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, 984 ft. / 300 m (868-900 MHz) or RM2400, 492 ft. / 150 m (2.4 GHz);

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

II 1G Ex ia da IIC T4 Ga

SAFETY CERTIFICATIONS For LELIR/CO₂ sensor installed:

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

WIRELESS APPROVALS 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 or SolarPak 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

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

(SWITCH) 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 (CO ₂)	0-5% vol. / 100 ppm	0.01% vol. / 100 ppm	-4 to +131° F / -20 to +50° C
CARBON DIOXIDE (CO ₂) (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 (CL ₂)	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).

SolarPak BW™ RIGRAT (optional)

The Honeywell $BW^{\mathbb{M}}$ RigRat can be powered by SolarPak $BW^{\mathbb{M}}$ RigRat. Certain monitor configurations will not provide a continuous operation but only a run time extension. Please refer to the manual for details.

CERTIFICATION MARKINGS

USA and Canada

Class I, Division 1, Groups A, B, C, D T4 ATEX II 1 G Ex ia IIC T4 Ga -40°C \le Ta \le +60°C

IECEx Ex ia IIC T4 Ga -40°C ≤ Ta ≤ +60°C



Note: Due to ongoing research and product improvement, specifications are subject to change without notice..

