

DATA SHEET

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HONEYWELL BW™ RIGRAT

Transportable Multi-gas Area Monitor

Comply with safety procedures and protect workers with the most user-friendly area monitor of its kind.

Honeywell BW $^{\rm m}$ RigRat is so easy to use that workers can operate it with confidence, trusting it to alert them to gas threats in their proximity — indoors and out, in temperatures from -40 to +140°F (-40 to +60°C). Honeywell BW $^{\rm m}$ RigRat delivers:

- Up to 8 weeks of runtime on a single charge. Longer runtime than any area monitor in its class.
- Up to six slots for interchangeable gas sensors. Choice of electrochemical, PID, infrared, and catalytic bead sensors (measuring percent LEL and percent by volume).
- Integrated Noise sensor and Metrological data sensors.
- Enhanced configurations with programmable input and output.
- Approval for explosive atmosphere.
 Certified for ATEX/IECEx Zone 0 and CSA C1D1

- Flexible applications. Zone
 declassification, turnarounds, confined
 space, routine maintenance, fence
 line and more. Available with pump for
 remote sampling.
- One-button operation. Grab and go.
 No expertise required.
- Simple setup with a smartphone.
 Easy mobile app for alarm set points, calibration records and more.
- Added protection. Alerts workers to nearby gas leaks, whereas personal detectors cover only the breathing zone.



FEATURES AND BENEFITS



WIRELESS SAFETY PERIMETER

Position several Honeywell BW™ RigRat monitors to form a wireless safety perimeter.



REMOTE MONITORING

Use with Honeywell's remote monitoring software to see gas readings, location and other data from any device with an internet connection — for fast, informed decisions. Add an optional noise sensor or meteorological sensor.

OTHER HONEYWELL BW™ RIGRAT FEATURES:

- Line power for extended runtime in the field
- I/O ports providing additional input capabilities and local executive activation.
- Inert mode that prevents alarm in normal ambient air.
- Large, easy-to-read display



HONEYWELL TOUCHPOINT™ PLUS COMPATIBLE

Use with the Honeywell Touchpoint™ Plus controller for visibility on Honeywell BW™ RigRat monitors and workers' personal detectors.

 Rugged, weatherproof design, with optional protective cage



HONEYWELL BW™ RIGRAT TECHNICAL SPECIFICATIONS

INSTRUMENT SPECIFICATIONS (TYPICAL)

MODEL NUMBER BWRR100P/BWRR100D

SIZE 15.8 x 11.4 x 18.5 in. / 40.0 x 29.0 x 47.0 cm

WEIGHT 17.6 lb / 8 kg

GAS SENSOR SLOTS Up to 6

GAS SAMPLING METHOD Pumped or diffusion

BATTERY Rechargeable Li-ion battery (3.7V / 26.4 Ah)

CHARGING TIME Less than 18 hours when instrument is powered off

RUNNING TIME 8 weeks for low-power model; other models vary by configuration

KEYPADS One-button operation and programing

DISPLAY 3.5" 240 x 320 TFT color LCD with white LED backlight

ALARM Red/yellow/green LED alarm; buzzer alarm 108 dBA @ 1 m; on-screen indication of alarm conditions

DATALOGGING Complete gas sensors and instrument information for at least 4 months at one minute intervals

ISM license free band:

WIRELESS Bluetooth Low Energy Module (BT 4.2 / 5.0), 2.4 GHz, in default;

Mesh Module: IEEE 802.15.4 868 MHz / 915MHz /2.4 GHz (optional); OR

Wi-Fi Module: 802.11 b/g/n 2.4 GHz (optional)

Bluetooth Low Energy: RMBLEC, up to 16.4 ft. / 5 m; RADIO MODULE & RANGE Mesh: RM900A or RM2400, up to 984 ft. / 300 m;

Wi-Fi: RMWIFIC, up to 164 ft. / 50 m;

OUTDOOR LOCATION GPS receiver module: GPS L1 frequency (1575.42 MHz) (optional);

Only with IEEE 802.15.4 868 MHz / 915MHz modem and WIFI

IP RATING IP65 for pumped models; IP67 for diffusion models

TEMPERATURE -4 to +140°F (-20 to +60°C) for pumped models; -40 to +140°F (-40 to +60°C) for diffusion models

HUMIDITY 5 - 95% RH (non-condensing)

cETLus Class I Division 1; Group A, B, C, D; T4;

IEC EX/ATEX I M1 Ex ia I Ma

SAFETY CERTIFICATIONS II 1G Ex ia da IIC T4 Ga

(PENDING)

For LELIR/CO₂ sensor installed:

I M1 Ex ia I Ma

II 2G Ex ia da db IIC T4 Gb 1G Ex ia da IIC T4 Ga

WIRELESS APPROVALS

(PENDING)

FCC Part 15, IC, RE-D

ROHS (PENDING) RoHS Complaint, Directive (EU) 2015/863

NOISE SENOR

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

SAFE AREA CHARGE PORT (AC CHG SAFE AREA)

Battery charger input 6 VDC 3 A typical; connect to AC/DC adaptor

FIELD CHARGE
(IS CHG HAZARDOUS)

Intrinsically safe line power supply input to extend instrument runtime (low-power model only)

RAEMET PORT (SERIAL) Port to RAEMet wind sensor (optional)

ANALOG/SWITCH INPUT PORT

(4-20 MA IN)

4-20 mA signal input, X1 channel/switch on/off signal input, X1 channel (optional)

ON/OFF SWITCH OUTPUT (SWITCH)

 ${\sf Max}\ 20\ {\sf V}\ /\ 120\ {\sf mA}, {\sf SPDT}\ {\sf Normal}\ {\sf Open}, {\sf X3}\ {\sf channels}\ {\sf for}\ {\sf external}\ {\sf ports}\ ({\sf optional}).$ Refer to User Guide for complete details.

HONEYWELL BW™ RIGRAT TECHNICAL SPECIFICATIONS

SENSOR SPECIFICATIONS			
SENSOR	RANGE	RESOLUTION	TEMPERATURE RANGE
COMBUSTIBLE GASES (IR)*	0-100% LEL / 0-100% vol.	1% LEL / 0.1% vol.	-40 to +140° F / -40 to +60° C
COMBUSTIBLE GASES (LEL)	0-100% LEL	1% LEL	-40 to +140° F / -40 to +60° C
CARBON DIOXIDE (CO₂)	0-5% vol. / 100 ppm	0.01% vol. / 100 ppm	-4 to +131° F / -20 to +50° C
CARBON DIOXIDE (CO₂) (EXT. RANGE)	0-100% vol.	0.1% vol.	-4 to +131° F / -20 to +50° C
VOLATILE ORGANIC COMPOUNDS (VOC)	0-2000 ppm	0.1 ppm	-4 to +131° F / -20 to +50° C
CARBON MONOXIDE (CO)	0-500 ppm	1 ppm	-40 to +140° F / -40 to +60° C
CARBON MONOXIDE (CO) (EXT. RANGE)	0-2000 ppm	10 ppm	-4 to +131° F / -20 to +50° C
CARBON MONOXIDE (CO) (H ₂ RESISTANT)	0-1000 ppm	5 ppm	-4 to +140° F / -20 to +60° C
HYDROGEN SUFLIDE (H ₂ S)	0-100 ppm	0.1 ppm	-40 to +140° F / -40 to +60° C
HYDROGEN SUFLIDE (H ₂ S) (EXT. RANGE)	0-1000 ppm	1 ppm	-4 to +131° F / -20 to +50° C
SULFUR DIOXIDE (SO ₂)	0-20 ppm	0.1 ppm	-40 to +140° F / -40 to +60° C
OXYGEN (O ₂)	0-30% vol.	0.1% vol.	-40 to +140° F / -40 to +60° C
NITRIC OXIDE (NO)	0-250 ppm	0.5 ppm	-4 to +131° F / -20 to +50° C
NITROGEN DIOXIDE (NO ₂)	0-20 ppm	0.1 ppm	-4 to +131° F / -20 to +50° C
HYDROGEN CYANIDE (HCN)	0-50 ppm	0.5 ppm	-4 to +131° F / -20 to +50° C
AMMONIA (NH ₃)	0-100 ppm	1 ppm	-4 to +131° F / -20 to +50° C
CHLORINE (CL₂)	0-50 ppm	0.1 ppm	-4 to +131° F / -20 to +50° C

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

THE FUTURE IS WHAT WE MAKE IT



Thank you for reading this data sheet.

For pricing or for further information, please contact us at our UK Office, using the details below.

Please note — Product designs and specifications are subject to change without notice. The user is responsible for determining the suitability of this product.



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