



**Ralston Instruments**  
Pressure Calibration Specialists

# RALSTON FIELDLAB

The first laboratory grade pressure reference made to work like you do—no matter where you do it.



MADE IN THE USA SINCE 1969

Visit [ralstoninst.com](http://ralstoninst.com)

## Speed through Calibration Tests

With single button logging of both Device Under Test (DUT) and Reference readings, techs get completely digital logging of test points.

Instant tolerance feedback at each point lets you know sooner than later whether to recalibrate.

Perform calibrations on pressure transmitters, gauges, and switches using on-screen prompts that tell the user when any test point is out of calibration.



## Continuous Pressure Testing

For pressure testing and general purpose data logging of pressure, the FieldLab can monitor pressure over short or very long periods of time at customized intervals.

- » Pressure Testing
- » Customize Log Interval & Duration
- » Long Term Field Monitor (2 months on single charge)
- » 2 Million Data Points Onboard Storage
- » Wellhead Monitoring
- » Chart Recorder Replacement

## Work in the Real World

What good is rugged mobility if you can't take your tools to where the job is? Below freezing or above blazing — the FieldLab is designed for where you work. The FieldLab is certified **Intrinsically Safe** for hazardous locations anywhere in the world — whether inside a meter shed, on a drilling platform or on a drilling rig.

Spend less time onsite and get more tests done in an 8 hour day without tedious processes or pen and paper.

Every Ralston FieldLab Model FLP1 includes the following Intrinsic Safety Approvals:

### North America (US and Canada) Classification

- » Class I, Division 1 Groups A-D, T4,  $-10^{\circ}\text{C} \leq T_a \leq 50^{\circ}\text{C}$
- » Class I, Zone 0, AEx ia IIC T4,  $-10^{\circ}\text{C} \leq T_a \leq 50^{\circ}\text{C}$
- » Intrinsically Safe

### IECEx Classification

- » Ex ia IIC T4 Ga
- »  $-10^{\circ}\text{C} \leq T_a \leq 50^{\circ}\text{C}$  IP67
- » IECEx approved for use in countries around the world who adhere to the IECEx standards.

### ATEX European Classification

- » II 1 G Ex ia IIC Ga
- »  $-10^{\circ}\text{C} \leq T_a \leq 50^{\circ}\text{C}$  IP67
- » ATEX approved for use in Zone 0 Hazardous locations



# Intrinsically Safe Digital Calibration Platform for Hazardous Locations

## Rechargeable Lithium-ion Battery

Up to 3 months battery life.

## One Button Logging of Reference, DUT and Tolerance

Data logging up to 2 million data points.

## Rugged Connections

Available in Ralston Quick-Test™ and other industry standard connections.



## View Readings in Almost Any Engineering Unit

Select from 15 engineering units

## High Precision Pressure Measurement

Accuracy of 0.1% of reading (20-100% of full scale)

## Calibration Test Modes

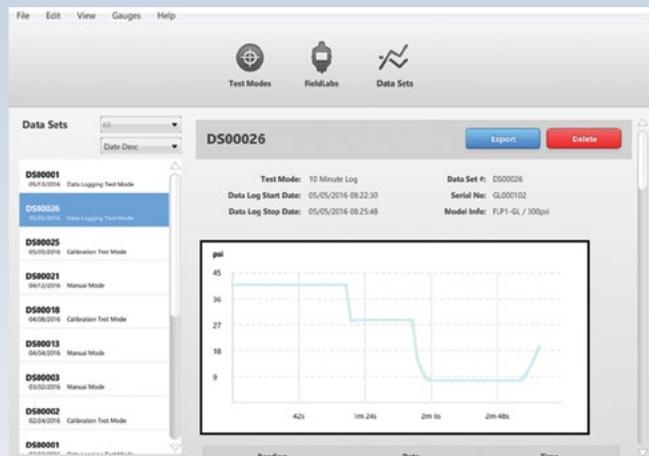
Customize Test Modes for any pressure calibration test



## FieldLab Desktop



Manage and configure your FieldLab Pressure References quickly and easily on your desktop or laptop.



Export Data Sets from Calibration Tests or Data Logging sessions.

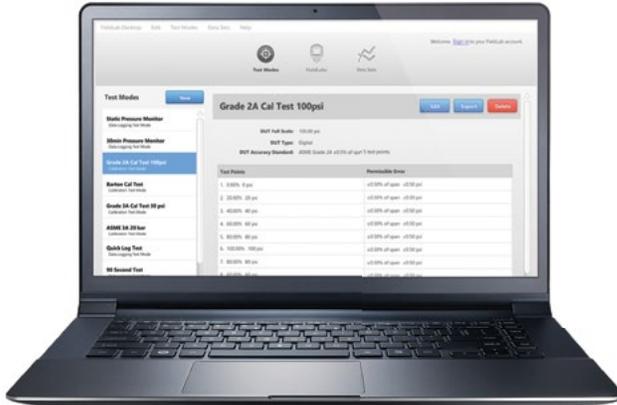


Download FieldLab Desktop, a free Windows application for use with any FieldLab Pressure reference at [ralstonfieldlab.com](http://ralstonfieldlab.com)

# Working Smarter in the Field

## 1 Create Test Modes in FieldLab Desktop

Create **Test Modes** based on your standard procedures for **Calibration Tests**, **Pressure Tests** and **PSV Tests**. Ensure repeatable and traceable testing procedures across your entire team and devices.



- » **Fully customizable Data Logging Test Modes** for Pressure Testing, Pressure Monitoring or short term pressure recording in the field.
- » **Calibration Test Modes** with customizable test points, permissible error and one button logging of DUT and Reference readings.
- » **Pressure Safety Valve (PSV) Test Modes** for logging accurate proof of PSV performance with detailed digital data reporting.

## 2 Add Test Modes to Your FieldLab

Share **Test Modes** across your team and your **FieldLab** devices. Add your Test Modes to your FieldLab before heading out to your test locations.



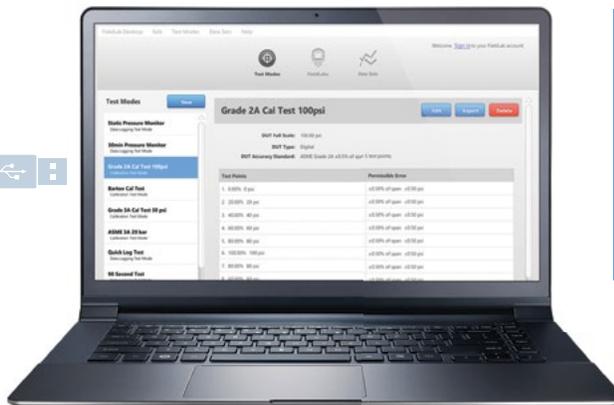
### 3 Run Tests in the Field

Connect your FieldLab to a pressure source and your **Device Under Test (DUT)** and run your Test Modes as needed. Log results of **Calibration Tests** or perform Pressure Monitoring Logging. All results are stored in **Data Sets** on the FieldLab.



### 4 Export Data Sets

Transfer **Data Sets** back to your Windows PC into FieldLab Desktop. Export the Data Sets for use in **Calibration Certificates**, As Found/As Left reports, or simple data runs.



For detailed tutorials on creating and managing Test Modes and Data Sets, visit:

[ralstonfieldlab.com](http://ralstonfieldlab.com)

# Specifications

<b>Measurement Uncertainty</b>	<b>±0.02% of Full Scale</b> (0-20% of Full Scale) (Exceeds ASME B40.100 Grade 5A)  <b>±0.1% of Reading</b> (20-100% of Full Scale) (ASME B40.100 Grade 4AR)  <b>Vacuum: ±0.25% of Full Scale</b> (ASME B40.100 Grade 3A)	
<b>Battery Type</b>	Lithium-ion, 4.8 Ah Capacity	
<b>Charging</b>	AC Power (Australia, China, Europe, North America, UK adapters included), DC Auto power (Optional)	
<b>LCD Display</b>	3.5 in / 90mm Color TFT LCD Display	
<b>USB Connection</b>	USB (Type B)	
<b>USB Cable</b>	2 meter (shielded)	
<b>Datalogging</b>	2 million data points	
<b>Engineering Units</b>	<b>SI units:</b> bar cmH <sub>2</sub> O @ 4°C cmHg @ 0°C kgf/cm <sup>2</sup> kPa mbar mmHg @ 0°C MPa	<b>Imperial Units:</b> atm ftH <sub>2</sub> O @ 39°F inH <sub>2</sub> O @ 39°F inHg @ 32°F oz/in <sup>2</sup> psi Torr

<b>Mounting Holes</b>	3 x M5 Inserts (10 mm deep)
<b>Ingress Protection</b>	IP67 (1 meter water submersion for 30 minutes)
<b>Temperature range</b>	14 to 122 °F (-10 to 50 °C)
<b>Construction</b>	316 Stainless Steel, Reinforced Polyamide
<b>Wetted Materials</b>	316 Stainless Steel
<b>Seal Materials</b>	Teflon, Viton
<b>Fluid Media Compatibility</b>	Air, Inert Gas, Natural Gas, Petroleum Based Oil, Water  <i>Fluids compatible with 316 Stainless Steel and Teflon, Viton Seals</i>
<b>Certifications</b>	<b>North America (US and Canada) Classification</b> Class I, Division 1 Groups A-D, T4, -10°C ≤ Ta ≤ 50°C Class I, Zone 0, AEx ia IIC T4, -10°C ≤ Ta ≤ 50°C  <b>ATEX European Classification</b> Ⓜ II 1 G Ex ia IIC Ga, -10°C ≤ Ta ≤ 50°C IP67  <b>IECEx Classification</b> Ex ia IIC T4 Ga, -10°C ≤ Ta ≤ 50°C IP67

## How to Specify a FieldLab Model Number

FLP1 - <sup>1</sup>XX - <sup>2</sup>XX

**Example:** FLP1-GJ-QM = 100 psi / 7 bar / 700 kPa  
Male Ralston Quick-test™ Connection.

### 1 Choose a Pressure Range

5 psi / 350 mbar / 35 kPa	= <b>GB</b>
15 psi / 1 bar / 100 kPa	= <b>GD</b>
30 psi / 2 bar / 200 kPa	= <b>GF</b>
50 psi / 3.5 bar / 350 kPa	= <b>GH</b>
100 psi / 7 bar / 700 kPa	= <b>GJ</b>
300 psi / 20 bar / 2 MPa	= <b>GL</b>
500 psi / 35 bar / 3.5 MPa	= <b>GN</b>
1,000 psi / 70 bar / 7 MPa	= <b>GP</b>
3,000 psi / 200 bar / 20 MPa	= <b>GR</b>
5,000 psi / 350 bar / 35 MPa	= <b>GT</b>
10,000 psi / 700 bar / 70 kPa	= <b>GV</b>

**Note:** Not all end connections are available in all pressure ranges.

### 2 Choose a Process Connection

¼" Male BSPP	= <b>2B</b>
¼" Male NPT	= <b>2M</b>
Ralston Male Quick-test™	= <b>QM</b>
Ralston Male Quick-test™ XT	= <b>XM</b>

### Ready to get the FieldLab?

For questions about FieldLab models, purchasing options, availability and support, contact us directly.

**800.347.6575 | sales@ralstoninst.com**  
8am – 5pm EST Weekdays



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See all available options and build model numbers at [ralstoninst.com/fieldlab](http://ralstoninst.com/fieldlab)

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