

The Honeywell BW™ RigRat is a versatile Multigas area monitor that is purpose built for rugged industrial applications. In addition to a variety of gas detection options, the BW RigRat offers noise sensing, meteorological, and wireless connectivity options. Position several RigRat monitoring and compatible on-person gas detectors to form a wireless safety parameter that alerts onsite workers of gas concentration that exceed low level limits.

### FEATURES

- Accepts line or solar power for extended installations
- Inert mode that prevents alarm in normal ambient air conditions
- Rugged, weatherproof design with optional protective cage
- Large, easy-to-read display
- I/O ports provide additional input capabilities
- Touchpoint™ for visibility on RigRat monitors and workers' personal detectors

### APPLICATIONS

- Zone declassification
- Refinery and chemical plant turnarounds
- Confined space
- Routine maintenance
- Emergency response
- Fence line monitoring
- Environmental disaster monitoring
- Site surveys
- Short-term environmental monitoring



**CALL GEOTECH TODAY (800) 833-7958**

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### SPECIFICATIONS

#### Instrument (Typical)

|  |   |
|--|---|
| <b>Model Number</b>                    | BWRR100P/BWRR100D   |
| <b>Size</b>                            | 15.8 x 11.4 x 18.5 in. / 40.0 x 29.0 x 47.0 cm  |
| <b>Weight</b>                          | 17.6 lb. / 8 kg   |
| <b>Gas Sensor Slots</b>                | Up to 6   |
| <b>Gas Sampling Method</b>             | Pumped or diffusion   |
| <b>Battery</b>                         | Rechargeable Li-ion battery (3.7V/26.4 Ah)  |
| <b>Charging Time</b>                   | Less than 18 hours when instrument is powered off   |
| <b>Running Time</b>                    | 8 weeks for low-power model; other models vary by configuration   |
| <b>Keypads</b>                         | One-button operation and programming  |
| <b>Display</b>                         | 3.5" 240 x 320 TFT color LCD with white LED backlight   |
| <b>Alarm</b>                           | Red/yellow/green LED alarm; buzzer alarm 108 dBA @ 1 m; on-screen indication of alarm conditions  |
| <b>Datalogging</b>                     | Complete gas sensors and instrument information for at least 4 months at one minute intervals   |
| <b>Wireless</b>                        | ISM license-free band:<br>Bluetooth Low Energy Module (BT 4.2/5.0), 2.4 GHz, in default;<br>Mesh Module: IEEE 802.15.4 868 MHz / 915MHz / 2.4 GHz (optional);<br>OR Wi-Fi Module: 802.11 b/g/n 2.4 GHz (optional)                           |
| <b>Radio Module &amp; Range</b>        | Bluetooth Low Energy: RMBLE, up to 16.4 ft. / 5 m;<br>Mesh: RM900A, 984 ft. / 300 m (868-900 MHz) or RM2400, 492 ft. / 150 m (2.4 GHz);<br>Wi-Fi: RMWIFIC, up to 164 ft. / 50 m;  |
| <b>Outdoor Location</b>                | GPS receiver module: GPS L1 frequency (1575.42 MHz) (optional);<br>Only with IEEE 802.15.4 868 MHz / 915MHz modem and WIFI  |
| <b>IP Rating</b>                       | IP65 for pumped models; IP67 for diffusion models   |
| <b>Temperature</b>                     | -4 to +140°F (-20 to +60°C) for pumped models;<br>-40 to +140°F (-40 to +60°C) for diffusion models   |
| <b>Humidity</b>                        | 5-95% RH (non-condensing)   |
| <b>Safety Certifications (Pending)</b> | cETLus Class I Division 1; Group A, B, C, D; T4;<br>IEC EX / ATEX<br>I M1 Ex ia I Ma<br>II 1G Ex ia da IIC T4 Ga<br>For LEL/IR/CO <sub>2</sub> sensor installed:<br>I M1 Ex ia I Ma<br>II 2G Ex ia da db IIC T4 Gb<br>1G Ex ia da IIC T4 Ga |
| <b>Wireless Approvals (Pending)</b>    | FCC Part 15, IC, RE-D   |
| <b>RoHS (Pending)</b>                  | RoHS Complaint, Directive (EU) 2015/863   |
| <b>Noise Sensor</b>                    | 60-125 dBA range; (respond: 100 Hz to 8 kHz), 1 dB resolution; A-weighted 15 second equivalent level; updated every 5 seconds   |

#### External Ports

|   |   |
|---|---|
| <b>Safe Area Charge Port (AC CHG Safe Area)</b> | Battery charger input 6 VDC 3 A typical; connect to AC/DC adaptor   |
| <b>Field Charge (IS CHG Hazardous)</b>          | Intrinsically safe line power supply input to extend instrument runtime (low-power model only)                          |
| <b>RAEMet Port (Serial)</b>                     | Port to RAEMet wind sensor (optional)   |
| <b>Analog/Switch Input Port (4-20 mA IN)</b>    | 4-20 mA signal input, X1 channel/switch on/off signal input, X1 channel (optional)                                      |
| <b>ON/OFF Switch Output (Switch)</b>            | Max 20 V/120 mA, SPDT Normal Open, X3 channels for external ports (optional). Refer to User Guide for complete details. |

#### Sensor Specifications

| SENSOR  | RANGE                  | RESOLUTION           | TEMPERATURE RANGE            |
|---|------------------------|----------------------|------------------------------|
| <b>Combustible Gases (IR)*</b>                        | 0-100% LEL/0-100% vol. | 1% LEL/0.1% vol.     | -40 to +140°F / -40 to +60°C |
| <b>Combustible Gases (LEL)</b>                        | 0-100% LEL             | 1% LEL               | -40 to +140°F / -40 to +60°C |
| <b>Carbon Dioxide (CO<sub>2</sub>)</b>                | 0-5% vol. / 100 ppm    | 0.01% vol. / 100 ppm | -4 to +131°F / -20 to +50°C  |
| <b>Carbon Dioxide (CO<sub>2</sub>) (Ext. Range)</b>   | 0-100% vol.            | 0.1% vol.            | -4 to +131°F / -20 to +50°C  |
| <b>Volatile Organic Compounds (VOC)</b>               | 0-2000 ppm             | 0.1 ppm              | -4 to +131°F / -20 to +50°C  |
| <b>Carbon Monoxide (CO)</b>                           | 0-500 ppm              | 1 ppm                | -40 to +140°F / -40 to +60°C |
| <b>Carbon Monoxide (CO) (Ext. Range)</b>              | 0-2000 ppm             | 10 ppm               | -4 to +131°F / -20 to +50°C  |
| <b>Carbon Monoxide (CO) (H<sub>2</sub> Resistant)</b> | 0-1000 ppm             | 5 ppm                | -4 to +140°F / -20 to +60°C  |
| <b>Hydrogen Sulfide (H<sub>2</sub>S)</b>              | 0-100 ppm              | 0.1 ppm              | -40 to +140°F / -40 to +60°C |
| <b>Hydrogen Sulfide (H<sub>2</sub>S) (Ext. Range)</b> | 0-1000 ppm             | 1 ppm                | -4 to +131°F / -20 to +50°C  |
| <b>Sulfur Dioxide (SO<sub>2</sub>)</b>                | 0-20 ppm               | 0.1 ppm              | -40 to +140°F / -40 to +60°C |
| <b>Oxygen (O<sub>2</sub>)</b>                         | 0-30% vol.             | 0.1% vol.            | -40 to +140°F / -40 to +60°C |
| <b>Nitric Oxide (NO)</b>                              | 0-250 ppm              | 0.5 ppm              | -4 to +131°F / -20 to +50°C  |
| <b>Nitrogen Dioxide (NO<sub>2</sub>)</b>              | 0-20 ppm               | 0.1 ppm              | -4 to +131°F / -20 to +50°C  |
| <b>Hydrogen Cyanide (HCN)</b>                         | 0-50 ppm               | 0.5 ppm              | -4 to +131°F / -20 to +50°C  |
| <b>Ammonia (NH<sub>3</sub>)</b>                       | 0-100 ppm              | 1 ppm                | -4 to +131°F / -20 to +50°C  |
| <b>Chlorine (Cl<sub>2</sub>)</b>                      | 0-50 ppm               | 0.1 ppm              | -4 to +131°F / -20 to +50°C  |

\* Note: Temperature range for the Dynamet Combustible IR sensor is -4 to +131°F (-20 to +50°C).

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