



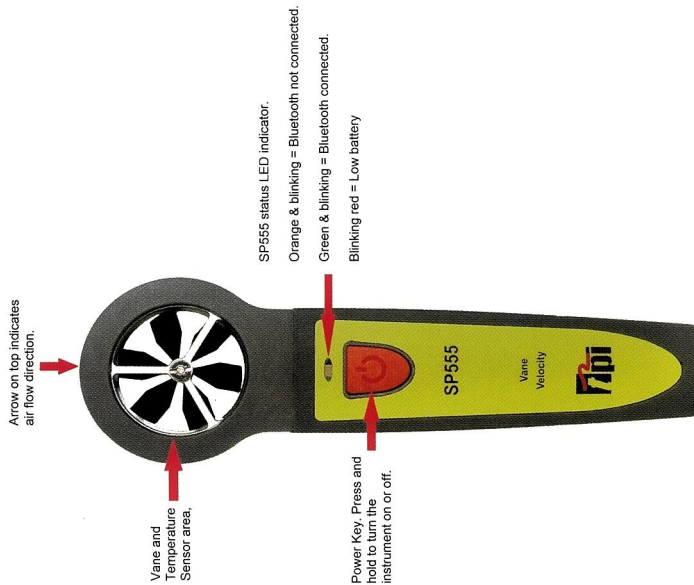
SP555 Smart Air Velocity Probe Instruction Manual



Scan to download
the TPI View app:

Description & Overview

The TPI SP555 Smart Vane Air Velocity Probe is used to measure air velocity, temperature, and calculate air flow (volume) in heating and cooling systems, and ambient air. It connects to a smart device using the TPI View app.



OPERATION

WARNING: The SP555 measures up to 140°F. do not use the probe to measure the velocity of air above this temperature.

1. Install the TPI View App on your smart device.
2. Press and hold the SP555 on/off key for approximately 2 seconds to turn the smart probe on. An orange LED will blink indicating the SP555 is ready to be connected to a smart device.
3. Open the View app and tap 'Start Scanning for TPI Smart Instruments'. Then tap on SP555 to connect it to the app.
4. The default start up screen once connected is "Live Anemometer". Live readings will be displayed on the app. Units are selectable by tapping on the reading. NOTE: If a duct size has not been entered, the CFM reading will be dashed lines. Please refer to Air Flow in the next section.

Air Flow (CFM)

Air flow (CFM) can be calculated using the SP555. The size of the duct must be entered into the app. If the size of the duct is not entered into the app, the CFM reading will be dashed lines as the app cannot calculate CFM without a duct size.

1. Turn the SP555 on and open the View app and connect to the smart probe. At the bottom of the display will be choices for duct type (rectangular / round) and where the duct is located (supply air or return air).
2. If rectangular is selected, tap on width and enter the duct width then tap on height and enter the duct height. If round is selected, tap on diameter and enter the duct diameter.
3. The CFM reading can be seen at the top of the app. Please note if the duct size has not been entered, the CFM reading will be dashed lines as the app cannot calculate CFM without a duct size.

ADD TO LOG FUNCTION

Use the 'Add to Log' function to manually log readings during 'Live Anemometer' mode. These readings can be saved to a job, emailed, or printed on the optional A740BT printer.

1. Connect the SP555 to the View app as outlined earlier and select 'Live Anemometer' in the View App. Insert the probe into the air to be tested.
2. Tap on 'Add to Log' and the measurement along with a date and time stamp will be added. Continue to tap 'Add to Log' to add more measurements to the log.
3. The log can be viewed, or a report can be created. The data can also be cleared. When viewing the data, individual measurements can be deleted by tapping on them.

AIR FLOW MEASUREMENTS

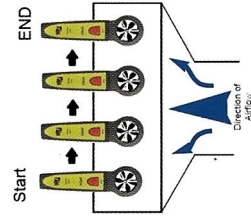
Traversing Grills

To do a proper airflow measurement (CFM) you should do traverse readings to obtain the true average airflow through the duct. There are two ways to perform this test using the SP555, Timed Average and Multi-Average Traverse.

TIMED AVERAGE TRAVERSE

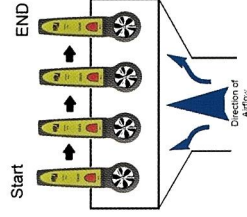
1. Turn the SP555 on and connect to the TPI View App.
2. Select 'Timed Average' in the app. Determine the type and size of the grill and enter it into the View App.
3. Position the SP555 at the end of the grill. The arrow on top of the SP555 indicates the direction it should be oriented in the air flow.
4. Tap 'Start Test' to begin the traverse test.
5. Move the SP555 along the grill from one end to the other. Once you reach the end tap "Stop Test". (See Picture Below) The average air velocity, air flow (CFM), and temperature will be displayed.
6. A report can be created and data can be saved to a job by tapping on "Create Report".

Note: Pause can be tapped to pause testing and then continued. This can be used if the SP555 needs to be re-positioned during the test. This can be helpful for large grills.



MULTI AVERAGE TRAVERSE

1. Turn the SP555 on and connect it to the TPI View App.
2. Select Multi-Average in the TPI View App. Determine the type and size of the duct (grill) and enter it into the View App.
3. Position the SP555 at the end of the grill. The arrow on top of the SP555 indicates the direction it should be oriented in the air flow.
4. Tap "Start Test" to begin the traverse test.
5. Move the SP555 along the grill from one end to the other stopping at test points. Once stopped tap "Add to Average" to add the reading to the overall average readings. **NOTE: Stop every inch or so. The more readings you add to the average the more accurate the average will be.** Once you reach the end tap "Stop Test". (See Picture Below).
6. The average air velocity, air flow (CFM), and temperature will be displayed.
7. A report can be created and data can be saved to a job by tapping on "Create Report".



Stop at each test point and tap "Add To Average". The more test points added the more accurate the average will be.

LED INDICATOR

The SP555 uses a multi-colored LED to indicate operational status.

Orange blinking LED – SP555 is on and ready to connect to the smart device

Green blinking LED – SP555 is connected to a smart device

Red blinking LED – Batteries need to be replaced

AUTO POWER OFF

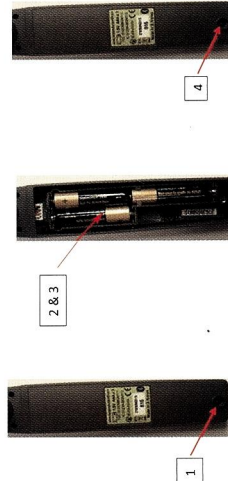
If the SP555 is not connected to a smart device for more than 8 minutes it will auto power off. When connected to a smart device the auto power off is disabled. Auto power off is also disabled during data logging.

GENERAL MAINTENANCE

Housing: The SP555 can be wiped down with a damp lint-free cloth. Do not use any cleaning agents including solvent or soap.

Battery Replacement: When the LED indicator blinks Red the batteries need to be replaced.

1. Turn the SP555 off. Loosen the battery cover screw and open the cover.
2. Remove the three AAA batteries from the battery holder.
3. Install three new AAA alkaline batteries into the holder observing correct polarity.
4. Install the battery cover and tighten the screw. Do not overtighten.



SPECIFICATIONS

Range	98 ft/min to 4900 ft/min (0.5 m/s to 25 m/s)
Air Velocity Measurement	2 ft/min / 0.1 m/s +/- (2% of reading + 59 fpm) or +/- (2% of reading +0.3 m/s)
Temperature Measurement	-4°F to 140°F (-20°C to 60°C) 0.1°F / 0.1°C
Resolution Accuracy	32°F to 113°F (0°C to 45°C) = +/- 1°F (+/- 0.5°C) <32°F (<0°C) and >113°F (>45°C) = +/- 2°F (+/- 1.0°C)
Battery Life	Approximately 30 hours
Battery Type	AAA x 3 alkaline
Operating Temperature	-4 °F ~ 122 °F (-20 °C ~ 50 °C)
Storage Temperature	-4 °F ~ 140 °F (-20 °C ~ 60 °C)
Operating Humidity	0 ~ 80 %RH
Weight	3.74oz (106g)



FCC ID: Q00BGM113



IC (Industry Canada) ID: 5123A-BGM113



209-100204



See www.tpieurope.com for CE and UKCA Certificate of Conformity

SP565 STANDARD ACCESSORIES

A555SP – Soft Pouch for SP555

SP555 OPTIONAL ACCESSORIES

A925 – Carrying case capable of holding four smart probes

A927 – Carrying case capable of holding two smart probes