

# پترو فرهان گستر جنوب



Tehran, Tehransar

DIGITAL ANEMOMETER





## Description

### 2.2 Button description

-  Button:  
Switch for meter powering on/off.
-  button  
Switch for turning on/off the backlight
- **HOLD** button  
Switch for reading retention mode.
- **FUNC** button  
It is used for switching among the functions of wind speed measurement, area setting and air volume measurement. Long press for three seconds to enable or disable "Auto Power-Off" function.
- **MAX/MIN** button  
Switch maximum/minimum/normal mode, long press to exit.
- **UNIT** button  
Switch unit, area (m<sup>2</sup>, ft<sup>2</sup>),  
Wind speed (m/s, km/h, mil/h, ft/m, ft/s, knots),  
Air volume (CMS, CMM, CFM).

### 2.3 Sign definition


	Indicates Auto Power-Off status
<b>HOLD</b>	Reading hold state
<b>VEL</b>	Wind speed measurement state
<b>FLOW</b>	Air volume measurement state
<b>AREA</b>	Area setting required by air volume

<b>SLOW</b>	The current wind speed less than 5m/s
<b>FAST</b>	The current wind speed greater than 5m/s
<b>MAX</b>	Displays maximum after entering maximum/minimum mode
<b>MIN</b>	Displays minimum after entering maximum/minimum mode
<b>m<sup>2</sup></b>	Indicates that the current area setting unit is square meter
<b>ft<sup>2</sup></b>	Indicates that the current area setting unit is square foot
<b>CMM</b>	Cubic meters per minute
<b>CMS</b>	Cubic meters per second
<b>CFM</b>	Cubic meters per minute
<b>knots</b>	Nautical miles per hour, 1850 meters per hour
<b>ft/s</b>	Feet per second
<b>ft/m</b>	Feet per minute
<b>m/s</b>	Meters per second
<b>Km/h</b>	Kilometers per hour
<b>mil/h</b>	Nautical miles per hour
	Low battery indicator

### 3. Specification

The meter should be recalibrated under the condition of 18°C ~ 28°C, relative humidity < 75% every year.

#### 3.1 General

- Work height: Maximum 2000m
- Work mode: Frequency of wind speed conversion
- Display: LCD
- Maximum show value: 9999
- Sampling time: About 0.4s/time.
- Low battery indicator:  sign displays on LCD.
- Work power: 1×9V 6F22 battery.
- Operation environment:
  - Relative humidity→ 0~85%RH, no moisture condensation
  - Temperature→ 0°C~40°C, no moisture condensation
- Detector (fan) operation environment:
  - Relative humidity→ 0~95%RH, no moisture condensation.
  - Temperature→ -20°C~80°C, no moisture condensation.

- Storage environment:
  - Relative humidity→ 0~80%RH, no moisture condensation
  - Temperature→ -10°C~50°C, no moisture condensation
- Dimension: Meter →165LX85 WX38Hmm.
- Weight: About 200g

#### 3.2 Technique data

Ambient temperature: 23±5°C, Relative humidity: <75%

##### 3.2.1 m/s

Measuring range	Resolution	Accuracy
0.80 ~ 30.00 m/s	0.01 m/s	±(2.0% reading + 50 characters)
30.00 ~ 40.00 m/s		For reference only

##### 3.2.2 km/h

Measuring range	Resolution	Accuracy
1.40~108.00 km/h	0.01km/h	±(2.0% reading + 50 characters)
108.0 ~ 144.0 km/h		For reference only

## Operating guidance

### 3.2.7 Air volume unit

CFM	0- 99990	(Area) 0 - 9.999 ft <sup>2</sup>
CMM	0- 99990	(Area) 0 - 9.999 m <sup>2</sup>
CMS	0 - 9999	(Area) 0 - 9.999 m <sup>2</sup>

## 4. Operating guidance

### 4.1 Power On/Off

Press the "⊙" key to turn on or off the anemometer power.

### 4.2 Reading hold

In the measurement process, if the reading should be kept, press "HOLD" key to lock the reading, and display the **HOLD** symbol; press it again to unlock.

#### Note

In the reading hold state, "FUNC", "MAX/MIN" and "UNIT" keys are invalid.

### 4.3 Backlight

In the measurement process, if the ambient light is too dark to read, you can press "☀" key to open the backlight. Backlight timer is set to 15 seconds. During this period, you can press "☀" key again to turn off backlight at any time.

## Specification

### 3.2.3 ft/s

1.30 ~ 98.50 ft/s	0.01 ft/s	±(2.0% reading + 50 characters)
98.50 ~ 131.20 ft/s		For reference only

### 3.2.4 knots

Measuring range	Resolution	Accuracy
0.80 ~ 58.30 knots	0.01 knots	±(2.0% reading + 50 characters)
58.30~77.70 knots		For reference only

### 3.2.5 mil/h

Measuring range	Resolution	Accuracy
0.90 ~ 67.20 mil/h	0.01mil/h	±(2.0% reading + 5 characters)
67.20~90.00 mil/h		For reference only

### 3.2.6 ft/m

Measuring range	Resolution	Accuracy
78 ~ 5900 ft/m	1ft/m	±(2.0% reading + 5 characters)
5900 ~ 7874 ft/m		For reference only

#### 4.5 Wind speed measurement

When using the meter to measure air volume, you can press "UNIT" key to select the measurement unit you required (m/s, km/h, mill/h, ft/m, ft/s, knots).

#### 4.6 Area setting

To measure air volume, you should first determine the area of air flue to be, area input steps are shown as following:

- ① Press "FUNC" key to make "AREA" display on the screen.
- ② Use the "MAX/MIN" and "UNIT" keys to adjust value and unit, after adjusting area unit (m<sup>2</sup>, ft<sup>2</sup>), then press "MAX/MIN" key. There should be an audible buzz, indicating that area input is completed and settings are saved.
- ③ To change the area setting, please repeat the step ②.

#### 4.7 Air volume measurement

Place the detector (fan) into the test environment. Use the "FUNC" key to set the meter to the Air volume measurement mode; the "FLOW" symbol should display on the screen.

Measurement is done with the fan surface perpendicular to the wind direction.

#### Note

- ◆ The luminous body of backlight is LED with large operating current. Frequently using backlight will shorten battery life. Do not use backlight when unnecessary.
- ◆ When the battery voltage  $\leq 7V$ , the "🔋" (low battery) symbol will show on the display. However, in the case of using the backlight, if the battery voltage  $\geq 7V$ , the battery voltage drops because of its larger operating current, "🔋" symbol may show (when "🔋" symbol is showing, the accuracy of the measurement can't be guaranteed). At this moment, you needn't replace battery until the "🔋" symbol display again under normal use condition without using backlight.

#### 4.4 Wind speed measurement

Place the detector (fan) into the test environment, "VEL" symbol will display on the screen, measurement is done with the fan surface perpendicularly to the wind direction.

#### Note

- ◆ If the detector (fan) is not aiming at the wind direction, which will bring the measurement error.
- ◆ For steady wind, the detector (fan) will get maximum reading when it is aiming at the wind direction.


**Note**

- ◆ If the detector (fan) is not aligned in the wind direction, the measurement can be skewed.
- ◆ For steady wind, the detector (fan) will get maximum reading when it is aiming at the wind direction.

**4.8 Air volume unit selection**

When using the meter to measure air volume, you can press the **"UNIT"** key to select the measurement unit your required (CMS, CMM, CFM).

**4.9 Replacing battery**

- ① If the  sign appears, this indicates that the battery should be replaced.
- ② Power off the meter and remove the battery cover.
- ③ Replace the old battery.
- ④ Install the battery cover properly.

**5. Attachments**

- |   |                  |                     |     |
|---|------------------|---------------------|-----|
| ① | Battery          | 9V, NEDA 1604, 6F22 | 1pc |
| ② | Packaging Bag    |                     | 1pc |
| ③ | Operation Manual |                     | 1pc |

 +982165565901

 +982144584619

 +989034119385

پتروفهان گستر جنوب

**FGJ-NDT . IR**

**DIGINDT . IR**