# **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 C1 D1

- 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

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:

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

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;

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

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

**IP RATING** IP65 for pumped models; IP67 for diffusion models

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

-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

II 1G Ex ia da IIC T4 Ga

**SAFETY CERTIFICATIONS** 

(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

60-125 dBA range; (respond: 100 Hz to 8 kHz), 1 dB resolution; **NOISE SENOR** 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

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

(SWITCH)

### **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 <sub>2</sub> )	0-5% vol. / 100 ppm	0.01% vol. / 100 ppm	-4 to +131° F / -20 to +50° C
CARBON DIOXIDE (CO <sub>2</sub> ) (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 <sub>2</sub> RESISTANT)	0-1000 ppm	5 ppm	-4 to +140° F / -20 to +60° C
HYDROGEN SUFLIDE (H <sub>2</sub> S)	0-100 ppm	0.1 ppm	-40 to +140° F / -40 to +60° C
HYDROGEN SUFLIDE (H <sub>2</sub> S) (EXT. RANGE)	0-1000 ppm	1 ppm	-4 to +131° F / -20 to +50° C
SULFUR DIOXIDE (SO <sub>2</sub> )	0-20 ppm	0.1 ppm	-40 to +140° F / -40 to +60° C
OXYGEN (O <sub>2</sub> )	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 <sub>2</sub> )	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 <sub>3</sub> )	0-100 ppm	1 ppm	-4 to +131° F / -20 to +50° C
CHLORINE (CL <sub>2</sub> )	0-50 ppm	0.1 ppm	-4 to +131° F / -20 to +50° C

<sup>\*</sup>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

