

eS fine eB-P01

Blood Glucose Monitoring System

GDH



User's Manual



eS monitor 
easy Blood monitoring

1320385 2026.05.05

Welcome

Thank you for selecting the eBfine Blood Glucose Monitoring System. This manual provides all the information you need to get accurate test results. Please read this entire manual carefully before you proceed with testing.

At Visgeneer, we believe in the value of early prevention over later treatment. eBfine Blood Glucose Monitoring System is developed under this vision and is manufactured and supported by us. For any questions or concerns, please feel free to reach out to us or our local agent. Our contact information is located in the back cover of this manual.

Intended Use

The eBfine Blood Glucose Monitoring System is designed for people self-testing with diabetes to measure glucose concentration in capillary whole blood from the fingers and venous whole blood. These test strips are for in vitro diagnostic use only.

The test results are whole-blood calibrated. The measuring range of glucose concentration in capillary whole blood is from 20 to 600 mg/dL (1.1 to 33.3 mmol/L).

Test Principle

The technology used for the eBfine Blood Glucose Monitoring System is based on the principle that small electrical currents are produced when blood glucose reacts with the reagent immobilized on the reaction area of the eBfine test strip and the current change is proportional to the amount of glucose in the blood.

Accuracy (Method Comparison)

The eBfine Blood Glucose Monitoring System is calibrated by means of glucose oxidase method to display plasma equivalent results, which is traceable to an NIST standard SRM917d. The whole blood was used for calibration.

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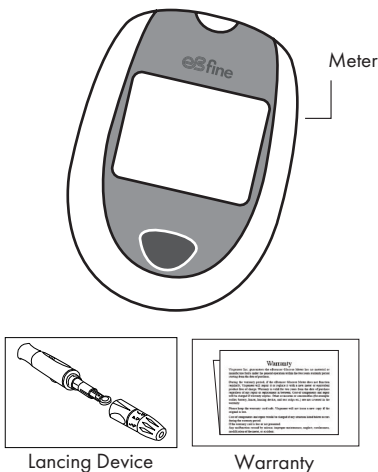
1. eBfine Blood Glucose Monitoring System

1.1 The eBfine System

The eBfine system is intended to monitor blood glucose in fresh capillary whole blood and venous whole blood. The system is used outside the body only. Please perform the test using eBfine test strips only.

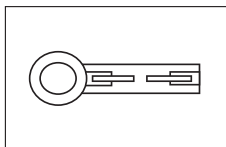
1.2. Equipment in Package

Please check the kit package for the eBfine Blood Glucose Monitoring System which should include the following items. If not, please contact our local agent or exchange at the original purchased store.

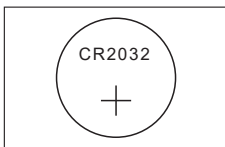


Optional items (not included in the kit package, contact our local distributor for ordering)

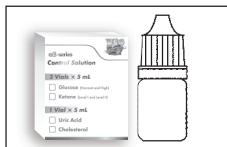
- eBfine Blood Glucose Test Strips 50 pcs/vial.
- eB-series glucose control solution.



Lancet



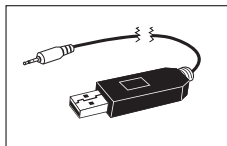
Lithium Battery



Control Solution



Blood Glucose
Test Strips



USB PC Interface

1.3. Product Specification

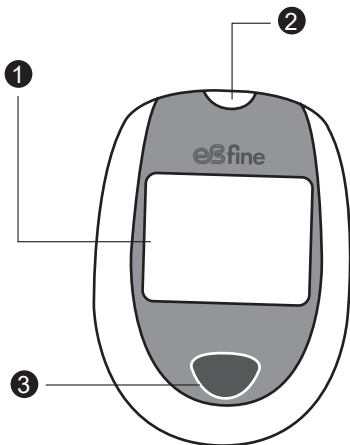
Strip series	eBfine
1. Blood volume	0.5 μ L
2. Measuring time	5 seconds
3. Blood sample type	Capillary and venous whole blood
4. Acceptable hematocrit range	20~60 %
5. Measuring range	20~600 mg/dL (1.1~33.3mmol/L)
6. Measuring unit	mg/dL and mmol/L (Interchangeable)
7. Memory capacity	180 results with time and date
8. Time display	24H
9. Operating temperature range	10 ~ 40 °C
10. Relative humidity operating range	Below 85%
11. Meter storage condition	0~50 °C
12. Meter storage humidity range	Below 95%
13. Dimensions L x W x H (mm)	85 x 63 x 15 mm
14. Weight	\leq 50g
15. Power supply	One 3 Volt lithium battery (CR2032)
16. Data output	USB PC Interface

Note :

Please read all the instructions carefully in this booklet before you start using the System. Parental guidance is advised with use in minors (below 18 years).

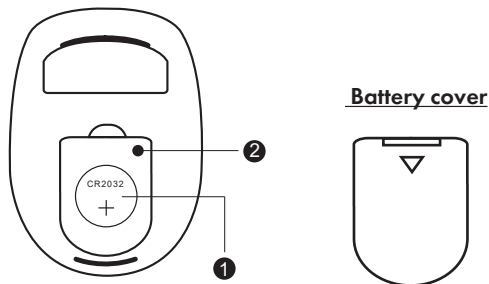
2. About eBfine Glucose Monitoring System

The front side of the meter



- 1 Screen**
Shows blood glucose result, messages and blood glucose results stored in memory
- 2 Test Slot**
Insert test strip and Code card here
- 3 Button**
Used to recall stored test results or to change the values in the set mode (time/date) and Measurement Unit.

The back side of the meter



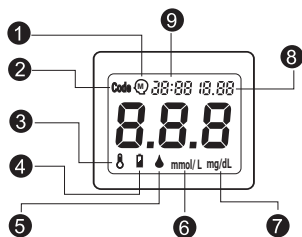
1 Battery Slots

Use one 3 volt CR2032 Lithium battery.

2 Setting Button

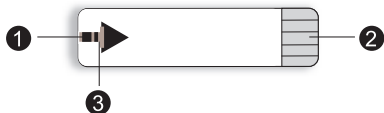
For setting up year, time, date and measurement unit.

The screen of the meter



- 1** Memory Symbol
- 2** Code Symbol
- 3** Thermograph
- 4** Battery sign
- 5** Blood drop sign
- 6** Measuring unit: mmol/L
- 7** Measuring unit: mg/dL
- 8** Date
- 9** Time

Test strip



1 Top Edge

Apply a drop of blood or control solution to the cutout on the top of the narrow channel of the test strip

2 Electrical Contacts

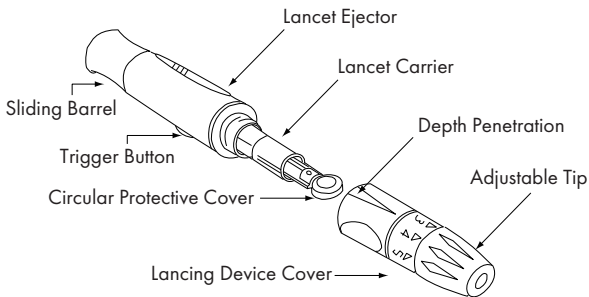
Face these contacts up and insert into the meter

3 Indication Slot

To indicate if enough blood has been applied to fill the reaction area

Lancing set

Lancing device



Lancet



3. Operating Procedure

3.1 Before Testing

3.1.1. Installing Battery

The meter requires one 3-volt CR2032 lithium battery.

Step 1. Open the battery slot.

Step 2. Put one 3-volt CR2032 Lithium battery in.

Step 3. Place the battery cover back on.

When the battery power is low, a battery sign will be shown on the screen. Follow the steps above to replace the battery.

1. Note:


If not using the meter for a while, please take the battery out from the battery socket to prevent leakage and damage to the meter.

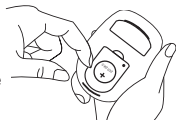
3.1.2 Setting the Time and Date







The time and date should be set before testing and whenever you change the battery. Setting the time and date is important for reviewing the results stored in memory. Please note that the time is set in 24 hours.

Step 1. Open the battery cover and find a setting button on the top right side above the battery slot.

Step 2. Press and release the setting button, the year digits start flashing on the screen.

Step 3. Press and release  the button to adjust the digits until the correct year is shown on the screen.

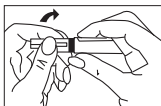


- Step 4. Press and release the setting button, the month digits start flashing on the screen.
- Step 5. Press and release the  button to adjust the digits until the correct month is shown on the screen.
- Step 6. Press and release the setting button, the day digits start flashing on the screen.
- Step 7. Press and release the  button to adjust the digits until the correct day is shown on the screen.
- Step 8. Press and release the setting button, the hour digits start flashing on the screen.
- Step 9. Press and release the  button to adjust the digits until the correct hour is shown on the screen.
- Step 10. Press and release the setting button, the minute digits start flashing on the screen.
- Step 11. Press and release the  button to adjust the digits until the correct minutes are shown on the screen.
- Step 12. Press and release the “setting” button to set  the Measurement Unit : Press  the button for 3 seconds to switch the measurement unit between mg/dL and mmol/L.
- Step 13. Press and release the setting button, “OFF” will appear on the screen to exit the time and date setting mode.

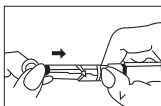


3.2 Start Testing

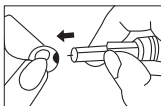
Step 1. Remove the cap from the lancing device.



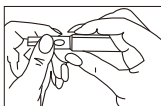
Step 2. Insert a lancet into the lancing holder and push it down until it is securely in place.



Step 3. Twist the circular protective cover on the front of the lancet and remove it.



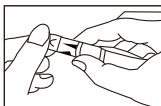
Step 4. Put the cap back onto the lancing device.



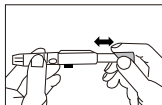
Step 5. Adjust the depth setting of the lancing device before use. There are 5 levels of depth you can choose.

Level 1 is for people with very thin skin. Level 5 is for people with very thick skin.

Step 6. Choose a desired skin penetration depth for yourself by rotating the depth selector until the depth selection window displays your desired depth setting.



Step 7. Slide the ejection/cocking control back until it is triggered.



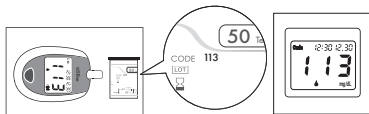
Step 8. Wash your hands with warm, soapy water. Rinse and dry thoroughly.



Step 9. Open a new vial of test strips. Take out a test strip from the vial and close the cap properly.

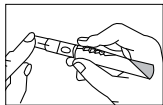
Step 10. Make sure the triangle sign on the test strip is facing up and insert the electrical contact end of the test strip fully into the test slot. The blood drop sign will flash until your blood fills the indication slot.

Step 11. The meter will turn on automatically and the code number will be indicated on the screen accompanied with a “beep” sound (for example, 113). Please make sure that this number matches the code number on the vial of test strips.



Step 12. Put your hands on a table and press the lancing device against your fingertip.

Step 13. Push the trigger on the lancing device and the lancet will prick your skin.



Step 14. To obtain a drop of blood, squeeze your finger gently to form a small drop of blood.

Step 15. Touch the drop of blood to the cutout on the top of the narrow channel of the test strip.

Step 16. The blood will be drawn into the strip automatically. The blood has to fill the indication slot. If you have enough blood on the strip, the indication slot turns red (filled with blood). If the indication slot is not completely filled with blood before the meter begins to count down, do not add more blood to the strip and discard the strip. Please repeat the test.

Note: Please do not drop the blood from above.



Step 17. Hold your finger to the strip until after the meter beeps.

Step 18. The meter starts counting down from 5 seconds, after which your test result appears on the screen (for example 100) and is stored automatically in the meter's memory.

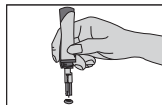


Step 19. The meter will switch off when the test strip is removed.

Step 20. Dispose of the used test strip in a sealed container.



Step 21. Remove the cap from the lancing device. Put the protective cover back onto the lancet.




Step 22. Push the ejector forward and dispose of the lancet in a sealed container.



4. Accessing the Meter Memory


Your Blood Glucose Meter stores 180 most recent glucose results with date and time in the memory. When the memory is full, the most recent result is added to the memory and the oldest result is deleted from the memory.

Step 1. You may enter the memory mode by press the  button. "01" will flash followed by the latest glucose results with date and time.



Step 2. Press the  button again to obtain the second record.



Step 3. You may obtain all 180 records by pressing the  button.

Step 4. After the oldest result is shown, the symbol "OFF" will appear on the screen to exit the memory mode and then the meter will be turned off automatically.



5. Quality Control Testing (Optional)

You can use control solution to ensure the test strip is working together with the meter properly.

eB-series Glucose Control Solution is used to check that if the monitoring system (meter working together with test strips) is functioning properly.

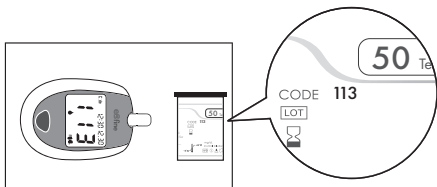
When to do a control solution test:

1. When you open a new vial of test strips.
2. Whenever you suspect that the meter or test strips are not working properly.
3. When your blood glucose test results are not consistent with how you feel, or when you think your results may not be accurate.
4. If you drop the meter.

Steps of Performing a Control Solution Test

Step 1: Take out a test strip from the vial and close the cap properly. Make sure the triangle sign on the test strip is facing up.

Step 2: Insert the electrical contact end of the test strip fully into the test slot. The meter will turn on automatically and the code number will be shown on the screen accompanied with a beep sound. Make sure this number matches the code number on the vial of test strips.



Step 3: Open a bottle of Control Solution. The Control Solution can only be stored for 3 months after the first opening or up to the expiry date, whichever comes first.

Step 4: Always write down the opening date on the bottle.

Step 5: Gently squeeze the bottle to form a small drop of control solution on the tip of the bottle.

Note: Always shake the bottle gently, discard the first drop before applying the control solution.

Step 6: Touch the drop of control solution to the cutout on the top of the narrow channel of the test strip.

Step 7: The control solution will be drawn into the strip automatically. Make sure the indication slot is filled with the control solution.

Step 8: The meter starts counting down from 5 seconds, after which your test result appears on the screen.

Step 9: Compare the result with the expected range printed on the test strips vial. The result should be within the range.

Control solution and test strips are necessary but may not be provided and must be purchased separately. For more

information on the control solution and where to purchase them, please contact our local distributor.



6. Range of Expected Values

Blood glucose monitoring requires the help of healthcare professionals in setting the expected range of your own blood glucose values, arranging frequency of tests, and discussing the meaning of your blood glucose results.

Expected blood glucose levels for people without diabetes¹:

* Fasting and before meals: Less than 100 mg/dL (5.6 mmol/L)

* 2 hours after meals: Less than 140 mg/dL (7.8 mmol/L)

REMEMBER TO REPEAT THE TEST IF THE TEST RESULT FALLS OUTSIDE THE EXPECTED RANGE



If you get unexpected results:
Low or high blood glucose readings can indicate a potentially serious medical condition. Please consult your healthcare professional and follow his or her treatment advice.

Reference:

1. American Diabetes Association (2010), Clinical Practice Recommendation, Diabetes Care 34 (Supplement 1):S11-S61.

7. Limitation

- Blood Glucose Monitoring System will give accurate results when the following limitations are observed:
- The test strips should not be used for the testing of neonates.
- The test strips are for single use only. **DO NOT** reuse.
- Handle the meter with care. **DO NOT** drop the meter or apply a strong force to the meter.
- **DO NOT** disassemble the meter.
- **DO NOT** use code card from other glucose meter systems.
- **DO NOT** operate the meter placed on hot or cold surfaces.
- Always store the meter in the carrying case when not in use.
- Keep away from dust or dirt.
- **DO NOT** drop the meter into water or allow water to enter it. This can result in an inaccurate result, even if you dry it.
- **DO NOT** remove the strip while the measurement is in process.
- If the surface of meter gets dirty, you may gently wipe with 70% alcohol soft cloth and avoid liquid into the test slot or transmission slot.
- The test strips are only used with fresh capillary whole blood from your fingers. **DO NOT** use serum or plasma.
- Hematocrit values less than 20% may cause falsely high test results; hematocrit values higher than 60% may cause falsely low test results (consult your healthcare professional regarding your hematocrit value).
- Allow approximately 20 minutes before using the meter to ensure adjustment to room temperature. Neglecting to do so may cause incorrect test results.
- **DO NOT** use the meter close to a TV, microwave oven or cellular telephone. Malfunction may occur.
- Follow the regulations in your area to dispose of the used test strips and lancing materials.
- Avoid direct sunlight.
- The altitudes that are up to 8000 feet have no effect on eBfine







- blood glucose measurements.
- Inaccurate results may occur in severely hypotensive individuals or patients in shock.
- Inaccurate low results may occur for individuals experiencing a hyperglycemic-hyperosmolar state, with or without ketosis.
- Critically ill patients should not be tested with blood glucose meters.
- Treat every patient sample and all used materials as if they are contaminated. Even if a sample looks "safe", you must follow standard safety protocols to protect yourself from potential infections.
- The meter has to be used in an environment with less than 85% humidity.
- It is suggested to operate the meter between 10~40 ° C (50~104 ° F) in surrounding temperature.(Meter will automatically switch off when temperature is below 4 ° C or above 42 ° C)
- The meter has to be recycled in a container which is WEEE directive.
- Follow proper precautions in accordance with local regulations when disposing of all materials.
- This unit is not suitable for use in the presence of a flammable anesthetic mixture with air, oxygen or nitrous oxide.
- Interferences: Pralidoxime iodide, Gentisic acid, Hemoglobin and Glutathione. Please see the table below for certain concentrations which can affect the function of the meter.





Substance	No Interference
Acetaminophen	< 1.32 mmol/L
Creatinine	< 0.88 mmol/L
Dopamine	< 5.88 μmol/L
Galactose	< 0.83 mmol/L
Gentisic acid	< 0.13 mmol/L
Glutathione	< 2.28 mmol/L
Hemoglobin	< 0.80 g/dL
Maltose	< 7.30 mmol/L
Pralidoxime iodide	< 0.38 mmol/L
Uric acid	< 1368 μmol/L

8. Troubleshooting

The following table is a summary of all the display messages. It can help you identify the problem.

However, the message may not appear every time when the problem occurs. Improper use may cause inaccurate result without showing an error message or a symbol.

Message	Cause	Action
	The meter is faulty.	The meter needs to be repaired. Please contact our local distributor.
	The battery power is low.	Replace with one 3 volt CR2032 Lithium battery.
	The surrounding temperature is too low (4°C~9°C) or too high (41°C~42°C) to perform a test.	Repeat the test in a place between 10°C~40°C (50°F~104°F).
	No battery power. The meter will switch off automatically.	Replace with one 3 volt CR2032 Lithium battery.
	When the temperature goes below 4°C(39.2°F) the meter will switch off automatically.	Repeat the test in a place between 10°C~40°C (50°F~104°F).
	The surrounding temperature is too high to perform a test.	Repeat the test in a place between 10°C~40°C (50°F~104°F).

Message	Cause	Action
	<p>Your blood glucose level is higher than 600 mg/dL (33.3 mmol/L).</p>	<p>Re-check your blood glucose level. If "HI" is displayed again, please call your doctor immediately.</p>
	<p>Your blood glucose level is lower than 20 mg/dL (1.1 mmol/L).</p>	<p>Re-check your blood glucose level. If "LO" is displayed again, please call your doctor immediately.</p>
	<p>The test strip is used or damp.</p>	<p>Please use a new test strip.</p>
	<p>The code card is damaged or incorrect.</p>	<p>Please contact our local distributor.</p>

9. Labeling and Information



Use by date



Serial number



Do not re-use



Authorized representative in the European Community/European Union



Keep dry



Caution, consult accompanying documents



Batch number



Consult instructions for use



Manufacturer



Operating temperature limitation



Recycling



Store temperature limitation



In vitro diagnostic medical device



Keep away from sunlight



Please do not dispose this meter with other household or municipal waste. Please follow regulation to dispose the meter at designated recycling facility, or return it back to your original purchasing site.



This product meets the requirements of Directive 98/79/EC in vitro diagnostic medical devices.

 Lancet  and Lancing Device 
Beijing Ruicheng Medical Supplies Co., Ltd.
Building 5, No. 8, Yanqi West Road, Yanqi Economic
Development Zone, Huairou District, 101407 Beijing, P.R. China



Lotus NL B.V.
Koningin Julianaplein 10, 1e Verd, 2595AA,
The Hague, Netherlands.

 **VISGENEER INC.**

No. 335, Sec. 6, Zhonghua Rd.,
30094 Hsinchu City, Taiwan
Tel : 886-3-5181918
Fax : 886-3-5181908
E-mail : eB@visgeneer.com
Website : www.eB-monitor.com | www.visgeneer.com



MedNet EC-REP GmbH
Barkstrasse 10,
48163 Muenster, Germany



Novagen Pharma

Office 2, 100 Sovereign Dr, Route 21 Corporate
Park, Nellmapius Dr, Irene, Pretoria, South Africa
Tel: 012 345 1420

 **VISGENEER INC.**

No. 335, Sec. 6, Zhonghua Rd.,
30094 Hsinchu City, Taiwan

Tel : 886-3-5181918

Fax : 886-3-5181908

E-mail :

eB@visgeneer.com

Website :

www.eB-monitor.com

www.visgeneer.com

 0123

VISGENEERGROUP

