10920 Madison Ave
Cleveland | Ohio | 44102 | USA
+ 1 216 281 1100
www.Meriam.com
(800) 817-7849

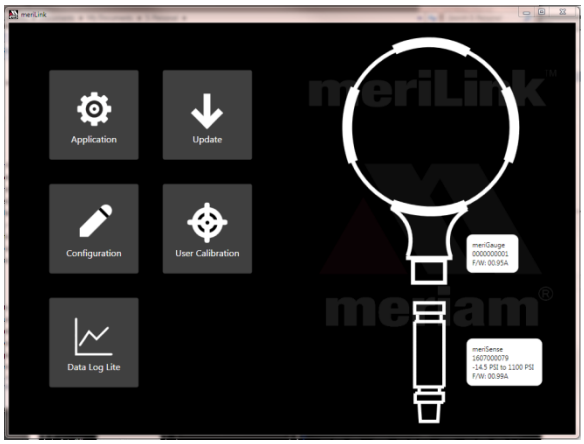
A trusted leader in measurement
and calibration solutions.

User Manual

The meriGauge *plus* system

The meriGauge® *plus* and meriSense

meriLink™ software



A meriSense™ smart sensor

Introductory information

Notification Statements

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Safety Information

Preventing injury

Failure to follow all instructions could result in injury:

- Read.
- Understand.
- Follow all safety warnings and instructions provided with this product.
- Meet or exceed your employer's safety practices.

Safety Symbols

The following table defines the safety symbols, signal words, and corresponding safety messages used in the manual. These symbols:

- Identify potential hazards.
- Warn you about hazards that could result in personal injury or equipment damage.

Safety Symbols

Safety Symbols	Explaining the symbols
	This is the **Read Instruction Manual** symbol. This symbol indicates that you must read the instruction manual.
	Indicates a potentially hazardous situation which, if not avoided, will result in death or serious injury.
	Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
	Indicates a potentially hazardous situation which, if not avoided, could result in minor or moderate injury.
	Indicates information essential for proper product installation, operation or maintenance.

General Purpose

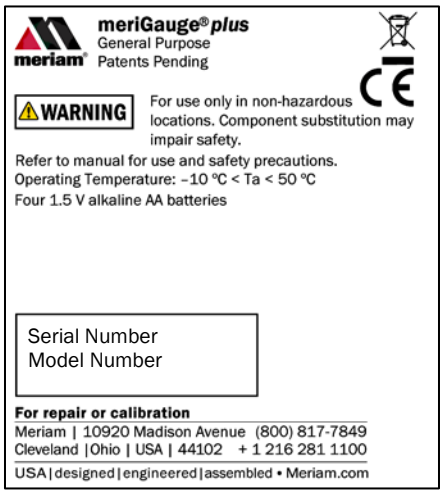
General Purpose use only

- Never use General Purpose gauges in hazardous areas.
- Never use General Purpose sensors in hazardous areas.
- General Purpose gauges and sensors are a fire or explosion hazard.
- Do not substitute components because they may impair operation and safety.

Sample labels for General Purpose gauges

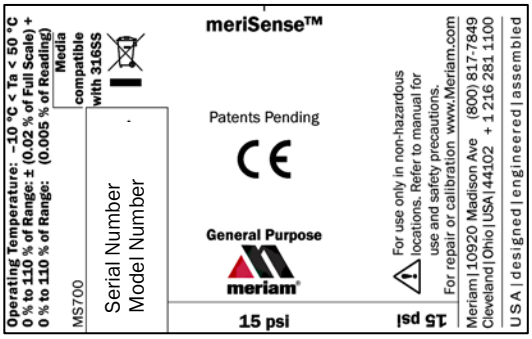
General Purpose—meriGauge *plus* label

See the figure of a sample General Purpose label.



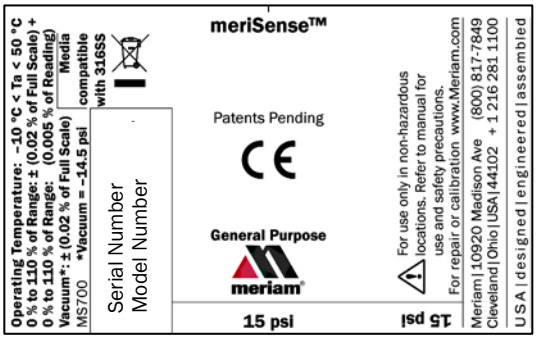
General Purpose—meriSense Absolute label

See the figure of a sample General Purpose label below.



General Purpose—meriSense Compound label

See the sample General Purpose figure label below.



Contents

Meriam Contact Information

Meriam		
Address	Meriam 10920 Madison Avenue Cleveland | Ohio | 44102 USA	
Telephone	US customers: (800) 817-7849	
	International customers: + 1 216 281 1100	
Fax	US customers: + 1 216 281 0228	
	International customers: + 1 216 281 0228	
E-mail addresses	**Departments**	**E-mail addresses**
	Return Material Authorization / Service & Repair Department	returnforms@meriam.com
	Sales	sales@meriam.com
Website	meriam.com	

Local Meriam Representatives	
Find a local Meriam representative	• Use this link to help you find Meriam representative on this world map: REP LOCATOR. • Or, you may use this full website address to go to the same location: http://www.meriam.com/representatives-map/

Glossary

Words and phrases	Definitions
Absolute Isolated pressure (AI)	Absolute pressure is equal to the sum of these two: 1. Gauge pressure. 2. Atmospheric pressure (also known as barometric pressure).
Button or key	• A **button** always refers to an area on the screen that you can click to select functionality. • A **key** always refers to hardware push-buttons on the keyboard that you can press.
Compound Isolated pressure (CI)	A compound gauge can display both positive and negative (vacuum) pressures. The meriGauge *plus* System replaces the need for buying one gauge for each sensor: 1. A pressure sensor. 2. A vacuum sensor.
Firmware	Firmware is a type of software that is stored on hardware. Both meriGauge *plus* and meriSense have firmware. meriLink is a software application that can communicate with their firmware and change or update it as needed.
Isolated	The word **isolated** refers to the sensing element being isolated from the media. It is commonly used in the phrases *Absolute Isolated* (AI) *pressure* and *Compound Isolated* (CI) *pressure*.
Meriam Calibration	Meriam calibration refers to any calibration completed at Meriam with *Meriam traceability*. Meriam calibration includes: • Oven calibration. • Multipoint Meriam adjustment.
User Calibration	User calibration refers to any calibration done outside of Meriam with *non-Meriam traceability*. User calibration includes: • Multipoint user calibration or adjustment.

The meriSense detachable sensors

Make a pressure connection

Make a good NPT connection

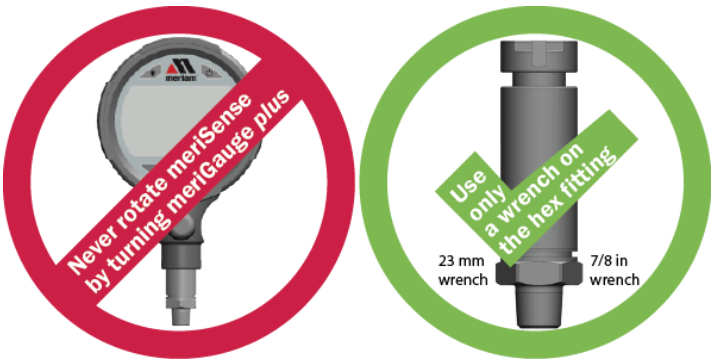
Each meriSense detachable sensor has a 316 stainless steel 1/4 in. male NPT connection for direct mounting.

- The threads should be coated with a pipe sealant compound before installation.
- Tighten to finger tight plus 1.5 turns to 3 turns using a 23 mm (7/8 in.) wrench with the notch facing the same direction as you intend for the display.

Use *only* a wrench on the hex fitting

NOTICE

Never rotate a meriSense sensor by turning the meriGauge *plus* gauge.



Protect your sensors from dust

Keep the dust cap on sensors

Make sure you put the dust cap on the sensor to protect the electrical contacts after the meriGauge *plus* gauge has been detached from the sensor.

Accuracy Statement for meriSense (MS700x-xxxxxx)

Range limits	
Sensor pressure ranges	**MS700 meriSense** Contact sales@meriam.com to purchase these parts and for more information about the following part numbers: **+ 1 216 281 1100** or **(800) 817-7849**.

MS700 meriSense sensors

Part number	Ranges	Type
ZMS700-AI0015	0 *psi to* 15 psi	Absolute
ZMS700-CI0015	–15 *psi to* 15 psi	Compound
ZMS700-AI0030	0 *psi to* 30 psi	Absolute
ZMS700-CI0030	–15 *psi to* 30 psi	Compound
ZMS700-AI0100	0 *psi to* 100 psi	Absolute
ZMS700-CI0100	–15 *psi to* 100 psi	Compound
ZMS700-CI0300	–15 *psi to* 300 psi	Compound
ZMS700-CI0500	–15 *psi to* 500 psi	Compound
ZMS700-CI1000	–15 *psi to* 1 000 psi	Compound
ZMS700-CI3000	–15 *psi to* 3 000 psi	Compound

- Includes all combined effects of linearity, repeatability, hysteresis, stability, and temperature over the specified calibrated temperature range for one year.
- Not recommended for continuous use below 0.02 psi absolute.

Media compatibility	316 SS
Temperature limits	
Operating temperature	–10 °C to 50 °C (14 °F to 122 °F) • Up to 95 % RH non-condensing. • No change in accuracy over operating temperature range. • Gauge must be zeroed to achieve rated specification.
Process temperature	–10 °C to 50 °C (14 °F to 122 °F)
Warm-up time	Five (5) minutes.

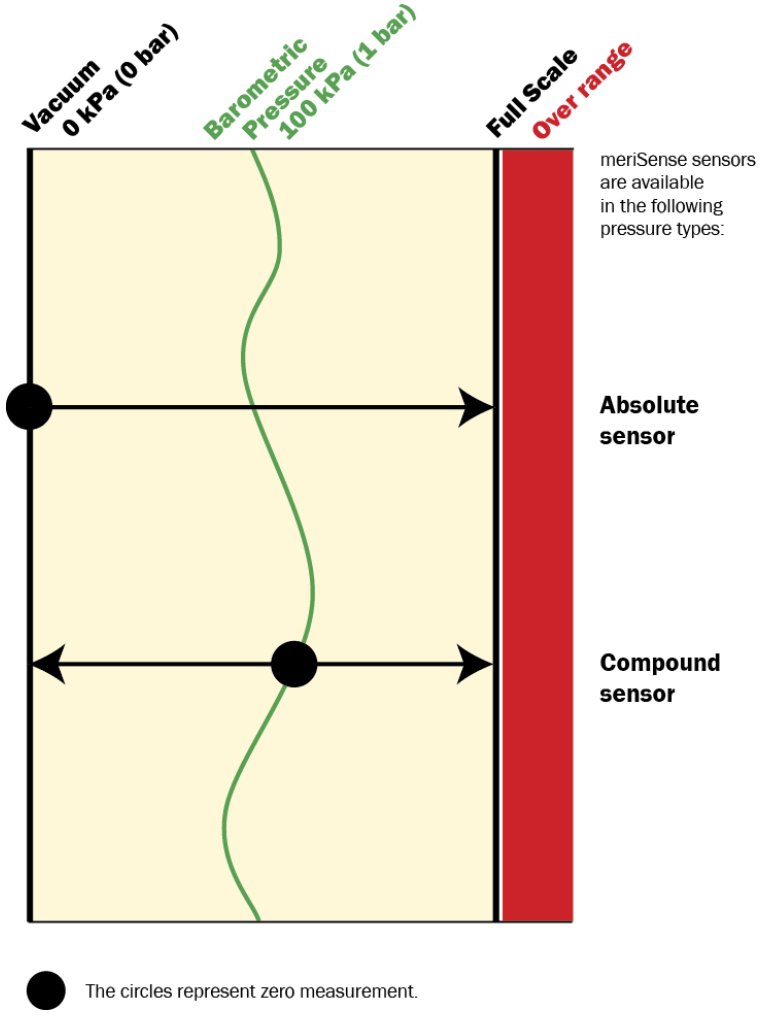
Accuracy Statement (continued)

Pressure measurements		
Absolute	0 % to 110 % of Range: 0 % to 110 % of Range:	± (0.02 % of Full Scale) + (0.005 % of Reading)
Compound	0 % to 110 % of Range: 0 % to 110 % of Range: Vacuum*: *Vacuum = –14.5 psi	± (0.02 % of Full Scale) + (0.005 % of Reading) ± (0.02 % of Full Scale)
Pressure limits		
WARNING	**Pressure limits** • Do not exceed the pressure limits listed in the sensor pressure ranges section for the MS700 meriSense. • Failure to operate within the specified pressure limits could result in injury.	
	Overrange limit Overrange pressure means the value is outside the calibrated upper or lower range. • Up to 110 % of range, meriGauge *plus* displays the accurate pressure. • Above 110 %, it flashes red. This indicates that the applied pressure exceeds the calibrated range. ***Note:*** *If the calibrated pressure range is exceeded, the pressure displayed may not be accurate* • Above 120 %, it flashes red and displays dashes.	
	Overpressure limits Overpressure is the point at which permanent damage (deformation) may occur to the sensor.	
WARNING	**Burst pressure limit** Burst pressure is four (4) times the rated pressure. It is the point at which the sensor may mechanically leak.	

Pressure reference chart

Pressure Reference Chart

The following chart contrasts the differences between the Absolute and Compound sensors.



Inspect the vent on the sensors

NOTICE

Do not block vent

1. If the vent becomes blocked, it will cause inaccurate measurements.
2. Meriam recommends that you visually inspect the vent area each time you use the meriSense to make sure it is not blocked.

The meriGauge *plus* gauge

Batteries

Install the batteries

1. Turn over the meriGauge *plus* so the display faces down.
2. Remove the four screws on the battery cover with the Phillips head screwdriver by turning them counterclockwise.
3. Insert the four AA batteries.

   Note: *Pay attention to the* ***positive (+)*** *and* ***negative (–)*** *battery polarity markings at the bottom of the compartment.*

4. Replace the battery cover.
5. To secure the cover, torque the screws clockwise 0.56 N-m (5 in-lbs) maximum.

Know your batteries

The meriGauge *plus* is powered by four 1.5 volt AA size batteries.

- **Never** mix batteries—not by manufacturer or by size, by capacity, or by chemistry.
- **Never** mix old and new batteries.
- **Remove all four** batteries in the meriGauge *plus* at the same time.
- **Replace all four** batteries with batteries from the same package or with the same expiration date.

Batteries (continued)

Watch for the low battery indicators

The battery indicator on the display shows the current charge.

> ***Note:*** *Be prepared to change batteries when you see the outline of the battery icon when the outline of the battery icon flashes.*

Using the Backlight reduces your battery life

Turn it off to optimize battery life.

Refer to the battery manufacturer's instructions

Visit the website of the battery manufacturer to learn more about the care, storage, shipping, use, disposal, and recycling of your batteries.

NOTICE

Insert good batteries before beginning...

- Insert good batteries before **data logging** or conducting a **Rate of Change**.
- Insert good batteries before modifying or updating your meriGauge *plus* gauge or meriSense sensor.

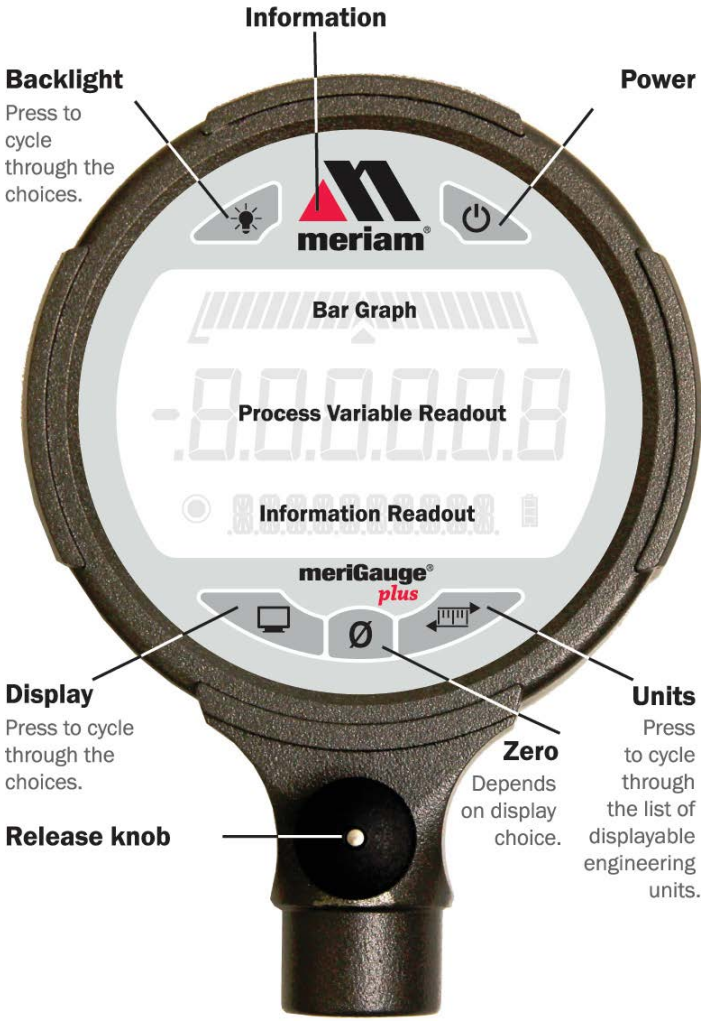
Connect the gauge to a sensor

Connect meriGauge *plus* to meriSense

- The notch on the sensor must face the same direction as the meriGauge *plus* for the sensor to lock in place.
- Simply slide the gauge housing on the meriSense until it fully connects.

The display

The keys



The bar graph

- The bar graph displays a live indication of the current pressure applied to the sensor as a % of Full Scale.
- When the **Information** key is pressed, the bar graph displays the remaining state of the charge for the batteries.

Backlight in the LCD display

White backlight

The white backlight has an automatic timeout. If no keys have been pressed, the backlight automatically turns off after *1 minute*.

> ***Note:*** *You can configure the backlight timeout with meriLink.*

Levels of backlight intensity

Press the **Backlight** key to cycle through the choices:

- Low.
- Medium.
- High.
- Off.

Flashing red backlight

- The flashing red backlight indicates an error condition.
- Possible error conditions are:
  - Pressure has exceeded the calibrated accuracy of the meriSense.
  - Pressure has fallen below the stated accuracy of the meriSense.
- The red backlight overrides the white backlight.

Display modes

Nine (9) display modes

Some modes below have characters in parentheses. The characters in bold display on the meriGauge *plus*.

1. Normal	5. Tare (**T.OFF, T.ON**)
2. Min (**MIN**)	6. Average (**AVG**)
3. Max (**MAX**)	7. Rate of change per minute (**RATE**)
4. Accuracy (**+/–**)	8. Data Log Lite (**DATA LOG**)
	9. Time & Temperature

Zero the meriGauge plus in Display mode

In normal measure mode

If the sensor is within a tolerance band around zero, press and hold the **Zero** key to zero the pressure measurement and to reset the Min and Max measurements.

> ***Note:*** *The tolerance band is approximately ± 1 % of the Full Scale pressure value of the sensor.*

In Min or Max mode

Press and hold the **Zero** key to reset the Min and Max measurement. However, this does not zero the pressure measurement.

In Tare mode

When the Tare is off (T.OFF), press and hold the **Zero** key to turn on Tare (T.ON) and to set the Tare value at the current pressure measurement.

Likewise, when the Tare is on (T.ON), press and hold the **Zero** key to turn off the Tare mode.

In Average mode

Press and hold the **Zero** key to restart the rolling average.

In Data Log mode

Press and hold the **Zero** key until you see **–STARTING—**appear on the LCD display to start recording a new data log.

Holding the Zero key

The key must be held to perform the Zero or Tare function. The displayed value(s) dashes out during the zero or tare process.

The Data Log mode

View the "BATT %" before you begin

Data Log Lite runs up to one hour.

> ***Note:*** *Do not start data log if the outline of the battery icon is flashing.*

Only one data set at a time

Data Log Lite can record and hold only one data set at a time.

> ***Note:*** *When you press and hold the* **Zero** *key while* **DATA LOG** *appears in the LCD display, a new data set begins to record over the existing data set.*

Start the data logging process

1. Press the **Display** key until you see **Data Log** appear in the LCD display.
2. Press and hold the **Zero** key until you see **–STARTING–.** The data log symbol starts to flash indicating it is recording data. Data Log Lite records data every 15 seconds for one hour.
3. **–COMPLETE—**appears after one hour.

   Note: *Auto Off is suspended during data logging. If you selected 5 Minutes for Auto Off, then meriGauge plus remains on for one hour and 5 minutes and then turns off.*

Complete the data logging process

Here are some of the actions that can complete the data logging process before the one hour:

- Press and hold the **Zero** key until you see **–STOPPING–.**
- Press the **Power** key to turn off the meriGauge *plus*.
- Remove the meriGauge *plus* from a sensor.
- Connect the meriGauge *plus* to the meriLink.

List of Engineering Units

Engineering units are stored in a sensor

- Each meriSense sensor stores a complete list of engineering units.
- meriLink software gives you the ability to configure specific engineering units to specific sensors.
- The meriGauge *plus* displays whatever units were previously selected on individual sensors.
- When the meriSense pressure sensors are shipped, the common 12 engineering units are available. These 12 units appear in bold type in the Standard Units list below.

Standard Units (non-custom)

1. PSI	12. CMW4C	23. KG/M2
2. INW20C	13. CMW60F	**24. PA**
3. INW4C	14. MW20C	25. HPA
4. INW60F	15. MW4C	**26. KPA**
5. FTW20C	16. MW60F	27. MPA
6. FTW4C	**17. INHG0C**	**28. BAR**
7. FTW60F	18. MHG0C	**29. MBAR**
8. MMW20C	19. CMHG0C	30. ATM
9. MMW4C	**20. MMHG0C**	**31. OZ/IN2**
10. MMW60F	21. TORR	32. LB/FT2
11. CMW20C	**22. KG/CM2**	

Engineering units can be changed on a sensor

- You must use meriLink software to select or deselect the Standard Units on a particular sensor from the list above.
- By pressing the **Units** key on the meriGauge *plus*, you cycle through all the configured units within the currently attached meriSense.

Information key

The Information key is in the red triangle of the Meriam logo

The information key displays:

Icon	Explanation
	The **Information** key *(the red triangle inside the Meriam logo)* displays the following: • **BATT %** displays the percentage on the bar graph and in digits. • **CAL DATE** is the date on which the meriSense sensor was calibrated by Meriam. • **USL** displays the Upper Specification Limit on the sensor. • **LSL** displays the Lower Specification Limit on the sensor. • **LT MAX %** displays the Life-Time Maximum that has been reached on the sensor.

Auto Off (Automatic shutoff)

How long will the gauge remain on if I leave it unattended?

- The default setting is *Always On*.
- You can configure the timeout for the Auto Off with meriLink.

The timeout for Automatic Shutoff is suspended

- The timeout for the Auto Off is suspended during data logging sessions to prevent an accidental loss of information.
- Auto Off is automatically re-instated after data logging is completed.

Prepare the meriGauge plus for storage

NOTICE

Remove the batteries to store the gauge

1. Remove the batteries from the meriGauge *plus* to store it for **30 days or more**.
2. Follow the battery manufacturer's instructions for storing your batteries.

Store the meriGauge *plus*

The recommended storage temperature for the meriGauge *plus* is between –20 °C to 70 °C (–4 °F to 158 °F).

The meriLink software

Install meriLink from the CD

Follow the on-screen directions

On the **meriGauge *plus* CD,** in the folder called **meriLink installer,** run the **Setup.exe** program and follow the on-screen instructions.

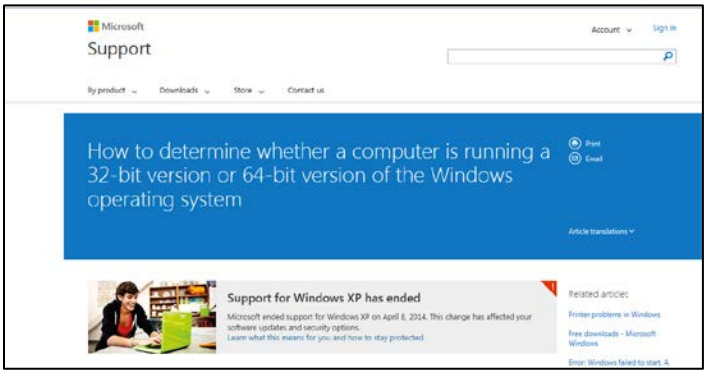
Part 1: Install USB device drivers

Do you have a 32 bit or 64 bit computer system?

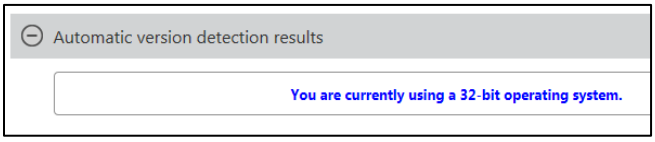
You need to select the right USB device driver for your system so follow the steps on this page.

If...	Then...
You already know what version you have,	Begin on the next page: Part 2: Install USB...
You don't know what version you have,	Continue with step 1.

1. Click this link http://support.microsoft.com/kb/827218 and this Microsoft website appears.



2. Scroll down until you see the **Automatic version detection results** box.



Note: *Microsoft displays the type of system your computer has, in this example 32-bit.*

Part 2: Install USB device drivers from the CD

For 64-bit systems

On the **meriGauge *plus* CD:**

- Open the folder called **USB Drivers** and open the subfolder called **64bit**.
- Double click **Installer.exe** and follow the on-screen instructions.

For 32-bit systems

On the **meriGauge *plus* CD:**

- Open the folder called **USB Drivers** and open the subfolder called **32bit**.
- Double click **Installer.exe** and follow the on-screen instructions.

Overview of meriLink

Compatible versions of Microsoft Windows

meriLink is compatible with these three versions:

- Microsoft Windows 7 with Microsoft .NET Framework 4.5 or newer.
- Microsoft Windows 8.1 with Microsoft .NET Framework 4.5 or newer.
- Microsoft Windows 10 with Microsoft .NET Framework 4.5 or newer.

USB cable and your computer

Connect the USB cable to meriGauge *plus* and to your computer in order to configure meriGauge *plus* and meriSense using the meriLink software.

Don't turn off the meriGauge *plus*

NOTICE

Do not turn off the power on the meriGauge *plus* while the gauge is communicating with meriLink. The display has dashes and the word **OFFLINE** while meriLink is communicating with a meriSense.

- Close meriLink first, disconnect the USB, and turn off the meriGauge *plus*.
- As long as **OFFLINE** remains visible, **Auto Off** is suspended.

Watch for the battery outline

NOTICE

Do not attempt to modify or update your meriGauge *plus* or meriSense when only the outline of the battery icon is visible..

Watch for the Yellow dot on a tab

A yellow dot appears on a tab in meriLink to indicate that you have made changes to settings but you have not saved them yet.

Click the **Write** button to save the changes you made.

Year-Month-Date format

Date format

meriLink displays the date in year-month-day format.

For example: **2016-04-22** (YYYY-MM-DD).

Hours:Minutes:Seconds format

Time format

meriLink displays the time in **Universal Coordinated Time** (UTC) 24-hour format.

For example: **15:05:45 UTC** (hours:minutes:seconds).

Connection status

Attached devices

meriLink displays the outlines of *attached* devices on the right with descriptions appearing alongside. See the figure below.

No sensor attached

Notice the bold outline of meriGauge *plus* contrasted with the dotted outline of an unattached meriSense. See the figure below.

No attached devices

meriLink displays no outlines of devices on the right side. See the figure below.

Buttons

meriLink buttons

The function buttons are described below.

Icons	Descriptions
	The **Application** screen displays: • About. • Language Selection. • Available Software Update.
	The **Update** screen displays two sections: • The meriGauge section. • The meriSense section. ***Note:*** *These sections alert you to new software updates for gauge and for each attached sensor.*
	The **Configuration** screen displays two tabs: • *meriGauge* or the name you assigned to it. • *meriSense* or the name you assigned to it. ***Note:*** *These tabs offer you various settings to configure each device.*
	The **User Calibration** screen displays: • Live Reading. • Restore Factory Defaults. • Choose Calibration Unit. • Begin and Apply calibration. • Factory Calibration Information. • User Calibration Information.
	The **Data Log Lite** button displays data log information and sensor information.

Passwords

Overview of passwords

Passwords are not required to use the meriGauge *plus* or meriSense**.**

- Each device (meriGauge *plus* or meriSense) can have its own unique 16-character password. You may use from 1-16 characters: letters, numbers, or symbols, and uppercase and lowercase.
- Each device can have its password enabled or disabled independently from any other device.
- meriLink retrieves the passwords stored on the meriGauge *plus* and meriSense.

meriLink uses the password on meriGauge

If *you* choose to enable the **Password Required For Future Access** feature**,** then meriLink will request a password for the following actions:

- To modify a gauge's configuration.
  This action includes saving to or loading from a file.
- To update the software on a gauge.

meriLink uses the password on meriSense

If *you* choose to enable the **Password Required For Future Access,** then meriLink will request a password for the following actions:

- To modify the sensor's configuration.
  This action includes saving to or loading from file.
- To update the software on the sensor.
- To calibrate the sensor.

Passwords (continued)

meriLink requests a password

If *you* choose to enable the **Password Required For Future Access,** then meriLink will request a password whenever you modify a configuration, update software, or calibrate a device.

- Once meriLink accepts a password for one of those actions, the device remains unlocked until it is disconnected.
- If you enter the password on one screen, meriLink unlocks that device on its other screens as well.

Data Log Lite does not use a password

meriLink does not use a password since **Data Log Lite** does not make changes.

Request a recovery password

Forgot the password for a device?

If you forget a password, contact Meriam to generate a recovery password for you to unlock the device.

A recovery password disables the password until you turn it back on. meriLink will prompt you to enter a new password.

Contact Meriam.

Only valid during the day

The recovery password is only valid during the day it is issued.

User Calibration—For qualified personnel only

What does "Calibration Enabled" refer to?

- With a check in the box, **Calibration Enabled** displays the *Live Reading* with your current user calibration applied.
- Without a check in the box, it displays *Live Reading* without your user calibration.

Restore Factory Defaults

This button clears your user calibration from the meriSense.

Choose Calibration Unit

- Select the calibration reference units.
- This does not affect or depend on the configuration units.

Begin button…Apply button

1. Click **Begin**.
2. Select the point.
3. Apply reference pressure within the range shown.
4. Enter the reference value.
5. Save the point.
6. Repeat steps 2-5 until you are done.
   (You have to change at least one point.)
7. Click the **Apply** button.

Note: If you click the **Back** button with information in any of the five boxes, an alert appears.

Configuration for meriGauge plus

The *Names* field

You can assign your own company designations to each meriGauge *plus*.

Sync PC time to Gauge

- Click to update meriGauge time and date with your computer.
- The display and data logging use this time and date.

Timeouts

- Backlight – default setting is *1 Minute*.
- Auto Off (Automatic Off) – default setting is *Always On*.

Display Functions: Enable or Disable

- Min/Max
- Accuracy
- Tare
- Average
- Rate of Change
- Time & Temp
- Allow zero adjust (ø)

As Left/As Found Configuration Report

You can review a summary of the configuration of the gauge when it is first connected and the changes you made in the **As Found/As Left Report** for meriGauge *plus*.

> ***Note:*** *Depending on the speed of your computer, you may have to wait for it to appear.*

Open and Save / Read and Write Configurations

- **Save** refers to saving new configuration data to an XML file format on your computer and **Open** refers to opening configuration data that you saved on your computer.
- **Read** and **Write** refer to reading configuration data from a meriGauge *plus* or writing to it.

Configuration for meriSense

The *Names* field

You can assign your own company designations to each meriGauge, asset number, naming scheme, and so on.

Enabled Units

Select or deselect the engineering units to view on the meriGauge *plus* display.

Two User Defined Units

Users can define text and multiplier for two non-standard or unsupported display units.

> ***Note:*** ***multiplier × PSI = the displayed value***.

As Left/As Found Configuration Report

You can review a summary of the configuration of the sensor when it is first connected and the changes you made in the **As Found/As Left Report** for meriSense.

> ***Note:*** *Depending on the speed of your computer, you may have to wait for it to appear.*

Open and Save / Read and Write Configurations

- **Save** refers to saving new configuration data to an XML file format on your computer and **Open** refers to opening configuration data that you saved on your computer.
- **Read** and **Write** refer to reading configuration data from a meriGauge *plus* or writing to it.

Preview the data log

Preview window

The Preview window displays the first 10 samples so you can confirm the data to save. If you have fewer than 10, it displays all of your samples.

Status, pressure, and temperature

The Status

- The ✓ symbol corresponds to readings that are within the calibrated range.
- The ↓↑ and × symbols correspond to the flashing red backlight on the meriGauge *plus* and indicate an error condition. The ↓↑ symbol indicates readable data. The × symbol indicates dashes and no readable data.

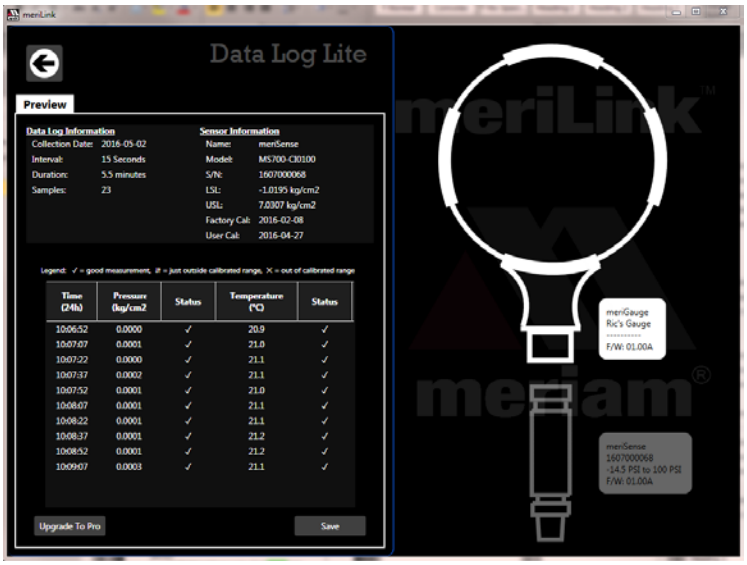
The Pressure

The pressure indicates the reading at each 15-second interval in the data set.

The Temperature

The temperature indicates *approximate* ambient temperature at each 15-second interval in the data set.

> ***Note:*** *See the figure below as an example of what the preview window may look like.*



Data log files

Save the log file

The **Save** button in **Data Log Lite** saves the data to a *Tab Separated Values* (*.TSV) file format. Due to differences in the use of commas, the TSV file format was selected.

Import the log file into Microsoft® Excel®

NOTICE

Use **Excel** (or other spreadsheet or database programs) to import the TSV file so you can see the formatted data log.

Directions for **Excel 2010** (later versions are similar):

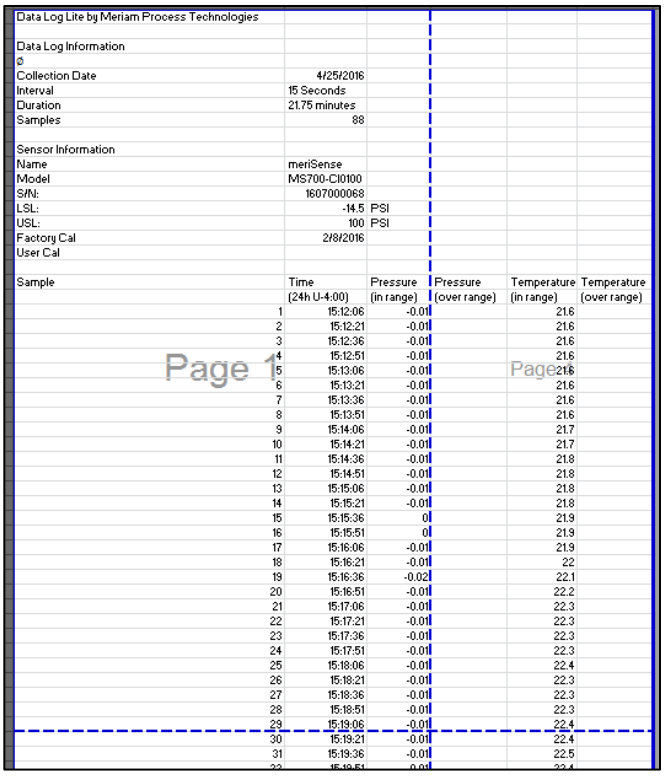
8. Open a new, blank workbook in Excel.
9. Click the **Data** tab.
10. Click the **From Text** button.
11. Click the **Text Files (*.prn;*.txt;*.csv)** arrow and select **All Files (*.*).**
12. Navigate to find the TSV file that you saved.
13. Select the file and click the **Import** button.
    The **Text Import Wizard** appears and guides you through three steps.
14. Click the **Next** button (in Step 1 of 3).
15. Click the **Next** button (in Step 2 of 3).
16. Click the **Finish** button (in Step 3 of 3) and the **Import Data** window displays.
17. Click the **OK** button to place the data in the **Existing worksheet** in cell A1.

    Note: *You may use other spreadsheet or database software to import TSV files. Some word processing software can import the data but text editors (Notepad is one example of a text editor.) may require extra effort to format the data.*

Data log files (continued)

Look for page breaks if you want to print

Excel has a feature called **Page Break Preview** to show you where the page breaks occur in the log file. Change the page breaks, rows to repeat at the top, and other settings as necessary so your printers do not waste paper.



Data Log Lite by Meriam Process Technologies					
Data Log Information					
Collection Date	4/25/2016				
Interval	15 Seconds				
Duration	21.75 minutes				
Samples	88				
Sensor Information					
Name	meriSense				
Model	MS700-CI0100				
S/N:	1607000068				
LSL:	-14.5	PSI			
USL:	100	PSI			
Factory Cal	2/8/2016				
User Cal					
Sample	Time (24h U-4:00)	Pressure (in range)	Pressure (over range)	Temperature (in range)	Temperature (over range)
1	15:12:06	-0.01		21.6	
2	15:12:21	-0.01		21.6	
3	15:12:36	-0.01		21.6	
4	15:12:51	-0.01		21.6	
5	15:13:06	-0.01		21.6	
6	15:13:21	-0.01		21.6	
7	15:13:36	-0.01		21.6	
8	15:13:51	-0.01		21.6	
9	15:14:06	-0.01		21.7	
10	15:14:21	-0.01		21.7	
11	15:14:36	-0.01		21.8	
12	15:14:51	-0.01		21.8	
13	15:15:06	-0.01		21.8	
14	15:15:21	-0.01		21.8	
15	15:15:36	0		21.9	
16	15:15:51	0		21.9	
17	15:16:06	-0.01		21.9	
18	15:16:21	-0.01		22	
19	15:16:36	-0.02		22.1	
20	15:16:51	-0.01		22.2	
21	15:17:06	-0.01		22.3	
22	15:17:21	-0.01		22.3	
23	15:17:36	-0.01		22.3	
24	15:17:51	-0.01		22.3	
25	15:18:06	-0.01		22.4	
26	15:18:21	-0.01		22.3	
27	15:18:36	-0.01		22.3	
28	15:18:51	-0.01		22.3	
29	15:19:06	-0.01		22.4	
30	15:19:21	-0.01		22.4	
31	15:19:36	-0.01		22.5	

Note: *Other spreadsheet software offer similar features.*

Appendices

Returning for repair or calibration

First — Request a Number

In the event that a meriGauge *plus* or meriSense requires service and must be returned, please contact Meriam using one of the methods listed in the following table to request a **Return Material Authorization (RMA)** number:

Method	Information	
Website:	http://www.meriam.com/resources/service-repair-authorization/ Complete the information online and submit the form.	
Fax:	If you printed and completed the Service & Repair Authorization form, then fax it to:	
	US and International Customers	+ 1 216 281 0228
E-mail:	We need the following information in the email: • Look on the meriGauge *plus* or meriSense label to find the model number & the serial number. • Give a brief description of the problem. • Send the e-mail to: returnforms@meriam.com	

Return Material Authorization

Do not send any unit for repair unless you contacted Meriam for a Return Material Authorization (RMA) number.

Important: If you have not received this number and have not clearly marked it on the package being shipped back, *we will return the unit at your expense*.

The Meriam Service & Repair Department will provide you with this number when you complete the website form, fax or e-mail your information.

An RMA number must accompany all incoming packages to insure proper tracking, processing, and repair work.

Questions? Call Meriam

US Customers	(800) 817-7849
International customers	+ 1 216 281 1100

Ship the box to

Meriam
10920 Madison Avenue
Cleveland, Ohio 44102
USA

Troubleshooting Checklist

The words “No Sensor” display on the gauge

Follow these steps to troubleshoot the meriGauge *plus* connection with meriSense sensor when the message **No Sensor** appears:

1. Turn off the meriGauge *plus* gauge.
2. Remove the gauge from the sensor.
3. Re-attach the gauge to the sensor.

   Note: *The notch on the sensor must be positioned the same direction as the gauge face for the sensor to lock in place. (You may hear it click when it locks in place.)*

   Note: *The locking pin prevents the gauge from accidentally disconnecting from the sensor.*

4. Turn on the meriGauge *plus* gauge.

   Note: *If the preceding steps don’t work, contact Meriam Sales:*

Specifications

Display Specifications

Display rate

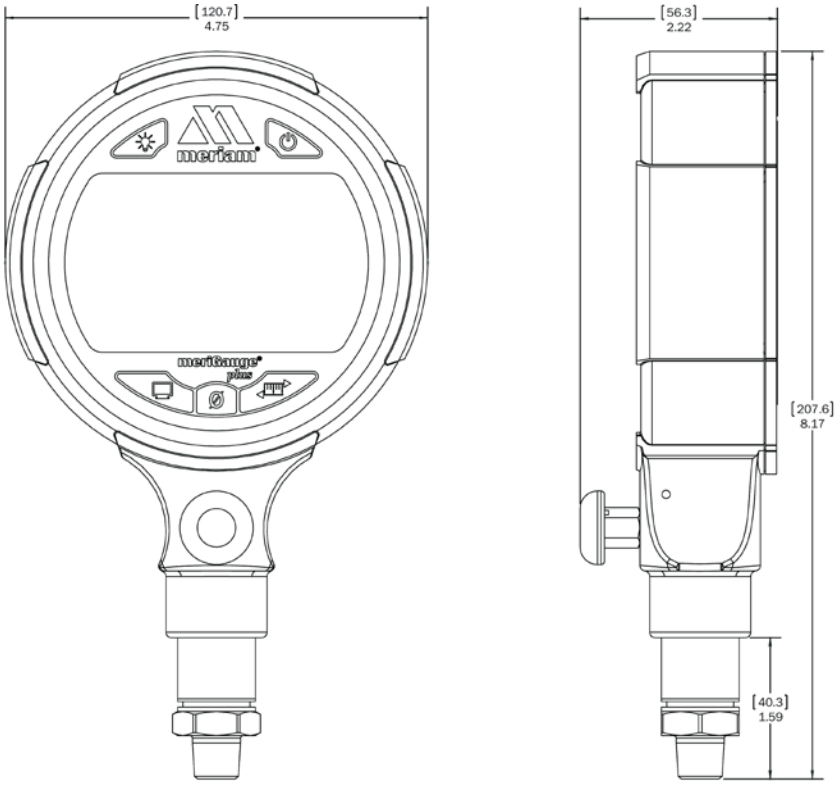
The meriGauge *plus* displays five (5) updates per second.

LCD screen

- The LCD displays six (6) digits.
- The numerical display height is 17.8 mm (0.7 in.)

Dimensional Specifications

The meriGauge plus gauge with the meriSense smart sensor



Material specifications

meriGauge *plus* housing

The meriGauge *plus* housing is made of these two types of aluminum:

- A356 Aluminum.
- 6061 Aluminum.

meriSense

The meriSense is made from 300 series stainless steel.

Hazardous Material and Recycling Compliance

Compliant with European Directives

This product is compliant with these European directives:

Directive	Description
RoHS Directive 2011/65/EU	Reduction of Hazardous Substances
WEEE 2012/19/EU	Waste from Electrical and Electronic Equipment ***Note:*** *The following marking indicates that you must not discard this electrical / electronic product in domestic household waste.* 

Part numbers

Contact Sales about these part numbers

Contact sales@meriam.com for more information:

+ 1 216 281 1100 or **(800) 817-7849**.

Part Numbers	Descriptions
Z9P273	USB Cable
Z9P1055	Protective Boot
Z9A1354	Hard carrying case
Z9A878	4-pack of batteries