



App Store  
(iOS)



Google Play  
(Android)

## Wireless Micron Gauge User's Guide

## Specifications

- Range: 0 – 25,000 Microns, 25 Torr  
3330 Pa, 33.3 mBar, 25 mmHg
- Accuracy: 5% of Reading +/- 5 Microns
- Resolution: 1 Micron (< 1000 Microns),  
0.1 Pa, 0.001 mBar/mmHg/Torr
- Warm-up: Instant
- Response: Instant
- Power: 2 'AAA' Alkaline Batteries  
Lithium Recommended for Low  
Temperature Operation.
- Battery Life: Up to 100 Hours (Bluetooth  
Off)
- Op. Temp. -10°F – 122°F (-12°C – 50°C)
- Fitting: 1/4" MFL Anodized Aluminum
- Weight: 2.7 oz. (77g) with Batteries
- Dimensions: 4.3" x 1.3" x 1"  
(11cm x 3.3cm x 2.5cm)
- Safe Over-  
Pressure: 500 PSI
- Wireless  
Range: Up to 100m Line-of-Site

## Features

- Hi-Visibility Back-Lit Display
- Microns, Pascals, Millibar, mmHg, Torr
- 0 – 25,000 Micron Range with 1 Micron Resolution
- Automatic Oil Sensor
- Wide Operating Temperature Range
- Long Battery Life
- Calibration Self-Test
- Calibratable – No Reference Needed
- Ideal for HVAC, Industrial and Scientific

## Wireless Operation

Double click to turn the radio on and off.

When turned on, the will flash in the display. This is an indication that the radio is on and waiting for a connection from a mobile app. When a connection is made by a mobile app, the will illuminate solid (not flashing).

For wireless operating instructions, please refer to the instructions and help material included with the iOS or Android app.

## Quick Start

1. Install 2 'AAA' batteries.
2. Press and hold for 1 second.
3. Press and hold to change the vacuum measurement units.
4. Using the supplied coupler, connect the μBluVac+ to an unused service port, core removal tool, or hose attached to the system.
5. Start the vacuum pump. Display will show vacuum pressure in selected units.
6. Press and hold for 1 second to turn the power off.

**WARNING:** To avoid damage, only hand-tighten sensor connection. If greater torque is required, support the sensor housing with a 3/4" wrench.

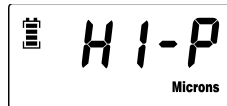
## Display



- CAL** Indicates Calibration Self-Test and Field Calibration Mode
- Torr** Torr Units Selected
- Pa** Pascal Units Selected
- mBar** Millibar Units Selected
- Microns** Microns Units Selected
- mmHg** mmHg Units Selected
- Battery Level Indicator
- Wireless Operation Indicator

## Hi-Pressure Indication

The μBluVac+ displays "HI-P" when the vacuum pressure exceeds 25,000 Microns (3330 Pa, 33.3 mBar, 25 mmHg/Torr):



## Backlight

Press and release to toggle the backlight on and off. To conserve battery power, the backlight will automatically turn itself off after one minute.

## Power Management

### Battery Level Indicator

Four bars in the battery level indicator indicate full battery strength. The μBluVac+ will turn itself off when the batteries are fully consumed.

### Sleep Mode

To conserve battery life, the μBluVac+ enters *Sleep Mode* after one minute in HI-P (unless wireless operation is active and connected):



Full power operation will resume when a button is pressed, or if the vacuum pressure is reduced below 25,000 microns.

### Auto Power-Off

The μBluVac+ powers off completely after one hour in *Sleep Mode*.

### Battery Installation

1. Remove battery cover from the back of the instrument.
2. Install 2 'AAA' Alkaline batteries observing polarity.
3. Replace battery cover.

## Range and Resolution

The μBluVac+ has a broad vacuum measurement range and very high resolution:

Units	Range	Resolution
Pa	0 – 3,330	10 (@ > 1,000)
		1 (@ > 100)
		0.1 (@ < 100)
mBar	0 – 33.3	0.1 (@ > 10)
		0.01 (@ > 1)
		0.001 (@ < 1)
mmHg Torr	0 – 25	0.1 (@ > 10)
		0.01 (@ > 1)
		0.001 (@ < 1)
Microns	0 – 25,000	100 (@ > 10,000)
		10 (@ > 1,000)
		1 (@ < 1,000)

## Oil Sensor & Cleaning

If oil or other contamination is inadvertently drawn into the sensor, the display will show:



To clean the sensor:

1. Turn the  $\mu$ BluVac+ power on.
2. Shake out any excess oil.
3. Using an eye dropper or syringe, fill the sensor port hole with isopropyl alcohol. **Do not** insert any object into the port.
4. Shake out the alcohol.
5. Repeat steps (3) and (4) three times.
6. Thoroughly dry the sensor by pulling a vacuum for about 1 minute, or allow at least 1 hour to air dry.
7. If OIL still shows on the display, perform a freezer calibration.

## Maintenance

The  $\mu$ BluVac+ should provide many years of service with no maintenance required. When not in use, the dust cap should remain in place over the sensor port. Clean the plastic enclosure with a damp (not wet) rag. Mild detergent is acceptable, but use no solvents.

## Product Registration

To register your  $\mu$ BluVac+ for warranty purposes, and for additional information regarding  $\mu$ BluVac+ and other AccuTools products, please visit our website at: [www.accutools.com](http://www.accutools.com).

## Calibration Self-Test

To ensure highest accuracy, periodically perform a calibration self-test:

1. Turn the  $\mu$ BluVac+ power off.
2. Expose the  $\mu$ BluVac+ to atmospheric pressure.
3. Press and continue to hold  $\odot$ . After 5 seconds, the display will show:



if the unit is in calibration, or:

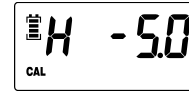


if calibration is required.

## Calibration

To calibrate the  $\mu$ BluVac+:

1. Ensure the sensor is clean and dry.
  2. Install fresh batteries, place dust cap over vacuum port, and turn the power off.
  3. Insert the unit into a small Ziploc® (resealable zipper bag) and seal.
  4. Place the bagged unit into a freezer with a temperature of less than  $-5^{\circ}\text{C}$  ( $23^{\circ}\text{F}$ ).
  5. After 45 minutes, remove the unit from the freezer (do not remove unit from bag).
  6. While holding  $\odot$ , press and continue to hold  $\odot$ . After 5 seconds, the display will show 'H' and the sensor temperature. For example:
7. Place the unit in an undisturbed location with a room temperature of at least  $23^{\circ}\text{C}$  ( $74^{\circ}\text{F}$ ).



## Calibration (cont'd)

8. Allow the unit to warm slowly to  $20^{\circ}\text{C}$ .
9. When complete, the display will show:



**Note:** The sensor temperature in step (6) must be less than  $-2^{\circ}\text{C}$  ( $28^{\circ}\text{F}$ ) for calibration to start. If ERROR appears on the display, perform the complete calibration procedure again, or, contact Core Enterprises, Inc. for technical support.

## Low Temperature Operation

The  $\mu$ BluVac+ can operate accurately at temperatures below freezing, though battery life may not be optimum. Use Lithium 'AAA' batteries for best battery life at low temperatures.

Contains Transmitter Module FCC ID: T9JRN4020

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy, and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Contains transmitter module IC: 6514A-RN4020

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

**Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes: (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.**

ONE YEAR LIMITED WARRANTY

Core Enterprises, Inc. warrants that this AccuTools® product conforms to Core Enterprises, Inc. published specifications and will be free from defects in material and workmanship. The duration is for a period of one year from the date of purchase. Core Enterprises, Inc., at its option, will repair or replace this product or any component of the product found to be defective during the warranty period. Replacement will be made with a new or remanufactured product or component. This is your sole warranty.

This warranty is valid for the original retail purchaser from the date of initial retail purchase and is not transferable. Keep the original sales receipt. Proof of purchase is required to obtain warranty performance. Core Enterprises, Inc. dealers, service centers, or retail stores selling Core Enterprises, Inc. products do not have the right to alter, modify or any way change the terms and conditions of this warranty.

This warranty does not cover batteries or any other normal wear or parts or damage resulting from any of the following: negligent use or misuse of the product, damage caused by use of the product for purposes other than those for which was designed, use contrary to the operating instructions, disassembly, repair or alteration by anyone other than Core Enterprises, Inc. or an authorized Core Enterprises, Inc. service center. Further, the warranty does not cover: Acts of God, such as fire, flood, lightning, hurricanes and tornadoes.

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Except to the extent prohibited by applicable law, any implied warranty or condition of merchantability or fitness for a particular purpose is limited in duration to the duration of the above warranty.

Core Enterprises, Inc. shall not be liable for any damages of any kind resulting from the purchase, use or misuse of, or inability to use the product including incidental, special, consequential or similar damages or loss of profits, or for any breach of contract, fundamental or otherwise, or for any claim brought against purchaser by any other party.

Some states or jurisdictions do not allow the exclusion or limitation of incidental or consequential damages or limitations on how long an implied warranty lasts, so the above limitations or exclusion may not apply to you.

This warranty gives you specific legal rights, and you may also have other rights that vary from state to state or jurisdiction to jurisdiction.

How to Obtain Warranty and Repair Service

To obtain warranty or repair service, please call (954) 227-0781 to obtain a RMA number.

For warranty service, a legible copy of the original receipt must be sent along with the RMA Form. Any package received without this RMA number will be refused. The returned product must be properly packaged and insured against shipping damage. Any shipping damage resulting from improper packaging shall be the responsibility of the Purchaser. The repaired or replaced product will be returned to Purchaser, freight prepaid via UPS ground only. Repaired or replaced units carry an additional 90 days warranty.



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