VVV-Group AM-288

Digital Hot Wire Anemometer AM-288 User Manual

Model: AM-288 | Brand: VVV-Group

1. Introduction

The VVV-Group AM-288 Digital Hot Wire Anemometer is a precision instrument designed for accurate measurement of wind speed, airflow (CFM/CMM), and air temperature. Utilizing advanced hot wire sensor technology, it provides rapid and reliable data, making it an essential tool for HVAC professionals, industrial applications, ventilation system analysis, and environmental monitoring.

Image: The VVV-Group AM-288 Digital Hot Wire Anemometer, showing the main unit and the flexible, extendable hot wire probe.

Its intuitive design, backlit LCD, and versatile measurement units ensure ease of use and readability in various environments. The telescopic probe allows for measurements in hard-to-reach areas, providing comprehensive data for system optimization and diagnostics.

2. Key Features

- **Accurate Wind Speed Measurement:** Measures wind speed from 0.0 to 30 m/s (0.0-108 km/h, 0.0-67 mph) with high precision.
- **CFM/CMM Airflow Calculation:** Easily switch between Cubic Feet per Minute (CFM) and Cubic Meters per Minute (CMM) for air volume measurement.
- **Wide Temperature Measurement Range:** Built-in sensor measures air temperature from 0°C to 45°C (32°F to 113°F).
- **Intuitive LCD with Backlight:** Bright display provides real-time readings and ensures visibility in low-light conditions.

- **Multiple Wind Speed Units:** Supports m/s, km/h, ft/min, knots, and mph for adaptable use.
- **Advanced Hot Wire Sensor Technology:** Ensures rapid response to air velocity changes for precise airflow measurement.
- **Max/Min & Data Hold Functions:** Stores maximum and minimum readings and allows for data hold for easy reference.
- **PC Connection:** Connects via USB for data export and detailed airflow analysis with included software.
- **Lightweight & Portable:** Compact and ergonomic design for easy handling and field inspections.
- **Bendable Telescopic Probe:** Extends up to 2 meters, suitable for hard-to-reach areas.

Image: The AM-288 anemometer highlighting its core functions: wind speed measurement, air temperature monitoring, and air volume calculation.

3. Setup

3.1 Unpacking and Inspection

Carefully unpack the AM-288 Anemometer and all its components. Verify that all items listed below are present and undamaged. If any items are missing or damaged, please contact VVV-Group customer support immediately.

- AM-288 Hot Wire Anemometer Main Unit
- Telescopic Hot Wire Probe
- USB Computer Cable
- Instruction Manual (this document)
- PP Box (Carrying Case)
- 2 x AAA Batteries (pre-installed or included separately)

Image: All components included in the AM-288 Anemometer package, neatly arranged in its protective carrying case.

3.2 Battery Installation

The AM-288 Anemometer requires 2 AAA batteries. These are typically included. To install or replace batteries:

1. Locate the battery compartment on the back of the main unit.
2. Open the battery cover by sliding it down or unscrewing it, depending on the model.

3. Insert the 2 AAA batteries, ensuring correct polarity (+ and -) as indicated inside the compartment.
4. Close the battery cover securely.

3.3 Probe Connection

Connect the telescopic hot wire probe to the main unit:

1. Align the connector of the probe cable with the port on the top of the main unit.
2. Gently push the connector into the port until it clicks into place, ensuring a secure connection.
3. To disconnect, grasp the connector firmly and pull it straight out. Do not pull on the cable itself.

Image: A detailed view of the AM-288's high-sensitive hot wire probe, illustrating its flexible and extendable nature for reaching confined spaces.

4. Operating Instructions

4.1 Power On/Off

- To power on the device, press the **POWER** button (usually red, centrally located).
- To power off, press and hold the **POWER** button until the display turns off.

4.2 Display Overview

The large LCD provides clear readings. It features a backlight for visibility in dark environments.

Image: The backlit LCD screen of the AM-288, displaying wind speed, temperature, and various unit indicators for clear readability.

- **VEL:** Displays wind velocity.
- **FLOW:** Displays airflow volume (CFM/CMM).
- **Temperature:** Displays air temperature in °C or °F.
- **Indicators:** MAX, MIN, REC (Record), HOLD, USB, Battery level.

4.3 Unit Selection

To change the wind speed units (m/s, km/h, ft/min, knots, mph):

- Press the **UNIT** button to cycle through the available wind speed units.

To change the temperature units (°C or °F):

- Press the **°C/°F** button to toggle between Celsius and Fahrenheit.

Image: The AM-288's display indicating support for various wind speed units (m/s, km/h, ft/min, knots, mph) and the ability to switch between CFM and CMM for airflow calculation.

4.4 CFM/CMM Airflow Calculation

To measure air volume:

1. Press the **VEL/FLOW** button to switch to airflow measurement mode.
2. Press the **AREA/SAMPLE** button to set the area of the duct or vent. Refer to the on-screen prompts or manual for entering dimensions.
3. The display will show the airflow in CFM or CMM based on your unit selection.

4.5 Max/Min & Data Hold Functions

- **MAX/MIN:** Press the **MAX/MIN** button to view the maximum or minimum recorded values during a measurement

session. Press again to cycle.

- **HOLD:** Press the **HOLD** button to freeze the current reading on the display. Press again to release. This is useful for taking readings in difficult-to-view locations.

4.6 PC Connection and Data Export

The AM-288 can connect to a computer via USB for data logging and analysis.

1. Install the provided software on your Windows 7/XP/10 computer.
2. Connect the main unit to your computer using the supplied USB cable.
3. Launch the software to access real-time data, export readings, and generate reports. The device can store up to 960 data sets.

Image: The AM-288 anemometer connected to a laptop, demonstrating its PC connectivity for data export and detailed airflow analysis using dedicated software.

5. Maintenance

5.1 Cleaning

- Wipe the main unit and probe with a soft, dry cloth.
- Do not use abrasive cleaners, solvents, or immerse the device in water.
- Keep the hot wire sensor on the probe clean and free from dust or debris to ensure accurate readings.

5.2 Storage

- When not in use, store the anemometer and probe in its protective PP box.
- Store in a cool, dry place, away from direct sunlight and extreme temperatures.
- Remove batteries if the device will not be used for an extended period to prevent leakage.

5.3 Battery Care

- Replace batteries when the low battery indicator appears on the display.
- Dispose of used batteries according to local regulations.

6. Troubleshooting

Problem	Possible Cause	Solution
Device does not power on.	Low or dead batteries; incorrect battery installation.	Replace batteries with new ones, ensuring correct polarity.
Inaccurate readings.	Dirty hot wire sensor; probe not fully extended or positioned incorrectly; environmental interference.	Clean the sensor carefully. Ensure the probe is fully extended and positioned correctly in the airflow. Minimize external drafts.
Display is dim or flickering.	Low battery level.	Replace batteries.
Cannot connect to PC.	USB cable not connected properly; software not installed or running; driver issues.	Ensure USB cable is securely connected. Verify software installation and run as administrator. Check device manager for driver issues.
Probe not responding.	Probe not securely connected; damaged probe.	Ensure probe is fully inserted. If problem persists, contact customer support for probe replacement.

7. Specifications

Parameter	Value
Wind Speed Range	0.0 - 30 m/s (0.0-108 km/h, 0.0-67 mph)
Wind Speed Accuracy	±3%
Wind Speed Resolution	0.01 m/s
Air Temperature Range	0°C to 45°C (32°F to 113°F)
Air Temperature Accuracy	±1°C (1.8°F)

Parameter	Value
Air Temperature Resolution	0.1°C/°F
Wind Flow Range (CFM)	0 - 999900 ft^3/min
Wind Flow Range (CMM)	0 - 999900 m^3/min
Data Storage	Up to 960 data sets
PC Connection	USB (Windows 7/XP/10 compatible software)
Power Supply	2 x AAA Batteries (included)
Product Dimensions	7.64 x 2.87 x 1.5 inches
Item Weight	8.47 ounces (240 Grams)
Material	Plastic
Manufacturer	VVV-Group

Image: The AM-288 anemometer's display showing its professional accuracy specifications, including wind speed range, air temperature range, and accuracy percentages.

8. Warranty and Support

For warranty information, technical support, or service inquiries regarding your VVV-Group AM-288 Digital Hot Wire Anemometer, please contact VVV-Group customer support directly. Refer to the contact information provided with your product packaging or visit the official VVV-Group website.

VVV-Group is committed to providing high-quality precision measurement instruments and dedicated customer service. You can visit the VVV-Group Store for more information:VVV-Group Amazon Store