

Elitech VGW-mini+ad

Elitech VGW-Mini Wireless Digital Vacuum Gauge Instruction Manual

Model: VGW-mini+ad

1. INTRODUCTION

The Elitech VGW-Mini is a compact and versatile wireless digital vacuum gauge designed for HVAC and refrigeration systems. It provides accurate vacuum measurements, features app connectivity for monitoring and data management, and includes an adaptor for convenient use. This manual provides essential information for the proper setup, operation, maintenance, and troubleshooting of your device.

Mini

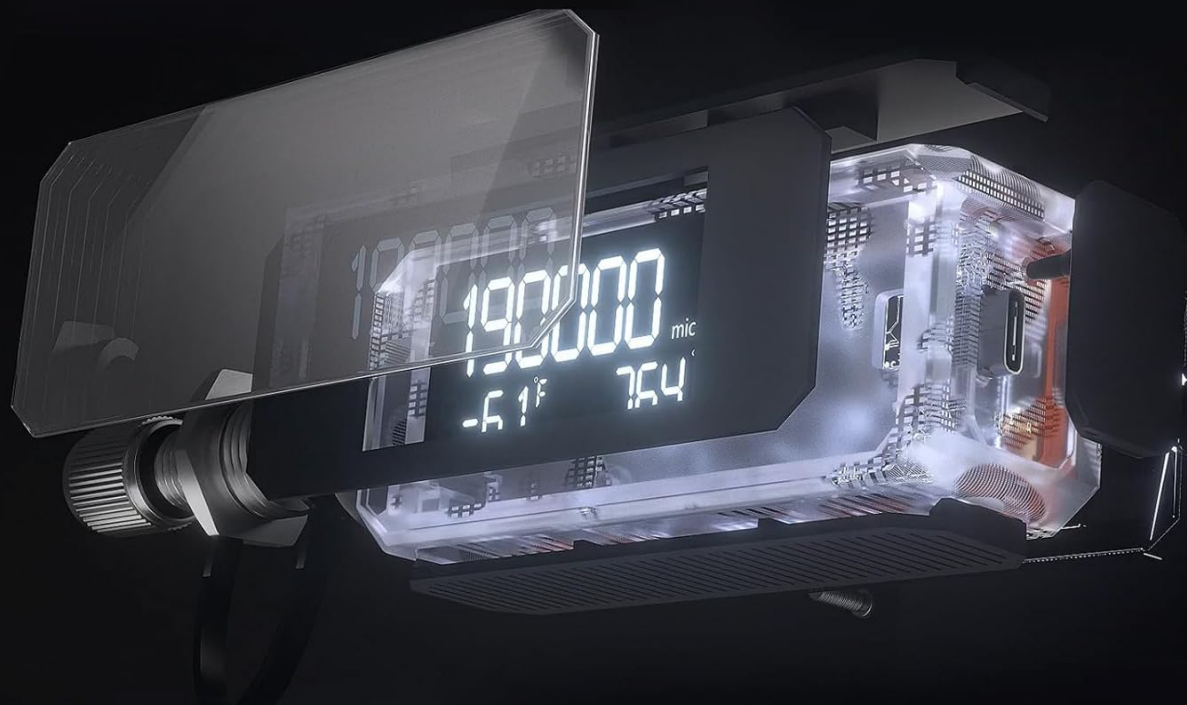
Easy Use for
Narrow Spaces

5460 Points

Off-line Record

OTA

Keep Upgraded
with App



19000 Micron
Maximum measurable range

Image 1: Elitech VGW-Mini Wireless Digital Vacuum Gauge with included adapter.

2. SETUP

2.1 Unboxing and Initial Inspection

Carefully remove all components from the packaging. Verify that the following items are present:

- Elitech VGW-Mini Digital Vacuum Gauge
- Adaptor (1/4" SAE)
- USB Charging Cable (not explicitly listed but implied by 'rechargeable')
- User Manual

2.2 Battery Installation and Charging

The VGW-Mini requires 1 Lithium Ion battery (included). Ensure the battery is properly installed. For charging, connect the device using a standard USB cable. The device is rechargeable.

USB CHARGE & RECHARGE

Elitech[®]
Innovation Preceding All



Image 2: Elitech VGW-Mini connected via USB for charging, illustrating its compact dimensions.

2.3 Connecting the Adaptor

Attach the provided 1/4" SAE adaptor to the vacuum gauge. Ensure it is securely fastened to prevent leaks during operation.

2.4 Elitech Tools App Installation

Download the Elitech Tools App from your device's app store (iOS and Android compatible). This integrated app allows for remote monitoring, data recording, and management of Elitech tools.

APP Monitoring, Data Export



Download on the
App Store



GET IT ON
Google play

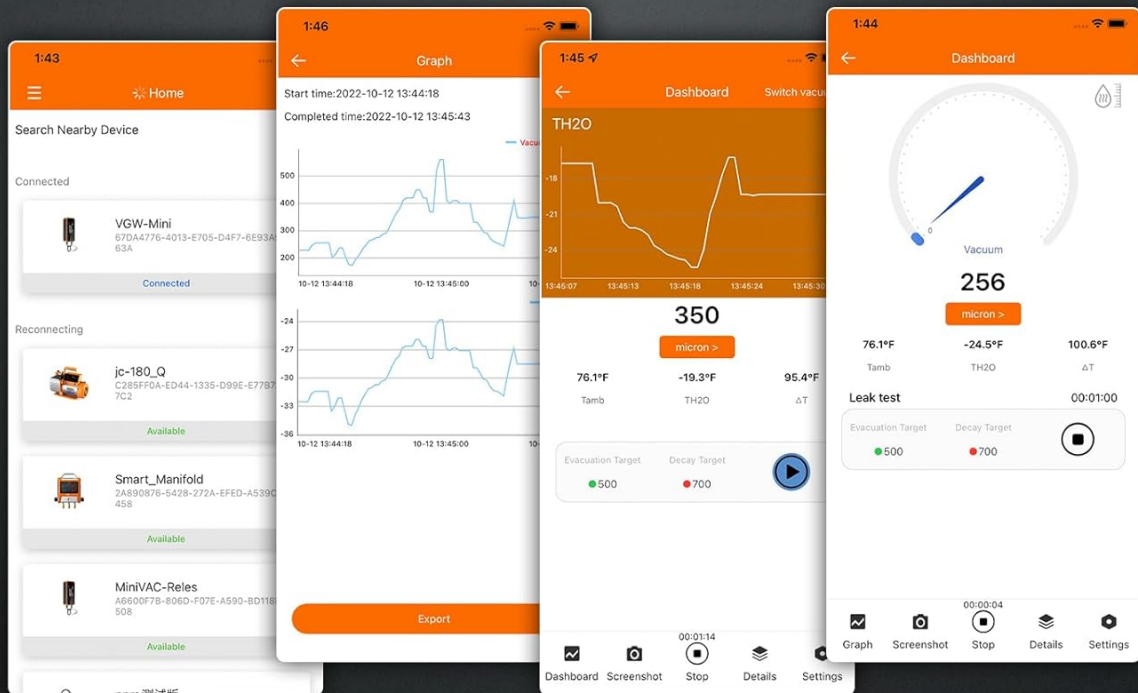


Image 3: The Elitech Tools App interface demonstrating monitoring capabilities and data export functions.

3. OPERATING INSTRUCTIONS

3.1 Power On/Off and Display

Press the power button to turn the device on or off. The large, full-view LCD screen provides a continual digital readout of the evacuation process. The device supports multiple units of measurement.

Small But Out of Ordinary



Support
Elitech Tools App



OTA
Upgrade



Off-line
Record



Larger VA Entire Angel of
View Display



Image 4: Elitech VGW-Mini showcasing its key features including app support, OTA upgrades, offline recording, and a large display.

3.2 Vacuum Measurement

Connect the VGW-Mini to the HVAC or refrigeration system using the 1/4" SAE adaptor. The gauge measures vacuum from 19,000 Microns (atmosphere) down to 0 Micron with an accuracy of $\pm 10\%$ or ± 10 Micron.

3.3 H2O Status Judgment

The vacuum meter automatically assesses the physical state of H2O by comparing the ambient temperature with the water saturation temperature corresponding to the system's vacuum level.

Judgement of H₂O Status

6 1000 microns
39.2°F T_{H₂O} 76.4°F T_{amb}

Image 5: The VGW-Mini's display indicating H₂O status judgment based on temperature and vacuum readings.

3.4 App Connectivity and Data Management

Pair the VGW-Mini with the Elitech Tools App via Bluetooth. The app allows you to:

- Monitor real-time vacuum readings.
- Set target values and receive notifications when readings exceed them.
- Record data offline (up to 5460 points) and export it in Excel and PDF formats.
- Manage other Elitech tools from a single interface.



Image 6: The Elitech VGW-Mini connected to the mobile app, displaying a vacuum graph and detailed data.

4. MAINTENANCE

4.1 Sensor Cleaning

Regular cleaning of the sensor is crucial for maintaining accurate readings. Oil or contaminants can impact accuracy. Refer to the manufacturer's guidelines for specific cleaning procedures. Generally, this involves carefully removing any debris and cleaning with an appropriate solvent like denatured alcohol, ensuring the sensor is completely dry before reassembly.

4.2 Oil Proof Film

The product includes an oil proof film inside its head. If directly connecting to a vacuum pump, this film may cause a delayed numerical display. It is suggested to remove the oil film when connecting to the vacuum pump and reinstall it when connecting to the system to prevent oil contamination.

4.3 Battery Care

To prolong battery life, charge the device regularly and avoid fully discharging it. Store the device in a cool, dry place when not in use.

5. TROUBLESHOOTING

5.1 Delayed Numerical Display

If you experience a delayed numerical display when connected directly to a vacuum pump, consider temporarily removing the internal oil proof film as described in Section 4.2. Reinstall the film when connecting to the system.

5.2 Inaccurate Readings

Inaccurate readings can often be attributed to a contaminated sensor. Perform a thorough sensor cleaning as outlined in Section 4.1. Ensure all connections are tight and leak-free.

5.3 App Connectivity Issues

Ensure Bluetooth is enabled on your mobile device and the VGW-Mini is within range. Restart both the device and the app if connection problems persist. Verify that the Elitech Tools App is updated to the latest version.

6. SPECIFICATIONS



Weight



0.44lb

- Measuring Range: 0-19000 microns
- Operating Temperature:
-4°F~140°F (-20°C-60°C)
- Interface: 1/4 SAE
- Accuracy: ±10%
- Resolution:
0-400 1 Micron
400-3000 10 Micron
3000-10000 100 Micron
10000-19000 250 Micron

Image 7: Detailed technical specifications and physical attributes of the Elitech VGW-Mini.

Feature	Specification
Manufacturer	Elitech
Part Number	VGW-mini+ad
Item Weight	209 g (0.44 lb)
Product Dimensions	12.45 x 3.56 x 2.79 cm (4.9 x 1.4 x 1.1 inches)
Batteries	1 Lithium Ion battery (included)
Material	Plastic
Measurement Accuracy	±10% or ±10 Micron
Measurement Range	0-19000 Microns

Feature	Specification
Interface	1/4" SAE
Resolution	0-400 Micron: 1 Micron 400-3000 Micron: 10 Micron 3000-10000 Micron: 100 Micron 10000-19000 Micron: 250 Micron

7. WARRANTY AND SUPPORT

For warranty information and technical support, please refer to the official Elitech website or contact Elitech customer service directly. The Elitech Tools App may also provide access to support resources and firmware updates (OTA Upgrade).