



OVERVIEW

Where to use the TEC DG-8

Digital TrueFlow® Solution

The DG-8 is a key component of the Digital TrueFlow® solution and provides static pressure readings which are used in two ways

1. Supply plenum pressure with the HVAC system filter in place and then with the TrueFlow® Grid - to adjust the raw flow reading from the Digital TrueFlow® to deliver excellent flow rate accuracy in the specific system being measured.
2. Additional static pressures in the system (Supply, Return, and entrance and exit of air handler/furnace) to diagnose the root-cause of low system air flow.

The DG-8 and Digital TrueFlow® Grid connect by Bluetooth® to the TEC TrueFlow® App to take measurements and provide the system diagnosis. Download the free TEC TrueFlow® App on your Android or iOS device.

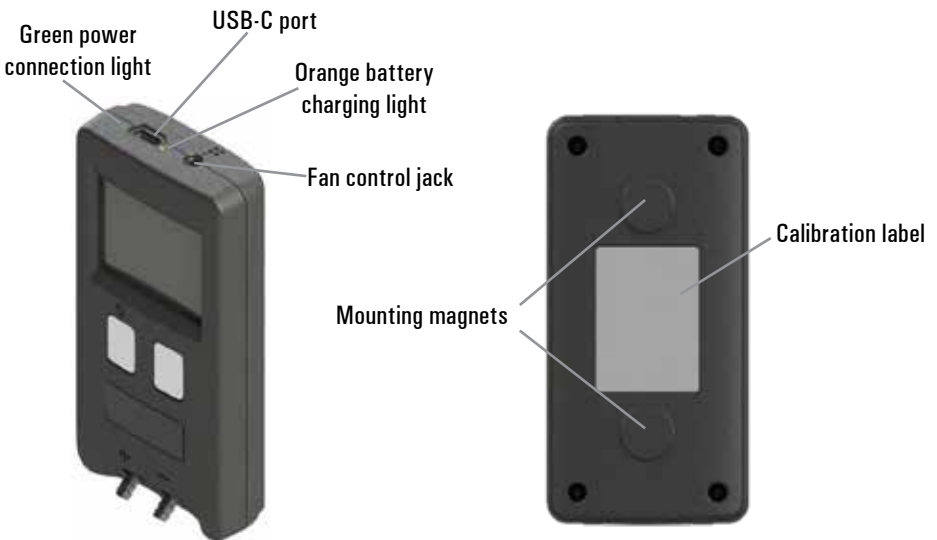
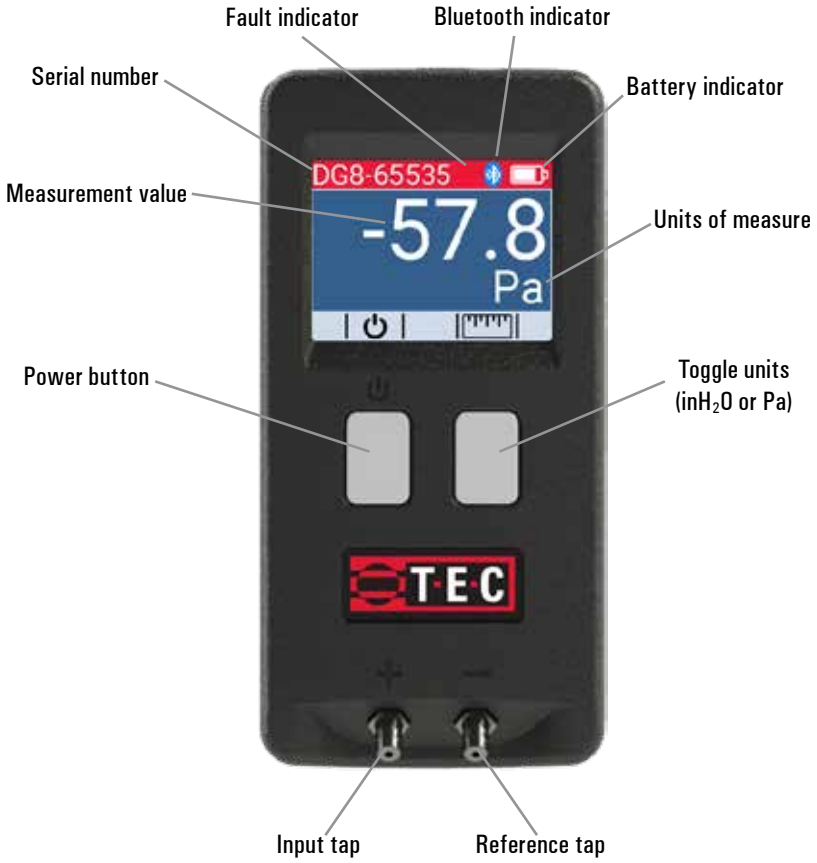


Other Applications

The DG-8 is a highly accurate single-channel micromanometer, and it is intended for use beyond the TrueFlow® - including in key building pressure measurements, such as room pressures, zonal pressures, Exhaust Fan Flow Meter, Pressure Pans, CAZ depressurization testing, radon sub-slab, hospital room pressure, and many more.



DG-8 Gauge Overview



Kit components

A standard DG-8 kit includes

- DG-8 pressure gauge
- Neoprene gauge sleeve
- Accessory carrying case
- USB Type C power adapter
- Magnetic static pressure probe
- 5' blue hose
- 5' green hose
- Inline hose connector
- Static pressure port plugs



Powering on and off the DG-8

To power on the DG-8 press and hold the power button for 3 seconds until button flashes green. To power off the DG-8 press and hold the power button for 3 seconds until button flashes red.

Battery information

The DG-8 uses a single protected lithium-ion polymer battery that is rechargeable, but is not user-replaceable.

Battery run time is typically 22 hours. All batteries self-discharge over time; TEC recommends charging the battery using the included fast charger at least once every three months regardless of battery level.

Charging instructions

The DG-8 battery is charged through its USB-C receptacle. When using the included USB-C power supply and USB-C cable, the DG-8 will charge from empty to 100% in approximately 2 hours. When charging the DG-8 using an aftermarket USB-A to USB-C cable it will take approximately 5 hours to fully charge from empty.

When the DG-8 is connected to a power source, the green LED light next to the USB-C port will be lit. While the battery is actively charging the orange LED light located on the opposite side of the USB-C port will be lit as well. Once fully charged, the orange LED will turn off.

The DG-8 battery should only be charged between 32° F and 115° F (0° C and 45° C).

TEC recommends using the supplied USB-C cable and power supply for optimal charging.

Temperature thresholds

The DG-8 should be stored in a dry place with temperature between 32° F and 77° F (0° C and 25° C). Operating temperatures are between 32° F and 115° F (0° C and 45° C).

Calibration information

The DG-8 should be calibrated at the TEC calibration lab once every four years. The date of calibration can be found on the label on the back of the gauge. Visit the TEC website for more information on arranging calibration service.

DG-8 specifications

COMPONENT	SPECIFICATIONS
No. of Independent Pressure Channels	One
Digital Communication	Bluetooth Low Energy, USB 2.0
Accuracy ^{1,2}	0.9% of pressure reading or 0.00048 in. H ₂ O (0.12 Pa), whichever is greater
Display Resolution	0.001 in. H ₂ O 0.1 Pa for readings up to 999.9 Pa 1 Pa for readings over 1000 Pa
Pressure Range	-10 to +10 in. H ₂ O (-2,500 to +2,500 Pa)
Units of Measure	Pa and in. H ₂ O
Display	320 x 240 pixels, 2-inch diagonal, backlit color TFT LCD
Power	Lithium-Ion Polymer Rechargeable Battery 2,000 mAh with USB-C® charger/power adapter included
Battery Life	Typically over 22 hours of continuous use
Auto-off	30 minutes
Dimensions	4.84 x 2.39 x 1.02 inches (123 x 61 x 26 mm)
Weight	6.4 oz (182 g)
Recommended Calibration Interval	48 months
Operating Temperature Range ³	32° F to 115° F (0° C to 45° C)
Storage Temperature Range ⁴	Less than one month: 15° F to 115° F (-10° C to 45° C) One month up to one year: 32° F to 77° F (0° C to 25° C)

¹Typical Conditions are a temperature range of 54° to 90° F, and a two year calibration interval.

²As Calibrated Accuracy is +/- (0.4% of reading + 0.045 Pa) under controlled conditions of 67° to 77° F, four month calibration interval, and pressure readings averaged for five seconds. All gauges are verified to meet this specification at all calibration pressures.

³For use at temperature conditions outside the typical conditions in Note 1, or the as-calibrated range in Note 2, add an additional 0.037% of pressure reading per degree F over the stated range.

⁴Storage limits are based on batteries. Storing outside these limits may require battery replacement.

Specifications subject to change without notice.

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THE ENERGY CONSERVATORY WARRANTY

EXPRESS LIMITED WARRANTY

Seller warrants that this product, under normal use and service as described in the operator's manual, shall be free from defects in workmanship and material for a period of 24 months, or such shorter length of time as may be specified in the operator's manual, from the date of shipment to the Customer.

LIMITATION OF WARRANTY AND LIABILITY

This limited warranty set forth above is subject to the following exclusions:

- With respect to any repair services rendered, Seller warrants that the parts repaired or replaced will be free from defects in workmanship and material, under normal use, for a period of 90 days from the date of shipment to the Purchaser.
- Seller does not provide any warranty on finished goods manufactured by others. Only the original manufacturer's warranty applies.
- Unless specifically authorized in a separate writing, Seller makes no warranty with respect to, and shall have no liability in connection with, any goods which are incorporated into other products or equipment by the Purchaser.
- All products returned under warranty shall be at the Purchaser's risk of loss. The Purchaser is responsible for all shipping charges to return the product to The Energy Conservatory. The Energy Conservatory will be responsible for return standard ground shipping charges. The Customer may request and pay for the added cost of expedited return shipping.

The foregoing warranty is in lieu of all other warranties and is subject to the conditions and limitations stated herein. No other express or implied warranty IS PROVIDED, AND THE SELLER DISCLAIMS ANY IMPLIED WARRANTY OF FITNESS for particular purpose or merchantability.

The exclusive remedy of the purchaser FOR ANY BREACH OF WARRANTY shall be the return of the product to the factory or designated location for repair or replacement, or, at the option of The Energy Conservatory, refund of the purchase price.

The Energy Conservatory's maximum liability for any and all losses, injuries or damages (regardless of whether such claims are based on contract, negligence, strict liability or other tort) shall be the purchase price paid for the products. In no event shall the Seller be liable for any special, incidental or consequential damages. The Energy Conservatory shall not be responsible for installation, dismantling, reassembly or reinstallation costs or charges. No action, regardless of form, may be brought against the Seller more than one year after the cause of action has accrued.

The Customer is deemed to have accepted the terms of this Limitation of Warranty and Liability, which contains the complete and exclusive limited warranty of the Seller. This Limitation of Warranty and Liability may not be amended or modified, nor may any of its terms be waived except by a writing signed by an authorized representative of the Seller.

TO ARRANGE A REPAIR

Please visit our website (www.energyconservatory.com/calibration-repair) before sending any product back for repair or to inquire about warranty coverage. All products returned for repair should include a return shipping address, name and phone number of a contact person concerning this repair, and the purchase date of the equipment.

Safety, warnings and troubleshooting information

- Follow all safety instructions provided when used with any TEC products.
- Do not operate the gauge if any liquid gets inside the gauge and contact TEC
- A hard reset may be performed by holding down both silicone buttons until the gauge powers off. This is only advised if holding the power button alone does not power off the gauge or gauge is unresponsive.

Lithium Ion battery safety and warnings

- The battery should only be charged in conditions between 32° and 115° Fahrenheit (0° and 45° Celsius).
- Do not leave the gauge in direct sunlight or in an area heated by sunlight. The battery could generate heat, smoke or flames.
- Do not use the battery when there is rust present, the battery has a bad smell or if the battery is damaged in any other way.
- Keep the battery out of the reach of children and animals.
- If fluid from the battery leaks out and makes contact with skin, wash with soap and water. The fluid may cause irritation. If this happens please see a doctor immediately.
- Do not expose the battery to extreme heat, flames or liquids.
- Do not modify or disassemble the battery as this could result in leakage or explosion.

Screen care

- To clean the screen, use a microfiber cloth.
- Do not clean the screen with flux, water, acetone, ethanol, isopropyl alcohol, toluene or ammonia (glass cleaner).

Software Information

The DG-8 communicates over Bluetooth® with both the TrueFlow® and TEC Gauge mobile apps available for both Android and iOS devices. The Energy Conservatory (TEC) also offers other software and apps which can be downloaded for free from the TEC website at software.energyconservatory.com.

Instructional Videos

The Energy Conservatory (TEC) offers a variety of online instructional videos. Visit www.YouTube.com/EnergyConservatory to see all of TEC's instructional videos.

Selecting a Gauge

The Energy Conservatory (TEC) offers two highly accurate digital pressure gauges, the single-channel DG-8 and the two-channel DG-1000. Here is a useful guide for selecting a gauge based on your needs:



Benefit	Feature	DG-8	DG-1000
Channels	Number of channels	1	2
Confidence in measurements	Accurate pressure readings to 0.9%	✓	✓
Ease-of-use	High resolution touch screen		✓
	On-board microprocessor with built-in apps like Tubing Assistant		✓
	Software connectivity to automated testing: AutoTest App, TECTITE and TECLOG		✓
	Android & iOS app connectivity to TrueFlow® and TEC Gauge	✓	✓
	WiFi communication		✓
Designed for key applications	Bluetooth® communication	✓	✓
	Blower Door™ and DuctBlaster® with 2-channels, flow calculations, fan speed slider and hold functions		✓
	Pressure measurements such as TrueFlow®, room pressure, ZPD, CAZ, Radon, Hospital and more	✓	✓



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