

# VGW-760 Wireless Digital Vacuum Gauge



# User Manual Wireless Digital Vacuum Gauge

Thank you for buying our brand new vacuum gauge. Please read this manual thoroughly before use and keep it with the gauge for further consultation.

#### 🛆 Warning!

- Please use the gauge in specified environment to avoid error or damage of the sensor.
- Please do not use chemical solvent or corrosive liquid to clean the gauge.
- Please do not disassemble the gauge.
- Remove the batteries if the gauge is not to be used for a long time in case the leakage corrodes the gauge. The batteries included are not rechargeable. Please do not charge them.
- Please use a special tool to install or disassemble it. Do not strongly rotate the shell in case it is damaged.



#### **Overview**

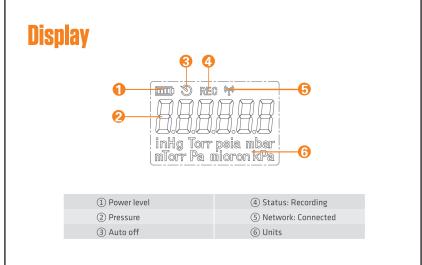
VGW-760 digital vacuum gauge features a professional vacuum sensor to precisely obtain vacuum measurements in the HVAC/R system and avoid compact on the system due to insufficient evacuation. The gauge can monitor the system in real time, test system leak and discern vacuum pump quality.

#### **Features**

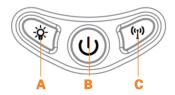
- View data on mobile app.
- Record data and generate report.
- Data analysis in graphs.
- Settable high/low pressure alarms.
- Protection grade IP65.

## **SPECIFICATIONS**

Measuring range	1- 19000 microns		
Resolution	1-400 microns	1 micron	
	400-3000 microns	10 microns	
	3000 <b>-</b> 10000 microns	100 microns	
	10000-19000 microns	250 microns	
Accuracy	1-10000 microns ±10% of Reading ± 10microns		
	10000-19000microns ±20% of Reading		
Power supply	3 AA batteries		
Time in use	120H		
Units	inHg, Torr, psia, mbar, mTorr, Pa, micron, kPa		
Operating temperature	0°F ~ 140°F (-17.8°C ~ 60°C)		
Wireless transmission distance	30m		
Offline records	9943 readings		
Fitting	1/4" SAE Male Flare		
Product size	127*74*37mm		
Max overpressure	27.5 bar		



#### **Buttons**



Press and release	A: Backlight	B: On/Off	C: Wireless connection
Press and hold	A: Switch units	/	C: Record
Press both	A+B: Enable /Disable Auto off		

## Operation

- Before connecting the gauge to a system, press power button to turn it on. Then it enters normal display.
- 2) After power on, the gauge will display "-----" if the current pressure goes above its measuring range. Data do not show until the measured pressure is within the range.

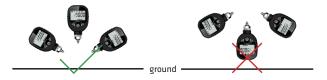
Note: Keep the pressure below 27.5bar, otherwise the sensor may be damaged.

- Make sure the connection type of the access system matches with the gauge fittings. If not, please use the included adapter.
- 4) Press and release X to turn on backlight. The backlight will be auto off two minutes later. Press in two minutes to turn off backlight directly.
- 5) Press and hold  $-\dot{\mathbf{Q}}$  to switch measurement units.
- 6) Press and release (P) to enable wireless connection. Press it again to disable wireless connection.
- 7) Press and hold <sup>(II)</sup> until "REC" appears in the screen to enable record function. Press and hold again to disable this function.
- 8) Press and release  $\oplus$  to turn off the gauge. Please use special tools to remove it.

Note: Please do not close the vacuum pump before removing the vacuum gauge from the system, or high pressure may occur in the system so that impurities will enter the sensor cavity.

# **Precautions for Product Instructions**

- 🥺 1. Before using the vacuum gauge, please check whether there is any oil stain on the joint.
- 2. Please keep the connector of the product downward and vertical to connect to the system as much as possible.



- 3. The product should be connected to the system as far as possible away from the vacuum pump.
- **0**4. Before turning off the vacuum pump, close the valve to isolate the pump from the system.

# **Battery indicator :**

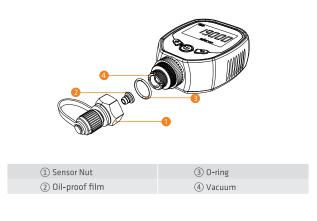
The battery power is indicated in segments, which reduce with power consumption until the frame of flashes. Hence the LCD will display unstably.

Please change batteries before the screen indicates unstably in case error message affects the normal use of the gauge.

## **Precautions**

- Try to avoid using the product in contact with oil, so as not to affect the accuracy of vacuum measurement.
- 2. This product adopts oil-proof treatment makes a slow response time. Pay special attention to it when the measuring the vacuum degree with below 5pa, it is necessary to read the actual vacuum value after the data is stable (it is stable when the vacuum value does not change within 2 minutes) or follow the instructions for replacing the oil-proof film. Remove the oil-proof film before performing vacuum measurement.

#### Maintenance

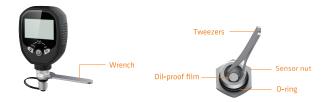


The filter cotton is used in the vacuum chamber to filter impurities and reduce sensor pollution. In order to maintain the best measurement accuracy, normal use needs to be checked every three months (adjust the inspection period according to the frequency of use). If the filter is seriously polluted, it needs to be replaced.

# Instructions for replacing the oil-proof film

Follow the steps below:

- 1. Turn the gauge off.
- 2. Unscrew the sensor nut with a wrench, and remove the oil-proof film with tweezers.
- 3. If there is contamination, please replace the oil-proof film.
- Check whether the O-ring is in good condition. Replace if damaged. Lubricate the O-ring with vacuum oil before replacing.
- 5. Put the oil-proof film into the hole of the sensor nut, press hard with a flat object, do not use sharp objects to avoid damaging the oil-proof film, and tighten the nut with a wrench after the installation and fastening.



# **Sensor Cleaning Instructions**

If the vacuum sensor inside the cavity is contaminated, follow the methods below to clean it:

- Inject acetone or alcohol (>70%) into the vacuum cavity with a dropper or a syringe. Tighten the nut and gently shake the gauge.
- 2. Loosen the nut and drain the fluid from the cavity. Repeat such operation 3 to 4 times.
- 3. Evacuate it or place it for 3 hours until the sensor gets dry.

## **Use the APP**

Turn on the gauge and enable wireless connection, open "Elitech Tools" and click "Search nearby Device". After the device name appears, click the product icon and enter the operation interface after the connection is successful.

Note :1) Multiple devices can be added for viewing simultaneously.

2) The Bluetooth icon on the product screen is always on when the product is successfully connected to the APP.

## **APP QR Code**







Scan the QR code to download APP

#### **Package contents**

VGW-760 Wireless vacuum gauge	x 1
AA alkaline batteries	х З
User Manual	x 1
Three-way connection	x 1
Bent adapter	x 1
0-ring	x 2
Oil-proof film	х З



