GasQuip

Gas Weighing System

Operating Manual

Model GQ-SENTRY

Thank you for purchasing your Sentry – Gas Weighing System

Contact Information:

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This device comes with a NIST traceable calibration certificate.

This device conforms to the European Union's Restriction of Use of Hazardous Substances in Electrical and Electronic Equipment (RoHS) Directive 2011/65/EU.

This device complies with the requirements of the Low Voltage Directive 2014/35/EU and the EMC Directive 2014/30/EU and carries the CE Marking accordingly.

This device complies with the requirements of the European Union's Waste Electrical & Electronic Equipment (WEEE) Directive 2002/96/EC

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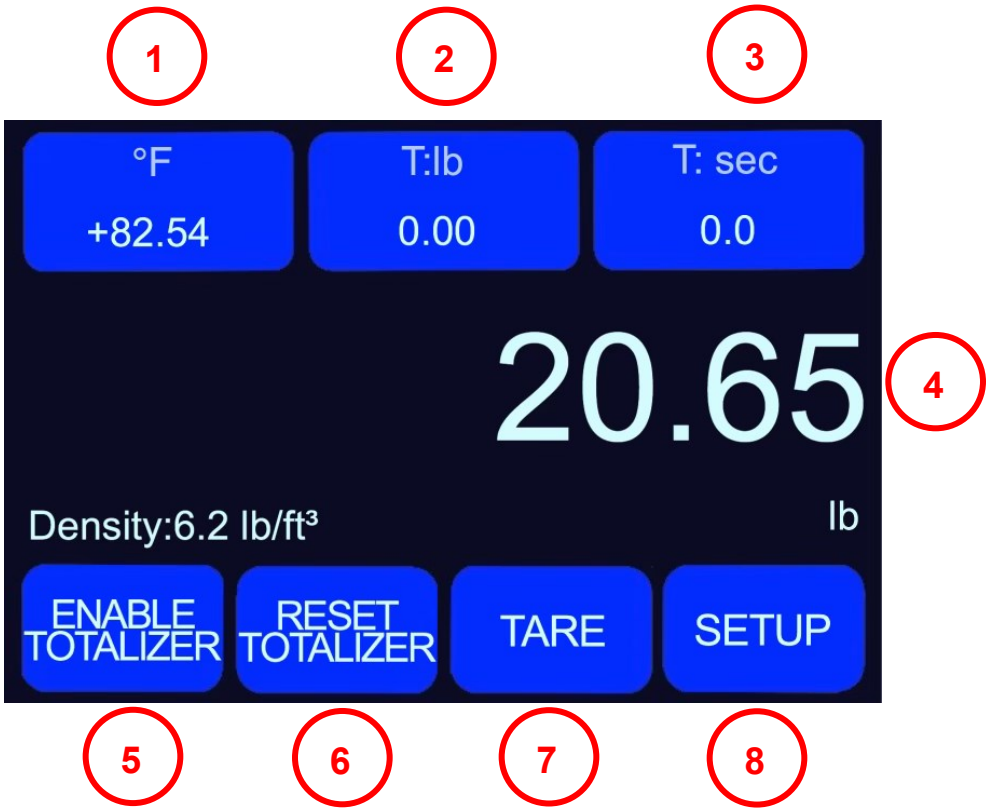
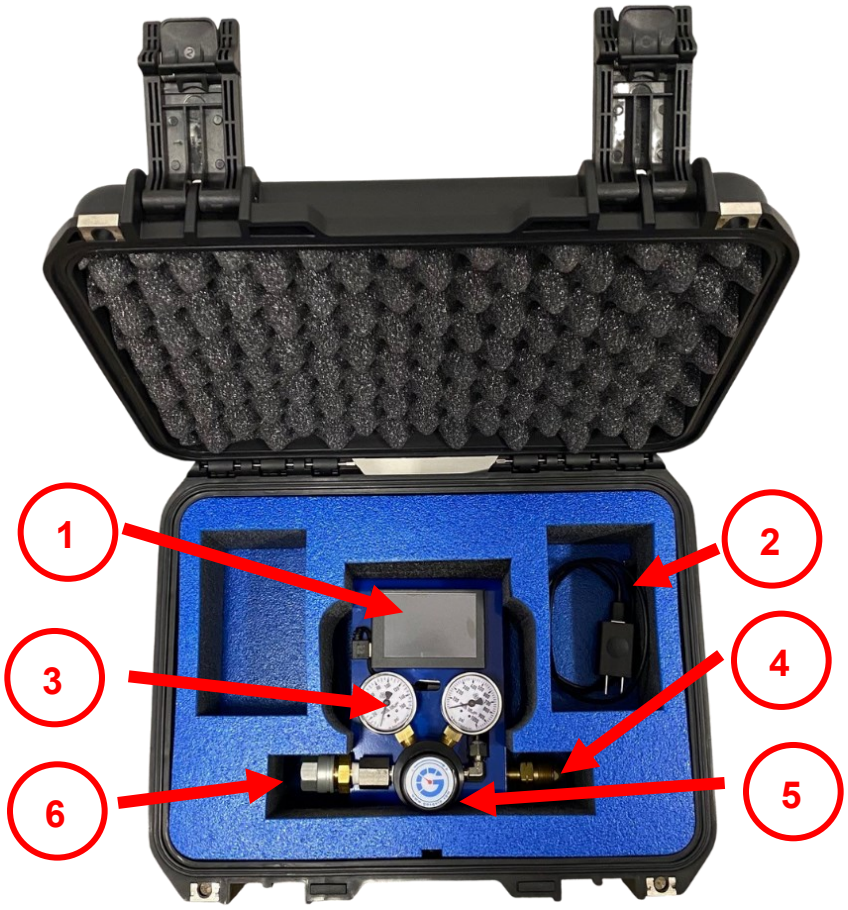
Getting Started

Getting to know your Sentry – Gas Weighing System



1. Temperature reading (tap for Celsius)
2. Totalizer (amount of gas in pounds)
3. Time elapsed in seconds
4. Totalizer (amount of gas in pounds, tap for flow rate)
5. Starts recording amount of gas
6. Resets amount of gas to zero
7. Zero out the sensor
8. Setup menu screen



1. Display
2. Power Cord
3. Pressure Gauges
4. CGA-590 Cylinder Connection
5. Regulator knob
6. DN8 Male Connection

Safety Precautions

General Safety

- **Always** position SF6 gas cylinder in an upright position, secured to a permanent structure with a safety chain or strap.
- **Always** use safety shoes when operating Sentry around electrical equipment
- **Always** use safety goggles around high pressure gas cylinders and electrical equipment
- **Only** properly trained personnel should carry out maintenance and repair work on pressure gas filled equipment.

Device Safety

- **Only** operate the device in sufficiently large and ventilated compartments (room volume > 100 m^3) so that the admissible SF6 concentration in ambient air is not exceeded in case of leakages incurring suddenly.
- For operation in smaller compartments SF6 warning devices **must** be available as well as the possibility to leave the compartment quickly.
- The Sentry is designed for use with pure SF6 gas**. Do not** use device with any other gas besides 99.9% Sulfur Hexafluoride.

Specifications

Device Dimensions	7.3” x 7” x 9”
Power Supply	5V, 2.5A Micro USB
Flow Speed	Up to 33lbs/hr.
Operating Temperature	0-60 C
Output Connection	DN8 Male (unless otherwise specified)
Case Dimension	15” 10.5 x 9”
Accuracy	+0.01 lbs.
Weight	8 lbs.
Input Connection	CGA 590

Operation

Setup

1. Connect the Sentry to the SF6 gas cylinder by using the CGA-590 nut. Snuggly tighten the nut with a wrench.
2. Connect the DN8 hose to the male DN8 connection on the output of the regulator. Do not connect the hose to the switchgear gas connection yet.
3. Plug in power cord to the top of the sentry display (micro–USB Port). Plug in opposite side power brick into a 120V outlet.
4. Plug in display with provided power brick
5. Allow 30 seconds for device to warm up and show main home screen

Device Preparation

1. Turn regulator counterclockwise to close valve
2. Open SF6 bottle valve completely by turning cylinder knob counterclockwise
3. Set regulator output to pressure specified by switchgear manufacturer. Turn knob clockwise and watch output pressure gauge until the specified fill pressure is met.
4. Now that gas has run through the device, regulator, and hose, it's time to tare the device for measurement
5. Press "Tare" on device and allow device to complete tare function
6. Press "Reset Totalizer"
7. Press "Enable totalizer" if not already enabled. If "disable totalizer" is showing, then totalizer is enabled.
8. You're now ready to move gas into GIE.

Filling Into GIE

1. Hook up the hose to the switchgear.

2. Open the valve on the gas compartment on the GIE to allow gas to begin flowing into GIE
3. Monitor the pressure on the breaker pressure gauge until the manufacturers specified filling pressure is reached.
4. Once specified filling pressure is reached, close the valve on the GIE gas reservoir
5. Close the valve on the SF6 cylinder

Wrapping up

1. Turn regulator counterclockwise to close valve
2. Record amount of gas showing in pounds
3. Unplug power cord from outlet and sentry device
4. Disconnect hose from switchgear and Sentry
5. Disconnect Sentry from SF6 cylinder by loosening CGA-590 nut
6. Pack sentry and other power cables into storage case

Maintenance

Cleaning

- This device requires minimal maintenance. If necessary, the outside of the device may be cleaned with a soft dry cloth. Avoid excess moisture or solvents.

Replacement Parts

- Each part of the Sentry was designed to be replaceable in case of damage. We recommend sending all damaged units back to GasQuip headquarters to be serviced. Check the warranty page for information on what damage is covered within our policy.

Calibration

Sentry is calibrated to NIST traceable standards at the time of manufacture. Due to the Coriolis technology used in the mass flow meter, we recommend calibrating your device every 2 years. Recalibration can be requested at the user's discretion/requirement by submitting a form with the device serial number at gasquip.com/contact-us/

5 Year Limited Warranty

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