trauma, sepsis, septic shock, and burns.<sup>1-3</sup>

Blood ketone testing provides rapid detection or rule-out of diabetic ketoacidosis (DKA), the leading cause of hospitalization and death for children with diabetes.<sup>4</sup> The American Diabetes Association and International Society for Pediatric and Adolescent Diabetes recommend blood ketone testing whenever glucose is above 14 mmol/L (250 mg/dL).<sup>5,6</sup>

### Ketone

### Hemoglobin

### Hematocrit

EMS Stat Analyzers provides accurate, measured results for both hemoglobin and hematocrit for pre-hospital assessment of blood oxygen carrying capacity for:

- Evaluation of internal or external hemorrhage
- Assessment of the need for blood products<sup>14,15</sup>
- Estimation of blood loss

## Fingerstick Sampling

Using capillary samples as small as 0.6  $\mu$ L, EMS Stat Analyzers provide fast and easy testing for high-stress medical situations. Capillary sampling and testing with EMS Stat Analyzers is as easy as glucose self-testing. It eliminates the time and costs of a venipuncture, including the tourniquet, needle, vacutainer, and transfer pipette—as well as finding a suitable vein.

## Simple to Use

EMS Stat Analyzers do not require coding or calibration before use and are fast and easy to use.



**1. Insert biosensor into meter**



**2. Lance finger**



**3. Touch biosensor to blood drop. Read result**

## Results in Seconds

With fast, simple testing steps and ready to use biosensors, EMS Stat Analyzers provides results in 6 to 40 seconds after the fingerstick depending on the assay.



# Fingerstick Blood Testing for Ambulance and Field Use



**EMS Stat Data Link™**  
 GLU KET LAC Hb/Hct

## EMS Stat Data Link, Connectivity and Data Storage

The meters store up to 1,000 patient results and offer Bluetooth connectivity. They offer comprehensive point-of-care features including operator and patient ID, preset or customized test result comments, quality control prompting and lockout for unauthorized use. The meters feature touchscreen operation and a bright color display.

## EMS Stat Data Link, Carrying Case

The case is rugged, compact, and contains all testing components, including meters, biosensors, controls, and lancets. It also serves as the battery charging station for the meters. It is water resistant and designed to protect all components if dropped. It is available with an adjustable shoulder strap.



**EMS Stat Basic™**  
 GLU KET LAC Hb/Hct

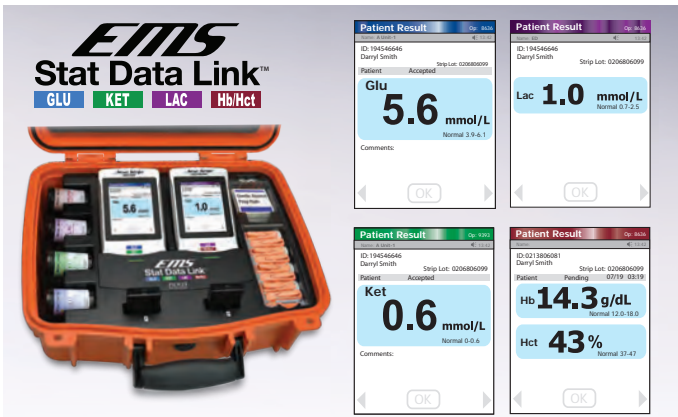
## EMS Stat Basic, Data Storage

The meters store up to 400 test results with a date and time stamp plus first in/first out sequential numbering for sample identification. The meters feature touch sensitive buttons for operation and bright color screens.

## EMS Stat Basic, Carrying Case

The case is rugged, compact, and contains all testing components, including meters, biosensors, controls, and lancets. It is water resistant and designed to protect all components if dropped. An adjustable shoulder strap is available.

# Specifications



## Meters: Glucose/Ketone | Lactate and Hb/Hct

Weight: ..... 220 g (0.49 lb)  
 Size: ..... 147 mm x 79 mm x 30 mm  
 (5.8 in x 3.1 in x 1.18 in)

### Data Storage:

Patient Tests: ..... 1,000  
 QC Tests: ..... 200

### Connectivity:

Meter Docking Station: ..... RJ-45 Ethernet Port  
 Protocol: ..... TCP/IP Ethernet 10/100 Mbit  
 Standard: ..... POCT 1-A Compliant

### Battery Information:

Type: ..... 3.7V Li Polymer Battery  
 Features: ..... Rechargeable  
 Life: ..... Minimum 600 tests

### Operating Ranges:

Temperature: ..... 1°C–40°C (34°F–104°F)  
 Altitude: ..... Up to 4,572 m (15,000 ft)  
 Humidity: ..... 10%–90% relative humidity

### Carrying Case:

Size: ..... 41 cm x 36 cm x 15 cm  
 (16 in x 14 in x 6 in)  
 Weight: ..... 2.7 kg (6 lb)



## Biosensors

**StatStrip Glucose Biosensor**  
 Only glucose biosensor FDA cleared  
 for use with critically ill patients



Test Measured: ..... Blood Glucose  
 Test Strip Volume: ..... 1.2 µL  
 Test Methodology: ..... Electrochemistry  
 Test Time: ..... 6 seconds

### Sample Types:

Whole Blood: ..... Arterial, Capillary, Venous

### Measurement Range:

Glucose ..... 0.6–33.3 mmol/L  
 (10–600 mg/dL)

### Operating Ranges:

Temperature: ..... 1°C–40°C (34°F–104°F)  
 Altitude: ..... Up to 4,572 m (15,000 ft)  
 Humidity: ..... 10%–90% relative humidity

### Reagents and Strips:

Test Strips: ..... 2 vials of 50  
 QC: ..... 3 levels (sold separately)  
 Linearity: ..... 5 levels available  
 Test Strip Use Life: ..... 24 months from  
 date of manufacture

**StatStrip Ketone Biosensor**  
 Best biomarker for detecting and guiding  
 therapy for ketosis and DKA



Test Measured: ..... Blood Ketone  
 Test Strip Volume: ..... 0.8 µL  
 Test Methodology: ..... Electrochemistry  
 Test Time: ..... 10 seconds

### Sample Types:

Whole Blood: ..... Capillary, Venous

### Measurement Range:

Ketone ..... 0.1–7.0 mmol/L

### Operating Ranges:

Temperature: ..... 1°C–40°C (34°F–104°F)  
 Altitude: ..... Up to 4,572 m (15,000 ft)  
 Humidity: ..... 10%–90% relative humidity

### Reagents and Strips:

Test Strips: ..... 2 vials of 25  
 QC: ..... 3 levels (sold separately)  
 Linearity: ..... 5 levels available  
 Test Strip Use Life: ..... 24 months from  
 date of manufacture

**StatStrip Hb/Hct Biosensor**  
 Rapid diagnosis of blood loss



Tests Measured: Hemoglobin and Hematocrit  
 Test Strip Volume: ..... 1.6 µL  
 Test Methodology: ..... Electrochemistry  
 Test Time: ..... 40 seconds

### Sample Types:

Whole Blood: ..... Capillary, Venous

### Measurement Ranges:

Hemoglobin ..... 6.5–22 g/dL  
 Hematocrit ..... 20%–65%

### Operating Ranges:

Temperature: ..... 1°C–40°C (34°F–104°F)  
 Altitude: ..... Up to 4,572 m (15,000 ft)  
 Humidity: ..... 10%–90% relative humidity

### Reagents and Strips:

Test Strips: ..... 2 vials of 25  
 QC: ..... 2 levels (sold separately)  
 Linearity: ..... 3 levels available  
 Test Strip Use Life: ..... 24 months from  
 date of manufacture

**StatStrip Lactate Biosensor**  
 Best biomarker for detecting and guiding  
 therapy for sepsis, septic shock, and trauma



Test Measured: ..... Blood Lactate  
 Test Strip Volume: ..... 0.6 µL  
 Test Methodology: ..... Electrochemistry  
 Test Time: ..... 13 seconds

### Sample Types:

Whole Blood: ..... Arterial, Capillary, Venous

### Measurement Range:

Lactate ..... 0.3–20 mmol/L

### Operating Ranges:

Temperature: ..... 1°C–40°C (34°F–104°F)  
 Altitude: ..... Up to 4,572 m (15,000 ft)  
 Humidity: ..... 10%–90% relative humidity

### Reagents and Strips:

Test Strips: ..... 2 vials of 25  
 QC: ..... 2 levels (sold separately)  
 Linearity: ..... 4 levels available  
 Test Strip Use Life: ..... 24 months from  
 date of manufacture

**Certifications and Compliance:** Nova Biomedical is certified to FDA Quality System Regulations and ISO 13485:2012.

**Complies to IVDD. Tested According to:** EN 61010-1:2010, EN 61010-2-101:2015, EN 60825-1/A1:2007

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# Nova Biomedical – A World Leader in Critical Care and Point-of-Care Testing

Nova Biomedical has been developing and building advanced technology whole blood analyzers for hospitals worldwide for over 40 years and has over 20 whole blood biosensors. More than 200 peer-reviewed studies have validated the accuracy of our biosensor measurement technology and nearly two out of three U.S. hospitals use Nova's whole blood meters.

Nova's glucose biosensor is the only one accurate enough to have been cleared by the U.S. Food and Drug Administration for testing critically ill patients.

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