

**DiVi Lab Optima 4 in 1 GCU-BP Meter**

DV-I-001/25

Manual Book

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## SAFETY REMINDER



Warning: Indicates a potentially hazardous situation which, if not avoided, could result in serious injury.

### (General Security Warning)

- Before using the device, read these instructions carefully and consult your healthcare professional before making any important medical decisions.
- Do not modify this product without the manufacturer's approval.
- Do not use accessories not specified by the manufacturer.
- Do not use the device if it is not working properly
- Do not use this monitor on an injured arm or an arm undergoing medical treatment
- Do not apply the cuff to an arm receiving an IV or blood transfusion
- This device is not intended to diagnose any symptoms or diseases. The measured data are for reference only. Always consult your doctor for results. Before using this device to test your blood pressure, blood glucose, cholesterol, or uric acid, read all instructions carefully and perform the test.
- Keep the device and testing equipment out of the reach of small children. Small objects such as test strips, lancets, battery caps, and bottle caps can be a choking hazard.
- Use the device in a dry environment, and do not use the device near sources of strong electromagnetic radiation, as this may cause inaccurate measurement results.
- Do not use this monitor in the vicinity of HF surgical equipment, MRI, or CT scanners, or in oxygen-rich environments. This may result in incorrect operation of the monitor and/or inaccurate readings.

### After Sales Service

To ensure the safe and efficient operation of the DiVi Lab Optima 4 in 1 GCU-BP Meter, regular maintenance is required. If the device has a problem, do not try to repair it. Contact our service center:

**PT VARIA INTERHEALTH INDONESIA**, South Quarter, Tower A 21th Floor, Jl. R.A. Kartini No. Kav 8, Cilandak Barat, Kec. Cilandak, Kota Jakarta Selatan, DKI Jakarta 12430

**BEFORE YOU BEGIN**

- Always use accessories recommended by the manufacturer, do not use other accessories as they may interfere with the measurement results.
- Use a fresh blood sample to test your blood glucose, total cholesterol or uric acid. Using other substances will cause inaccurate results.
- If your blood pressure, blood glucose, total cholesterol or uric acid results are lower or higher than normal, and you do not have any symptoms of the disease, repeat the test first. If you have symptoms or continue to get results higher or lower than normal, please consult and follow the advice of your health care professional.
- If you experience symptoms that do not match your test results and have followed all the instructions in this manual, contact your health care professional.
- The units used for blood pressure are mmHg and kPa. The calculation for the conversion of mmHg and kPa is as follows:

1 mmHg	0,1333 kPa
1 kPa	7.50062 mmHg

- The units of measurement used to identify the concentration of glucose in blood or plasma can be based on weight mg/dL or molarity (mmol/L). The calculation for converting mg/dL to mmol/L and vice versa is as follows:

mg/dL	Divided by 18	mmol/L
mmol/L	Multiplied by 18	mg/dL

Example:

$$- 100 \text{ mg/dL} : 18 = 5.55 \text{ mmol/L}$$

$$- 5 \text{ mmol/L} \times 18 = 80 \text{ mg/dL}$$

- The units of measurement used to identify the concentration of cholesterol in blood or plasma can be based on weight mg/dL or molarity (mmol/L). The calculation for converting mg/dL to mmol/L and vice versa is as follows:

mg/dL	Divided by 38,665	mmol/L
mmol/L	Multiplied by 38,665	mg/dL

Example:

- 100 mg/dL:  $38,665 = 2.5$  mmol/L

- 5 mmol/L x 38,665 = 193 mg/dL

- The units of measurement used to identify the concentration of uric acid in blood or plasma can be based on weight mg/dL or micromolarity (umol/L). The calculation for converting mg/dL to umol/L and vice versa is as follows:

mg/dL	Multiplied by 59,48	umol/L
umol/L	Divided by 59,48	mg/dL

Example:

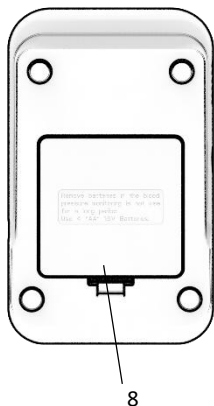
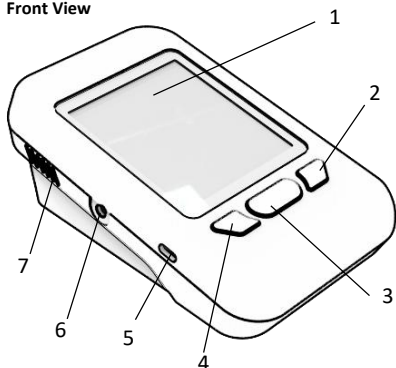
- 6 mg/dL x 59.48 = 356.8 umol/L

- 400 umol/L: 59.48 = 6.7 mg/dL

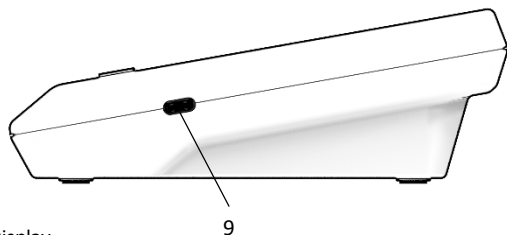
**PART NAME**

**Back  
View**

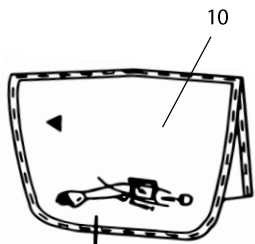
**Front View**



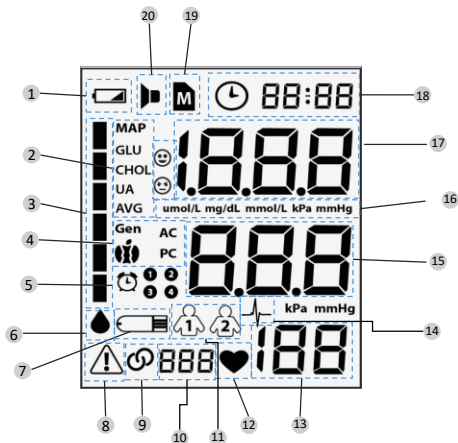
**Side View**



1. Display
2. Memory Button
3. START/STOP Button
4. Setting Button
5. Test Strip Port
6. Cuff Hole
7. Sound
8. Battery Cover
9. Type C Port
10. Cuff

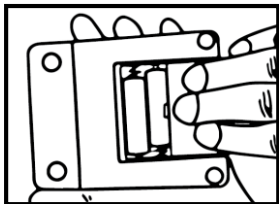
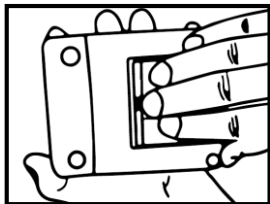


## SCREEN DISPLAY



1. Battery/Power Indicator
2. MAP : Mean Arterial Pressure  
GLU : Glucose strip detection  
CHOL : Cholesterol strip detection  
UA : Uric Acid Strip Detection  
AVG : Average of 3 Measurements
3. Bar for Blood Pressure Results (0-6 Bar)
4. Gen: General measurement (any time)  
AC: "Before meal" icon --> user set  
PC: "After meal" icon --> user set
5. Alarm Setting Icon 1 – 2 – 3 – 4
6. Blood Drop Icon
7. Strip Icon
8. Warning Sign
9. Connectivity Icon
10. Segment for memory number sequence
11. User 1 and User 2 Icons
12. Heart rate icon
13. Heart rate measurement result segment
14. Arrhythmia detection icon
15. Diastolic measurement result
16. Conversion of measurement units:  
kPa : kilopascal  
mmHg : millimeter of mercury  
umol/L : micromoles per liter  
mmol/L : micromoles per liter  
mg/dL : miligram per desiliter
17. Measurement result segment (systolic/Glucose/Cholesterol/Uric Acid)
18. Time segment (date, month, day, hour & minute)
19. Memory icon
20. Sound icon

## BATTERY INSTALLATION



1. Turn the device over, press the  $\Delta$  part on the battery cover, remove the battery cover according to the arrow direction.
2. Make sure the + - pole of the battery charge and insert the battery.
3. Close the cover



### ATTENTION

- Be sure to follow the manual
- Install the battery correctly after confirming the electron polarity
- Immediately remove the battery when the power is low
- Remove the battery if not used for a long time
- Use the battery within the usage period, Failure to follow the above will cause the battery to heat up, rupture or leak and cause danger.

### A. Battery Installation Preparation


- A new set of AAA batteries can be used about  $\pm 400$  times.
- The battery life will be shorter if used at low temperatures  $< 10^{\circ}\text{C}$ .
- Use AAA batteries, otherwise the life will not be long.
- When replacing batteries, be sure to use the same type, and replace 4 batteries at a time.
- Remove the batteries if they have not been used for a long time to avoid malfunction due to battery leakage. Do not dispose of waste batteries carelessly, follow local environmental regulations.

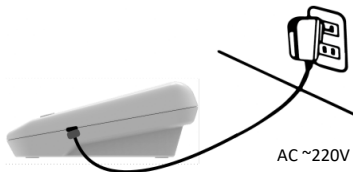
### B. How to Use Batteries and Adapters



#### ATTENTION

**Make sure to use a stable AC power source. Otherwise it may cause device error/damage.**


1. Connect the adapter to a power outlet (220V AC power source) carefully
2. Connect the USB Type-C from the 5V Adapter to the Type-C port located on the right side of the product
3. Press the  button to turn on the device







## DEVICE SETTINGS

Before using the device for the first time or if you replace the batteries in this device, you must check and update the device settings.


Entering setup mode:

Start with the device turned off (no test strip inserted). Press the Setup button  and hold for 5 seconds.




### 1. User Profile Selection

Press the  button in sleep mode, the screen will show the user icon  and  if the  button is pressed, then the selected User is the user whose icon was displayed last.

### 2. Date setting

Date setting starts from: YEAR → MONTH → DAY. When YEAR / MONTH / DAY flashes sequentially, press  or  button to adjust the correct time. Press  to confirm each selection.

### 3. Clock setting

When HOUR / MINUTE display flashes sequentially, press  or  to adjust the time. Press  to confirm the selection.

### 4. Blood Pressure Unit Setting




When the unit display and BP icon flash, press  or  to change the selection to mmHg or kPa. Press  to confirm the selection.

### 5. Glucose Unit Setting




When the unit display flashes, press  or  to change the selection to mg/dL or mmol/L. Press  to confirm the selection.

**CAUTION:** When the alarm is on, press any button to turn off the alarm. If not turned off, the alarm will sound for 2 minutes before turning off.




#### 6. Total cholesterol measurement unit setting

While the measurement unit display is flashing, press  or  to change the selection to mg/dL or mmol/L. Press  to confirm the selection.




#### 7. Uric acid measurement unit setting

While the measurement unit display is flashing, press  or  to change the selection to mg/dL or  $\mu\text{mol/L}$ . Press  to confirm the selection.


#### 8. Low and high glucose normal range target setting for setting mode

To set the low and high warning value range. The setting sequence is: Low gen  $\rightarrow$  High gen  $\rightarrow$  Low AC  $\rightarrow$  High AC  $\rightarrow$  Low PC  $\rightarrow$  High PC. When the display shows the menu, press  or  to set the desired target value. Press  to confirm the selection.








#### 9. Indonesian Voice Sound Setting

To set the sound of Indonesian Voice, press  or  to set "On" and "Off". Press  to confirm the selection.

#### 10. Clearing memory




While the display "DEL" and "M" appear on the display screen, press to select "No" to keep the memory. Then press the button  to skip the memory clear option. To delete all test results, press and select "yes".

#### 11. Alarm Reminder Setting

The device has 4 alarm reminder features. The device will display "On" or "OFF" and "-". If you do not want a reminder alarm. Press  to skip this menu. If you want a reminder alarm, press  or  until the "On" option appears. Then press . When HOUR:MINUTE appears on the display, press  or  to select the correct hour/minute. Press  and proceed to the next alarm.




## TEST MODE SETTINGS

### Blood Pressure Test



Press the button  , the device will enter standby mode. By default, the device enters blood pressure measurement mode marked with the icon  . When the button  is pressed again, the device will automatically measure blood pressure.

### Glucose Test



The device will give you 3 measurement modes General (Gen), before meals (AC) and after meals (PC) and the mode can be selected in the following way:

1. Start with the Device turned off. Insert the Glucose strip. The display will display the symbol  , and also the symbol "GLU" and  flashing.
2. Press the button  to select the test mode (General, AC and PC).

### Total Cholesterol Test

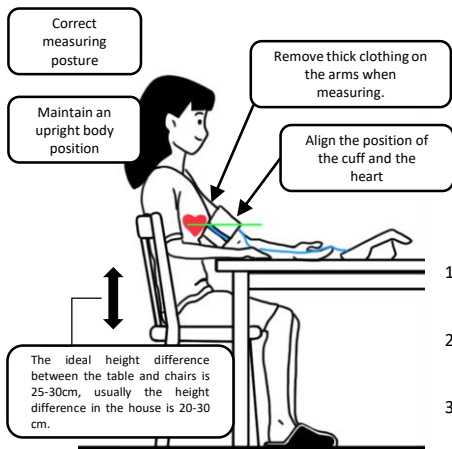
In this measurement there is only 1 measurement mode option: General. Start with the device turned off. Insert the total cholesterol test strip. The display will display the symbol  and also the symbol "CHOL" and  flashing.

### Uric Acid Test

In this measurement there is only 1 measurement mode option: General. Start with the device turned off. Insert the uric acid test strip. The display will display the symbol  and also the symbol "UA" and  flashing.

## PREPARATION FOR BLOOD PRESSURE MEASUREMENT

Measure when you are calm and relaxed.



1. Place your elbows on the table.
2. Cuff and heart are at the same level.
3. Calm down and relax

Measure at the same time with the same arm and the same movement every day

- The position of the cuff can affect the measurement results
- It is better to take a baseline blood pressure measurement, (pressure when you wake up and do not want to urinate in the morning) if you cannot, please measure before smoking or exercising
- Do not touch the instrument, cuff, and air tube
- Stay still and relax during the measurement
- Stay still for at least 5 minutes before measuring
- Relax your body, arm and fingers, no muscle activity
- Do not talk during the measurement
- If you want to measure 2 times in a row, take the second measurement 4 to 5 minutes after the first measurement. Do not take the second measurement immediately after the first measurement

## WRONG MEASUREMENT POSTURE

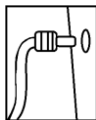


## Wrong Body Posture



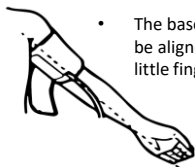
- Sitting with legs crossed during measurement
- Bending over or leaning forward
- Sitting on a short sofa or chair that causes the body to bend
- Measuring with a table that has a height difference with the chair of less than 20cm, causing the body to bend

## HOW TO USE CUFF



1. Attach the air hose with connector to the cuff hole on the left side of the product.

(When measuring with the left hand)



- The base of the air tube should be aligned with the palm of the little finger.

1. Attach the cuff by rolling the cuff over the upper arm and then securing it with Velcro

2. The cuff can be worn on either the right or left hand, but will display different measurement results. Please wear the cuff on the same arm each time you take a measurement.

(When measuring with the right hand)




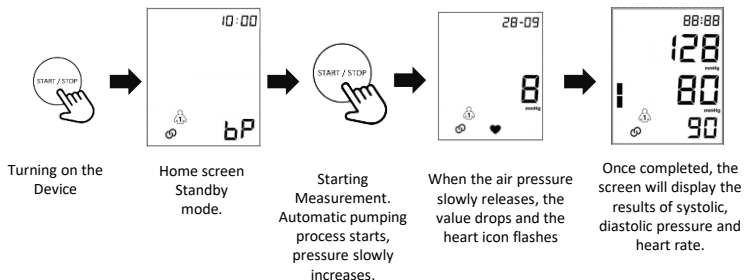
3. Attach the cuff tightly

Do not tighten the cuff too tightly or roll up clothing as this may affect the accuracy of the measurement.

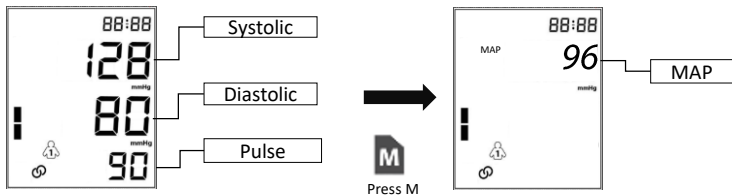
## TAKING BLOOD PRESSURE MEASUREMENTS

### AUTOMATIC BLOOD PRESSURE TESTING

Press the  button and the device will turn on. Then press the button again and the device will start measuring automatically by pumping air into the cuff. During the blood pressure measurement process, please do not move or talk. The units displayed can be mmHg or kPa which can be selected in the setting mode. The product will display the Systolic, Diastolic, and Heart Rate measurement results on the screen. To re-measure, press the “START/STOP” button again. If you want to turn off the device, press the “START/STOP” button for approximately 4 seconds.



Note:



**NOTE:** Choose a different spot each time you test. Repeated pricking in the same spot can cause pain and calluses.

## CONDUCTING TESTING

To do a blood test, here are the steps:

### 1. Insert the test strip to turn on the device

Wait until the device displays ,  and "GLU"/"CHOL"/"UA".

### 2. Select the desired measurement mode by pressing the button

### 3. Take blood sample

Use the pre-set Lancet Pen to prick the desired area. The drop size should be at least as large as (actual size) 1 microliters (uL) volume for blood glucose test and uric acid test; 1.2 microliters (uL) volume for total cholesterol test. Gently press the pricked area to obtain another drop of blood. Be careful NOT to smear the blood sample.

### 4. Apply blood sample

Gently drop blood into the absorbent hole on the test strip at an angle. The confirmation box on the test strip should be completely filled with the inserted blood sample. DO NOT remove your finger until you hear a beep.

#### NOTE:

- Do not press the puncture site onto the test strip or try to smear blood.
- If you do not apply a blood sample to the test strip within 2 minutes, the device will automatically turn off. You must remove and reinsert the test strip to start a new measurement.
- The confirmation box must be filled with blood before the device begins counting down. NEVER try to add more blood to the test strip after the blood drop has disappeared. Discard the used test strip and retest with a new one.
- If you have difficulty filling the confirmation box, please contact your healthcare professional or local customer service for assistance.

**5. Reading your results**

Your test results will appear after the Device counts down to 0. The results will be stored in memory automatically.

**6. Remove the used test strip**

Remove the test strip from the Device. Use the special waste bin to dispose of the used test strip. The Device will automatically turn itself off.

Always follow the Lancet instructions for use to remove the lancet.



**WARNING:**

Used lancets and test strips may have biological hazards. Please dispose of them carefully according to local regulations.


## DEVICE MEMORY


The device stores a total of 1200 latest measurement results with date and time stamps.






Memory data:

- User 1 (  )  
Blood Pressure (bP) : 100 data  
Glucose (GLU) : 250 data  
Cholesterol (CHOL) : 125 data  
Uric Acid (UA) : 125 data
- User 2 (  )  
Blood Pressure (bp) : 100 data  
Glucose (GLU) : 250 data  
Cholesterol (CHOL) : 125 data  
Uric Acid (UA) : 125 data

## Reviewing Test Results

1. **Press and release the button  for 4 seconds**

The symbol  will appear on the display and the first reading you see is the last test result along with the date or time and the measurement mode.

2. **Press  or  to scroll through all test results stored in the Device.**  
Press  to scroll down to view older test results and press  to scroll up to view new ones. Press the  button and hold for two seconds to turn the device off.

**NOTE:**



Whenever you want to exit the memory, keep Start/Stop pressed for 3 seconds or leave it without any action for 2 minutes. The meter will automatically turn off.  
The results of the control solution tests are NOT included in the daily average.

**MAINTENANCE**

The device is equipped with 4 pcs AAA batteries.

**Low Battery Signal**

The meter will display one of the following messages to alert you when the power of the meter is getting low:

1. The "**battery**" symbol  appears and the instrument is functioning and the results remain accurate, but it is time to replace the batteries.
2. The "**battery**" symbol  appears with "**E-b**". There is not enough power to perform the test. Please replace the batteries immediately.

**Replacing Your Battery**

**To replace the battery, make sure the device is turned off.**

Open the battery cover.

Remove the old battery and replace it with 4 pieces of AAA batteries.

Close the battery cover. If the battery has been inserted correctly, you will hear a "beep" afterward.

**NOTE:**

Replacing the battery does not affect the test results stored in the memory.

Batteries may leak chemicals if left unused for a long period of time. Remove the battery if you will not be using the Device for a long period of time (3 months or more).

Dispose of the battery properly according to environmental regulations.

## Caring for Your Device



1. Unplug the air hose connector from the product.
  2. Gently roll up the cuff and insert the air hose into the cuff.
- Do not roll the air hose around the monitor.
  - Do not stretch or bend the air hose as it will cause malfunction.

## Cleaning the Device

- To clean the exterior of the Device, wipe it with a cloth dampened with tap water or a mild cleaning agent, then dry the Device with a soft, dry cloth.
- Do not rinse with water.
- DO NOT use organic solvents to clean your Device

## Device Storage

- Storage conditions:  $-20^{\circ}\text{C}$  to  $60^{\circ}\text{C}$  ( $-4^{\circ}\text{F}$  to  $140^{\circ}\text{F}$ ) between 10% and 93% relative humidity (non-condensing).
- Always store or transport the Device in its original storage container.
- Avoid dropping and subjecting the Device to heavy impact.
- Avoid direct sunlight and high humidity.

## Device Disposal

Used devices should be treated as contaminated devices that may carry a risk of infection during measurement. The batteries in these used devices should be removed and the devices should be disposed of according to local regulations.






### ATTENTION

Make sure to calibrate this product periodically to maintain the accuracy of the instrument readings.

## READING MEASUREMENT RESULTS

## For Blood Pressure Testing

APPEARANCE	DESCRIPTION
	<p>If the measurement results for systolic values <math>&lt;90</math> mmHg and diastolic values <math>&lt;60</math> mmHg, the result <b>Lo</b> will appear as low and the icon will 😞 flash.</p>
	<p>If the measurement results for systolic values are <math>&gt;90</math> and <math>&lt;140</math> mmHg and diastolic values are <math>&gt;60</math> mmHg and <math>&lt;90</math> mmHg, an icon 😊 will appear that is still at the "Normal" reference value.</p>
	<p>When the systolic value measurement results are <math>\geq 140</math> mmHg and the diastolic value is <math>\geq 90</math> mmHg, the results will appear referencing the "High" result along with a flashing icon. 😞</p>






Blood Pressure Result Bar Description

BAR PRESSURE	SYSTOLIC VALUE mmHg	DIASTOLIC VALUE mmHg
■	$>180$	$>110$
■	160-179	100-109
■	140-159	90-99
■	130-139	85-89
■	120-129	80-84
■	90-119	60-79
NO BAR	$<90$	$<60$


Reference : <https://www.heart.org/en/health-topics/high-blood-pressure/the-facts-about-high-blood-pressure/low-blood-pressure-when-blood-pressure-is-too-low>

## READING MEASUREMENT RESULTS


## For Glucose Testing

APPEARANCE	DESCRIPTION		
Lo	< 20mg/dL (1.12 mmol/L)		
GLU  mg/dL Gen 58 Lo	10 – 69 mg/dl (0.56 dan 3.8 mmol/L)		
GLU  mg/dL Gen 100	AC	PC	Gen
GLU  mg/dL Gen 200 Hi	AC	PC	Gen
GLU  mg/dL Gen 300 Hi 	<p>≥ 300 mg/dL (16.6 mmol/L)</p> <p>Ketone Alert: This is displayed when your blood glucose result is equal to or higher than 300mg/dL (16.6 mmol/L).</p> <p>What to do: Check your blood ketones if checking ketones is part of your diabetes management program.</p>		
Hi	> 600 mg/dL (33.33 mmol/L)		

## For Total Cholesterol Testing

APPEARANCE	DESCRIPTION
Lo	< 100 mg/dL (2.5 mmol/L)
	100 – 400 mg/dL (2.5 – 10.3 mmol/L)
H <sub>i</sub>	> 400 mg/dL (10.3 mmol/L)

## For Uric Acid Testing

APPEARANCE	DESCRIPTION
Lo	< 3 mg/dL (0.17 $\mu$ mol/L)
	3 – 20 mg/dL (0.17 – 1189 $\mu$ mol/L)
H <sub>i</sub>	> 20 mg/dL (1189 $\mu$ mol/L)

## Reference Value

### Blood Pressure Measurement

Blood pressure readings in the form of systolic and diastolic values can be displayed in mmHg (millimeters of mercury) or kPa (kilopascals). While the results of heart rate measurements are in beats per minute.

BLOOD PRESSURE CATEGORY	SYSTOLIC mmHg (higher value)		DIASTOLIC mmHg (lower value)
NORMAL	<120	And	LESS THAN 80
ELEVATED	120 – 129	And	LESS THAN 80
HIGH BLOODPRESSURE (HYPERTENSION STAGE 1)	130 -139	Or	80-89
HIGH BLOOD PRESSURE (HYPERTENSION) STAGE 2	140 OR HIGHER	Or	90 OR HIGHER
HYPERTENSIVE CRISIS	MORE THAN 180	And / Or	MORE HIGHER THAN 120

### Blood Glucose Test

Blood glucose readings provide plasma equivalent results and are displayed in milligrams of glucose per deciliter of blood (mg/dL) or in millimolar glucose per liter of blood (mmol/L).

Condition	Normal plasma glucose range for people without diabetes (mg/dL)
Fasting and before eating	< 100 mg/dL (5.6 mmol/L)
2 hours after eating	<140 mg/dL (7.8 mmol/L)

Source : Diabetes Care 2021;44(Suppl. 1):S15–S33 | <https://doi.org/10.2337/dc21-S002>

## Total Cholesterol Test

Total cholesterol readings provide plasma equivalents and are expressed in milligrams of total cholesterol per deciliter of blood (mg/dL) or in millimolar total cholesterol per liter of blood (mmol/L).

Expected total cholesterol values for adults:

Total Cholesterol (mg/dL or mmol/L)	
Wanted	< 200 mg/dL (5.1 mmol/L)
High Limit Line	200 – 239 mg/dL (5.1 – 6.1 mmol/L)
High	≥ 240 mg/dL (6.2 mmol/L)

Your healthcare provider will discuss values that are specifically appropriate for each patient. At least two cholesterol measurements on separate occasions should be taken before a medical decision is made, because a single reading may not be representative of a patient's usual cholesterol concentration. High cholesterol is just one risk factor for heart disease. There are many others. The desired cholesterol level is less than 200 mg/dL.

Source : *National Cholesterol Education Program. ATP III Guidelines At-A-Glance Quick Desk Reference. National Institutes of Health. National Heart, Lung, and Blood Institute. NIH Publication No.01-3305, May 2001.*

## Uric Acid Test

Uric acid readings provide results equivalent to blood plasma and are expressed in milligrams of uric acid per deciliter of blood (mg/dL) or micromoles of blood uric acid ( $\mu\text{mol/L}$ ).

Reverence Value:

Man	3.5 to 7.2 mg/dL (208 to 428 $\mu\text{mol/L}$ )
Woman	2.6 to 6 mg/dL (155 to 357 $\mu\text{mol/L}$ )

Source: *National Kidney Foundation (2014)*

**SOLUTION TO PROBLEM****Error Code**

<b>MESSAGE</b>	<b>UNDERSTANDING</b>	<b>WHAT TO DO</b>
E1	Failure to inflate due to incorrect timing or pressure, or a sudden drop in pressure.	Please check the cuff fitting, it is possible that the cuff is too loose or there is an air leak.
E2	Measurement time or pressure exceeds limit	The cuff is too tight or there is airway obstruction, please refer to the cuff installation instructions.
E3	Abnormalities in measuring results	-Subtle emotional changes occur before the doctor reads the results -Low wrist cuff position -Incorrect cuff placement -Moving or talking during measurement
E-b	Appears when the battery or power is too low	Immediately replace the battery or power source from type-C.
E-U	-Appears when a used/wet test strip is inserted -Appears when using a damaged/unrecognized product strip -Appears when the test strip is removed during the measurement process -Appears when a blood sample is inserted onto the test strip but the drop symbol has not yet blinked	Repeat the measurement with a new test strip.
E-t	Appears when the ambient temperature is above or below the system operating range.	Repeat the test after the device and test strip are within the operating temperature range.

## Troubleshooting – Blood Pressure Monitor Section

Read this manual. If you have followed the recommended actions but the problem persists, contact after-sales service.

Code	Symptom	Possible causes
"E 1"	The cuff failed to inflate because the inflation time exceeded 10 seconds and the pressure was still below 20 mmHg or the inflation time exceeded 60 seconds, or there was a sudden drop in pressure during the inflation process.	Cuff is too loose or there is air leakage, please check the cuff, then reinstall and measure again.
"E 2"	The measurement process time and blood pressure are very high	The cuff is too tight or there is a blockage in the airway, please check the cuff, then re-install and measure.
"E 3"	Blood pressure measured at different times varies.	<ul style="list-style-type: none"> <li>-Subtle emotional changes occur before the doctor reads the results, measure again after 4 to 5 minutes.</li> <li>-Low wrist cuff position</li> <li>-Incorrect cuff position</li> <li>-Cuff position too high</li> <li>-Moving or talking during measurement</li> </ul>
	Blood pressure differs from doctor's measurements	

## Troubleshooting – GCU Meter Section


Read this manual. If you have followed the recommended actions but the problem persists, contact after-sales service.

1. If the device does not display a message after pressing a button or inserting a test strip:











POSSIBLE CAUSES	WHAT TO DO
Battery Dead Battery installation error	Replace with New AAA Battery or check battery installation
test strip inserted upside down or incompletely	Insert the test strip with the contact rod end first and facing up.
Device or test strip is damaged	Please contact after sales service

2. If the device does not start measuring after applying the sample:

POSSIBLE CAUSES	WHAT TO DO
Insufficient blood sample	Repeat the test using a new test strip with sufficient blood sample volume (until the blood reaches the confirmation box)
Test strip is damaged	Repeat the test with a new test strip.
Sample applied after auto shutdown (2 minutes after last user action)	Repeat the test with a new strip Apply the sample only when “  ” appears on the display.

## SYMBOL INFORMATION

SYMBOL	REFERENCE
	Manufacturer
	Manual book
	Read the manual book
	Disposal of this equipment must be in accordance with local regulations.
	General warning
	Temperature Limit
	Humidity Limit
	In Vitro diagnostic



## CONNECTIVITY GUIDE

1	Scan the barcode on the packaging, then select download DiVi Lab APP	
2	Download the app for Android or iOS	
3	Tap Install, and wait until the process is complete.	
4	Open the <b>DiVi Lab APP</b> on your smartphone.	
5	Register / <b>Sign Up</b> , then log in.	
6	Turn on the <b>DiVi Lab Optima</b> device.	
7	Tap once on the product image, or go to <b>Settings</b> in the app. Ensure Bluetooth is turned <b>on</b> , then add the <b>DiVi Lab Optima</b> device. <b>(Bluetooth name: DiVi Lab Optima 4-in-1).</b>	
8	Tap on the product image to start measuring. In the <b>Measurement</b> menu, make sure the <b>DiVi Lab Optima</b> is connected. (indicated by a connected symbol).	
9	Start the measurement by pressing the <b>START/STOP</b> button on the DiVi Lab Optima.	
10	The result will be saved and automatically recorded in the Report menu.	
11	For a complete guide on how to use the app, please access the Help (?) menu.	

## PRODUCT SPECIFICATIONS

No	PARAMETER		SPECIFICATION
1	Product Name		DiVi Lab Optima 4 in 1 GCU-BP Meter
2	Dimension		153 mm x 94,5 mm x 65 mm (LxWxH)
3	Display		LCD 4Inch
4	Power Supply		<ul style="list-style-type: none"> <li>Battery AAA x4 or</li> <li>5V DC (type C connector)</li> </ul>
5	Storage / Transportation Condition		<ul style="list-style-type: none"> <li>Temperature: -20°C - 60°C</li> <li>Humidity: 10-93%</li> </ul>
6	Operating Condition		<ul style="list-style-type: none"> <li>Temperature: 4°C - 40°C</li> <li>Humidity: 10-90%</li> </ul>
7	Operating Altitude		Up to 2000 meters, for indoor use
8	BPM Range Measurement		Pressure: 0 – 299 mmHg (0-39.9 kPa) Pulse: 40 – 195 beats/min
9	BPM Accuracy		Pressure: ± 3%; Pulse: ± 5%
10	BPM Result		Systolic ; Diastolic ; Pulse; MAP
11	GCU Measurement Range	Blood Glucose Test	20 – 600 mg/dL (1.1 – 33.3 mmol/L)
		Cholesterol Test	100 – 400 mg/dL (2.59 – 10.35 mmol/L)
		Uric Acid Test	3 – 20 mg/dL (179 – 1190 µmol/L)
12	Measuring Time		Glucose: 5 sec; Cholesterol: 25 sec; Uric Acid: 10 sec
13	Blood Consumption		Glucose: 1µL; Cholesterol: 1.2µL; Uric Acid: 1.2µL
14	Unit Conversion		BPM: mmHg; kPa GCU: µmol/L; mmol /L; mg/dL
15	Hematocrit Range		20-70 %
16	Test Sample		Fresh Capillary Whole Blood
17	Memory		BPM: 100 Data; GLU: 500 Data; CHOL:250 Data; UA:250 Data
18	Features		<ul style="list-style-type: none"> <li>Arythmia detection, Average of 3x measurement</li> <li>Connectivity (Mobile app)</li> <li>Auto strip detection</li> <li>Auto measurement (No need strip code)</li> <li>Auto Power Off after 2 minutes no measurement</li> <li>Indonesian Voice</li> </ul>
19	Requirements		<ul style="list-style-type: none"> <li>SNI IEC 61010-1 : 2016</li> <li>SNI IEC 60601 – 1 : 2014</li> <li>SNI IEC 80601-2-30 : 2014</li> <li>Certificate of SDPPI</li> </ul>



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