

CERTIFICATIONS (Continued)

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.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 cm between the radiator and your body.

LIMITED WARRANTY

BlackMAX Vacuum Gauges are covered by a CPS Products, Inc. LIMITED WARRANTY. CPS Products, Inc. warrants, to the original purchaser, that its BlackMAX line of wireless vacuum gauges and accessories are free from defects in assembly, materials and workmanship for 1 year from the date of purchase, or 15 months from the date of manufacture, whichever is sooner. If any BlackMAX product is believed to be defective it must be returned to CPS Products. If the product is found to be defective, CPS will repair or replace the item(s), at our option, at no charge.

This warranty does not apply to products or accessories that have been altered, misused, submerged, exposed to extreme heat or cold, lightning strikes, or electrical voltage exceeding published product specifications. This warranty also does not apply to products that are simply in need of routine field service maintenance.

To assure your BlackMAX purchase is on file with CPS Products, please fill in a Product Registration form and mail to CPS within 15 days from the date of purchase, along with a copy of the original sales receipt. Return of the registration form is not required to be

LIMITED WARRANTY (Continued)

covered by the Limited Product Warranty. To process a warranty claim, please contact CPS USA at 1-800-277-3808 or CPS Products N.V. (Belgium) at (32) 3 281 30 40; or CPS Australia at 08 8340 7055, within 15 days of discovering defects in assembly, materials, or workmanship. CPS will provide a return authorization number (RGA #). Do not attempt to repair BlackMAX products. CPS has the sole right to determine if a claim is valid and if compensation is justified.

THE FOREGOING WARRANTY IS IN LIEU OF ALL OTHER EXPRESS WARRANTIES. TO THE EXTENT ALLOWED BY LAW, ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE LIMITED TO THE DURATION OF THE LIMITED PRODUCT WARRANTY. IN NO CASE SHALL CPS PRODUCTS INC. HAVE ANY LIABILITY FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES OF ANY KIND, INCLUDING BUT NOT LIMITED TO: THE LOSS OF THE USE OF THE PRODUCT OR ANY ASSOCIATED EQUIPMENT, COST OF ANY SUBSTITUTED EQUIPMENT, FACILITIES OR SERVICES, DOWNTIME, THE CLAIMS OF THIRD PARTIES, DAMAGE TO PROPERTY OR PERSONAL INJURY. SOME JURISDICTIONS DO NOT ALLOW LIMITS ON WARRANTIES OR ON REMEDIES FOR BREACH IN CERTAIN TRANSACTIONS. IN SUCH JURISDICTIONS, THE LIMITS IN THIS PARAGRAPH MAY NOT APPLY. THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM JURISDICTION TO JURISDICTION.

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For additional language translations and the latest update to this owner's manual, go to the CPS Products website.

BLACKMAX®

WIRELESS VACUUM GAUGE

For use with CPSLinkPro App on android or iOS mobile devices.

Also for use with BlackMAX Wireless Digital Manifolds 200 series or later (sold separately).

US Patent No. 9,043,161



OPERATOR'S MANUAL (English)

BVG215

OVERVIEW

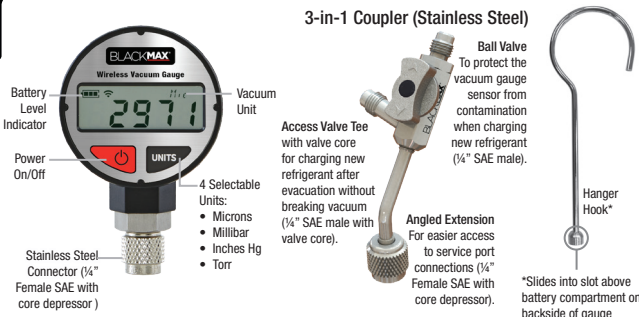
The BlackMax® BVG215 Wireless Vacuum Gauge brings high-resolution evacuation measurement and verification to the jobsite. The gauge can be used in 3 different ways, streaming live data directly to a Wireless Digital Manifold (200 series or later), connected to a wireless mobile device or read as a stand-alone instrument. Calibrated to NIST standards, the BVG215 delivers reliable accuracy across a wide operating range. It also features an innovative 3-in-1 Coupler that allows tech's to move seamlessly between vacuum testing and refrigerant charging without contaminating the sensor or breaking vacuum (all in one coupler). The result is a smoother evacuation process, clearer verification, and fewer workflow interruptions from start to finish.

For an enhanced experience, download the **CPSLinkPro™** App to your mobile device via the Apple App Store or get it on Google Play. To make a wireless connection, make sure wireless mode is activated on your mobile device.

Recommendation: Wirelessly connect the instrument to the CPSLinkPro in order to download the latest firmware 'over the air'. The firmware details outlined in this manual may slightly differ from the latest firmware on the device.



GAUGE LAYOUT & ACCESSORIES



CONTROLS AND FEATURES

1. Install a 9V battery.
2. Attach the BVG215 in a configuration that includes connections to a vacuum pump as well as a refrigerant system service port. Incorporating the 3-in-1 coupler and/or a manifold gauge may be helpful depending on the situation. To ensure accurate readings, always place the vacuum gauge as far as possible from the vacuum pump. (vacuum pump and manifold gauge not included).
3. **ON:** Press and hold the **Power button**  until the bars are energized. Then release the **Power button**.
4. Connect to a BlackMax Wireless digital manifold or mobile device (via CPSLinkPro).
5. Initiate the evacuation process (start vacuum pump) and monitor the BVG215 until the desired vacuum pressure level is achieved.
6. **OFF:** Manual: Press and hold the **Power button** until the display is blank.

LCD Bars Energized (3 rows)	Vacuum Pressure		
	Microns (millitorr)	inHg	mbar
Top Row of Bars	> 303,025	< 18 inHg	>404 mbar
Top & Middle Row	303,025 - 252,020	18 - 20 inHg	404 - 336 mbar
Top, Middle & Bottom Row	252,020 - 200,987	20 - 22 inHg	336 - 268 mbar
Middle & Bottom Row	200,987 - 150,763	22 - 24 inHg	268 - 201 mbar
Bottom Row	150,763 - 100,000	24 - 26 inHg	201 - 133 mbar
Numerical Value	<100,000	> 26 inHg	<133 mbar

RESOLUTION FOR NUMERICAL VALUES

Vacuum Pressure (microns)	100,000	75,000	50,000	25,000	10,000	3,000
	75,000	50,000	25,000	10,000	3,000	0
Displayed Resolution (microns)	2,000	1,000	500	100	50	1

7. **Auto-Off:** Instrument automatically powers down after 10 minutes without wireless connection (length can be adjusted/disabled in CPSLinkPro).

SENSOR CLEANING PROCEDURE

The BVG215 incorporates an easy to clean thermistor sensor, which cannot be damaged from exposure to positive pressure or oil mist.

1. Invert the BVG215 and remove the core depressor and gasket. Pour 1 tablespoon of clean 100% DENATURED ALCOHOL directly into the sensor housing.

SENSOR CLEANING PROCEDURE (Continued)

2. Gently shake the unit to create a swirling effect within the sensor housing.
3. Pour out the alcohol and repeat the procedure until the alcohol appears clear and free of contaminants.
4. Allow sensor to air dry. (DO NOT BLOW DRY).
5. Replace gasket and core depressor. Replace any compromised parts as needed.
 - Rubber Gasket Part number: HXG
 - Core Depressor Part Number: HXD

INSTRUMENT SPECIFICATIONS

Sensor Type	Self-heated thermistor bridge with integral temperature compensation from 32°F to 122°F (0°C to 50°C)
Accuracy	10% of reading +/- 5 microns (0-2,000 microns)
Operating Range	Atmosphere – 0 microns
Pressure Rating	450 PSIG MWP, 3000 PSIG Burst
Operation Temperature Range	Compensated (accuracy as stated): 32°F to 122°F (0°C to 50°C) non-compensated (add +/- 0.5% error for every °C outside compensated range): -22°F to 158°F (-30°C to 70°C)
Operating and Storage Humidity	0-95%, Non-condensing
Storage Temperature	-40 to 185°F (-40°C to 85°C)
Refrigerant Compatibility	All (including Ammonia) A1, A2L, A2 & A3 Compatible
Wireless Range	Up to 325 ft.
Battery	9V Alkaline (up to 20 hours of runtime)
Auto-Power Off	After 10 minutes of inactivity (length can be adjusted/disabled)
Selectable Units	Microns, Millibar, In Hg, Torr
Limited Warranty	1 year

CERTIFICATIONS



Contains FCC ID WAP2005 IC: 7922A-2005

FCC Statement

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and.
2. This device must accept any interference received, including interference that may cause undesired operation.