TOPTES TS-301

TOPTES TS-301 Digital Anemometer Instruction Manual

Model: TS-301 | Brand: TOPTES

1. Introduction

The TOPTES TS-301 Digital Anemometer is a versatile instrument designed for accurate measurement of wind speed, temperature, and relative humidity. This device is suitable for a variety of applications, including outdoor activities like sailing, drone flying, and golf, as well as indoor environmental assessments such as HVAC system analysis.

2. What's in the Box

- 1x TS-301 Digital Anemometer
- 1x User Manual
- 1x Storage Bag
- 3x AAA Batteries

Image: The TOPTES TS-301 Digital Anemometer, user manual, storage bag, and three AAA batteries as packaged.

3. Key Features

- **2.26-inch LCD Backlit Screen:** Provides clear and easy-to-read measurements in various lighting conditions.
- **Multiple Measuring Units:** Measures wind velocity in m/s, km/h, ft/s, ft/m, knots, and mph.
- **Temperature and Humidity Sensor:** Equipped to measure wind temperature (-4.0°F to 140.0°F) and relative humidity (0.0%~99.9%RH).
- **MAX/MIN/AVG Modes:** Allows for tracking maximum, minimum, and average wind speed readings.
- **Data Hold Function:** Temporarily freezes the current display reading for convenient recording.
- **Auto Power-off:** Automatically shuts down after 10 minutes of inactivity to conserve battery life.
- **Lightweight and Portable:** Compact design for easy one-handed operation and pocket storage.

4. Setup

4.1 Battery Installation

1. Locate the battery compartment on the back of the anemometer.
2. Open the battery cover.
3. Insert three (3) AAA batteries, ensuring correct polarity (+/-).
4. Close the battery cover securely.

Image: The TOPTES TS-301 Digital Anemometer, showing its front display and fan.

5. Operating Instructions

5.1 Power On/Off

Press the **Power** button ( ) to turn the device on. To turn it off, press and hold the **Power** button. The device will automatically power off after 10 minutes of inactivity.

5.2 Backlight Display

Long press the **Backlight/Hold** button ( ) for 2 seconds to activate the backlight. Long press again to turn it off.

5.3 Data Hold Function

Short press the **Backlight/Hold** button ( ) to freeze the current reading on the display. Press again to release the hold function.

5.4 Wind Speed Unit Selection

Press the **UNIT** button to cycle through the available wind speed units: meters per second (m/s), kilometers per hour (km/h), feet per second (ft/s), feet per minute (ft/m), knots, and miles per hour (mph).

5.5 Temperature Unit Selection

Press the **°C/°F** button to switch the temperature display between Celsius (°C) and Fahrenheit (°F).

5.6 MAX/MIN/AVG Modes

Press the **MAX/MIN** button to view the maximum, minimum, or average wind speed recorded since the device was powered on or the mode was reset. Cycle through the modes by repeatedly pressing the button.

Image: The anemometer's display showing various measurements and button functions.

Video: A demonstration of the TOPTES TS-301 Anemometer Wind Speed Meter's features and operation.

6. Applications

The TOPTES TS-301 is designed for diverse applications:

- **Outdoor Activities:** Ideal for sailing, windsurfing, drone flying, kite flying, boating, frisbee, golf, and shooting to assess local weather conditions and wind impact.
- **Indoor Airflow Assessment:** Useful for HVAC systems, vents, dust collectors, and heat registers to measure air velocity and ensure proper functioning.
- **Environmental Monitoring:** Provides accurate temperature and humidity readings for various settings.

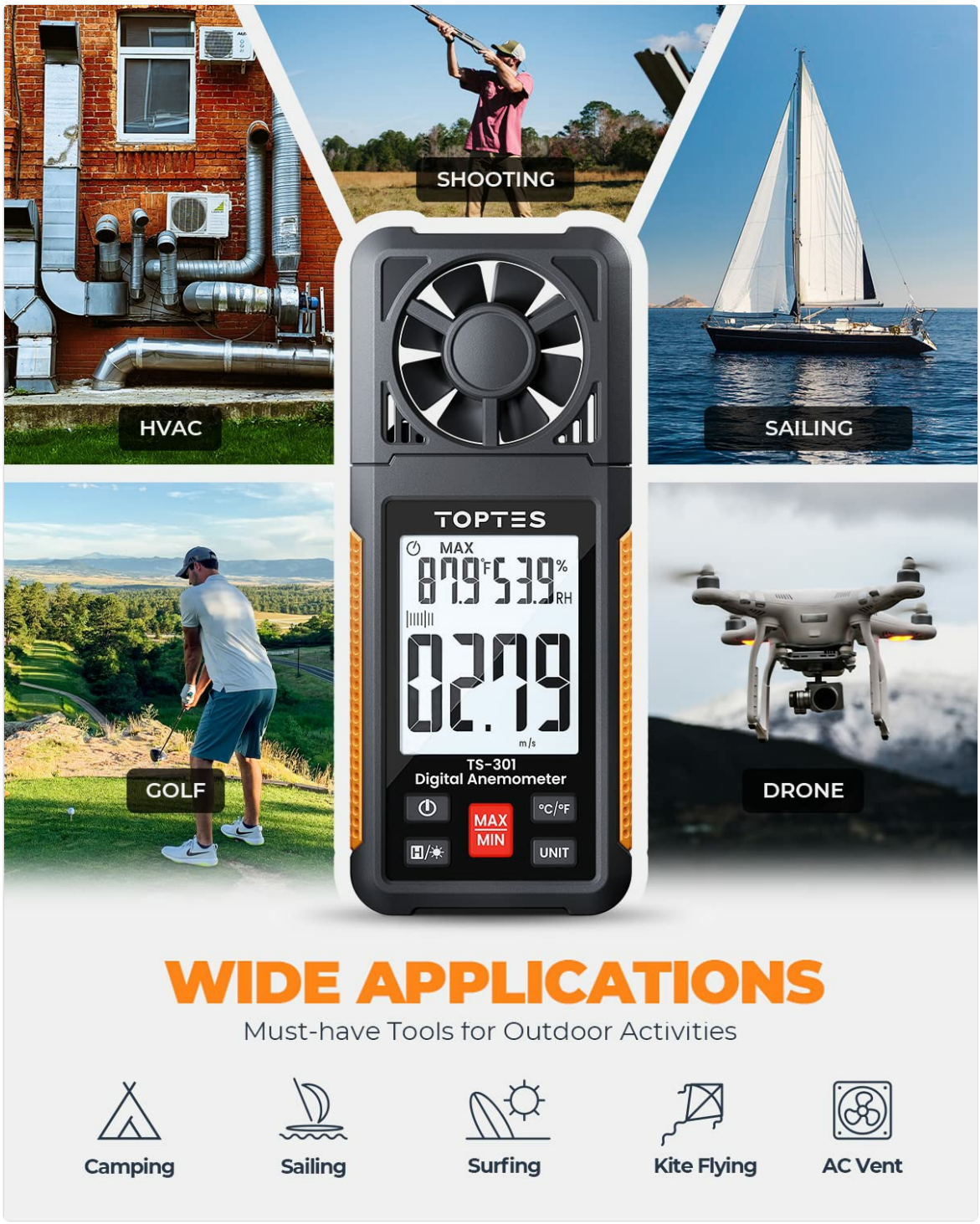


Image: The anemometer being used in diverse settings such as HVAC, shooting, sailing, golf, and drone operation.

7. Maintenance

- Keep the device clean and dry. Use a soft, damp cloth for cleaning; avoid abrasive cleaners.
- Ensure the fan blades are free from obstructions to maintain accurate readings.
- Remove batteries if the device will not be used for an extended period to prevent leakage.
- Store the anemometer in its included storage bag to protect it from dust and damage.

8. Troubleshooting

- **No Display/Device Not Turning On:** Check if the AAA batteries are correctly installed and have

sufficient charge. Replace if necessary.

- **Inaccurate Wind Speed Readings:** Ensure the fan is rotating freely and is not obstructed. Verify that the device is positioned correctly into the airflow.
- **Inaccurate Temperature/Humidity Readings:** Allow at least 30 minutes for the sensors to adjust to a new environment for stable readings.
- **Display Not Responding:** Try removing and reinserting the batteries to perform a soft reset.

9. Specifications

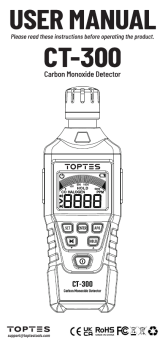
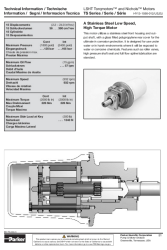
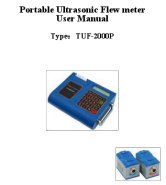
Feature	Specification
Model Number	TS-301
Wind Speed Measuring Range	1.5 to 67 mph (2.5 to 108 km/h)
Temperature Measuring Range	-4.0°F to 140.0°F (-20°C to 60°C)
Relative Humidity Measuring Range	0.0%~99.9%RH
Display	2.26-inch LCD with Backlight
Power Source	3x AAA Batteries (included)
Auto Power-off	10 minutes of inactivity
Material	Acrylonitrile Butadiene Styrene (ABS)
Item Weight	135 Grams (4.76 ounces)

10. Warranty and Support

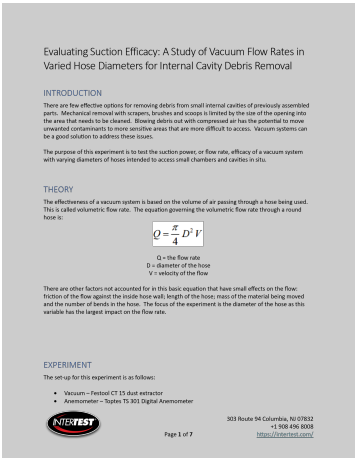
For warranty information, technical support, or any inquiries regarding your TOPTES TS-301 Digital Anemometer, please refer to the contact details provided in the included User Manual or visit the official TOPTES website.

Related Documents - TS-301

	Calibration Certificate for TOPTES Guard-101 Gas Detector This document is a calibration certificate issued by Guangdong Jingheng Detection Technology Co., Ltd. for the TOPTES Guard-101 gas detector. It details the calibration results, standards used, and environmental conditions for various gas measurements including Hydrogen Sulfide, Combustible Gas, Carbon Monoxide, and Oxygen.

	[TopTes CT-300 Carbon Monoxide Detector User Manual] Comprehensive user manual for the TopTes CT-300 Carbon Monoxide Detector, covering specifications, operation, safety, maintenance, and information on carbon monoxide. Learn how to use and care for your CO detector.
	[Parker LSHT Torqmotors TS Series: Stainless Steel Low Speed, High Torque Hydraulic Motors] Technical overview, specifications, and ordering guide for Parker Hannifin's LSHT Torqmotors TS Series hydraulic motors. Features stainless steel construction for harsh environments, offering high torque at low speeds.
	[TUF-2000P Portable Ultrasonic Flow Meter User Manual] Comprehensive user manual for the TUF-2000P Portable Ultrasonic Flow Meter, detailing its features, principle of measurement, installation, operation, and troubleshooting. Learn about its high accuracy, non-contacting measurement, and wide application range.
	[MAC Medical TS-Series Warming Cabinets: Installation, Operation, and Maintenance Guide] Comprehensive instruction manual for MAC Medical TS-Series Warming Cabinets, covering installation, operation, maintenance, safety guidelines, and technical specifications. Essential guide for healthcare facilities.
	[R&S TS7124M RF Shielded Box User Manual] Comprehensive user manual for the Rohde & Schwarz R&S TS7124M RF Shielded Box, detailing its features, setup, configuration, accessories, and maintenance for reliable RF interface performance testing.

Documents - TOPTES – TS-301



Evaluating Suction Efficacy: A Study of Vacuum Flow Rates in Varied Hose Diameters for Internal Cavity Debris Removal

INTRODUCTION

There are few effective options for removing debris from small internal cavities of previously assembled parts. Mechanical removal with scrapers, brushes and scoops is limited by the size of the opening into the area that needs to be cleared. Blowing debris out with compressed air has the potential to move unwanted contaminants to more sensitive areas that are more difficult to access. Vacuum systems can be a good solution to address these issues.

The purpose of this experiment is to test the suction power, or flow rate, efficacy of a vacuum system with varying diameters of hoses intended to access small chambers and cavities in situ.

THEORY

The effectiveness of a vacuum system is based on the volume of air passing through a hose being used. This is called volumetric flow rate. The equation governing the volumetric flow rate through a round hose is:

$$Q = \frac{\pi}{4} D^2 V$$

Q = the flow rate
D = diameter of the hose
V = velocity of the flow

There are other factors not accounted for in this basic equation that have small effects on the flow: friction of the flow against the inside hose wall; length of the hose; mass of the material being moved and the number of bends in the hose. The focus of the experiment is the diameter of the hose as this variable has the largest impact on the flow rate.

EXPERIMENT

The set-up for this experiment is as follows:

- Vacuum – Festool CT 15 dust extractor
- Anemometer – Toptes TS 301 Digital Anemometer

INTERTEST

303 Route 94 Columbia, NJ 07832
+1 908 496 8068
https://intertest.com/

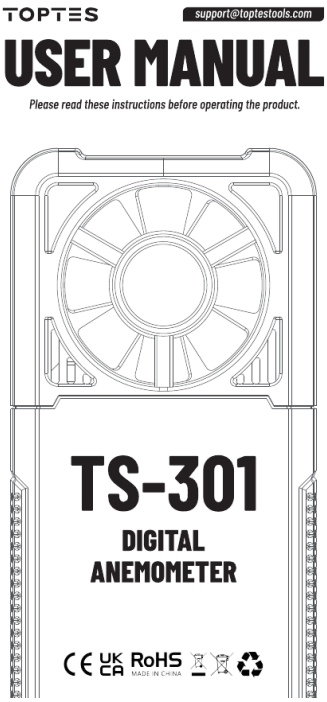
Page 1 of 7

[pdf]

Jim Allen Suction Efficacy Experiment Vacuum Flow Rates in Varied Hose Diameters for FOD RemovaliGrab™ Articulating FOSAR 1 2 Diameter ToolVacuum Rate Lab Report 6 28 24cdn shopify s files 0614 5212 4394 24 v 1719586981 |||

Evaluating Suction Efficacy: A Study of Vacuum Flow Rates in Varied Hose Diameters for Internal Cavity Debris Removal INTRODUCTION There are few effective options for removing debris from small internal cavities of previously assembled parts. Mechanical removal with scrapers, brushes and scoops is l...

lang:en score:11 filesize: 486.71 K page_count: 7 document date: 2024-06-28



[pdf]

TS 301 6 TopTes 301 Handheld Digital AnemometerThe is a reliable and efficient handheld digital anemometer with an easy to read 2 26 inch LCD screen It ideal for home weather tracking B1pSV429oELm media amazon images I B1pSV429oEL ref dp product quick view |||

...

lang:en score:9 filesize: 3.18 M page_count: 16 document date: 2025-06-19