

## PHD6™ SPECIFICATIONS



### Six-Gas Detector

<b>Housing</b>	
<b>Material</b>	Polycarbonate with tough rubber overmold
<b>Weight (Alkaline)</b>	1.1 lbs/17.6 oz/499 g (5 sensors)
<b>Weight (Alkaline) + Pump</b>	1.4 lbs/22.4 oz/635 g (5 sensors)
<b>Weight (Lithium-Ion)</b>	1.0 lbs/16 oz/454 g (5 sensors)
<b>Weight (Lithium-Ion) + Pump</b>	1.3 lbs/20.8 oz/590 g (5 sensors)
<b>Dimensions w/o std belt clip</b>	6.63 x 3.13 x 2 in./16.83 x 7.94 x 5.08 cm
<b>Dimensions with std belt clip</b>	6.63 x 3.13 x 2.5 in./16.83 x 7.94 x 6.35 cm
<b>Dimensions w/o std belt clip, with pump</b>	8.5 x 3.13 x 2.38 in./21.59 x 7.94 x 6.03 cm
<b>Dimensions with std belt clip and pump</b>	8.5 x 3.13 x 2.63 in./21.59 x 7.94 x 6.66 cm
<b>Power</b>	
<b>Type</b>	Rechargeable Lithium Ion or Alkaline (3 x AA size) battery pack options
<b>Environmental Ratings</b>	
<b>Dust &amp; Water Resistance Rating</b>	IP65
<b>Drop Testing</b>	Dropped 100+ times from 1 meter to concrete floor
<b>RF Immunity</b>	Conforms to EN 50270
<b>RF Emissions</b>	Conforms to IEC 61000-6-4
<b>ESD Immunity</b>	Conforms to IEC 61000-4-2
<b>Charger (all models) @ 68°F (20°C)</b>	6 hrs max.
<b>Certifications</b> (All certifications include pump, charger and IQ docks (with approved chgr bds))	
	SGS/USTC Class I, Division 1, Groups A,B,C,D Temp Code T3C
	SGS/USTC Class II, Division 1, Groups E,F,G, Class III
	CSA Class I, Division 1, Groups A,B,C,D Temp Code T3C (CSA approval does not include IR sensor)
	ATEX (EPS) Ex ia d IIC 170C (T3)
	IECEX Ex ia d IIC 170C (T3)
	CE Mark
<b>Capabilities</b>	
<b>Controls</b>	3 buttons
<b>Sensor Channels</b>	Maximum of 6
<b>Gas Types</b>	
<b>Available Sensors</b>	O <sub>2</sub> , LEL, PID, Duo-Tox, CO, H <sub>2</sub> S, CO-H, SO <sub>2</sub> , Cl <sub>2</sub> , NO, NO <sub>2</sub> , NH <sub>3</sub> , PH <sub>3</sub> , HCN, IR-CO <sub>2</sub> , IR-CH <sub>4</sub>
<b>User adjustable alarms</b>	Oxygen: Danger Low/Danger High; Combustible: Warning/Danger; PID and Toxic: TWA/STEL/Warning/Danger
<b>Calibration</b>	Fresh air and gas calibration with one button
<b>Calibration dates</b>	Most recent for full instrument calibration and for each sensor
<b>Motorized pump</b>	Optional external pump, standard length 10 ft. (3 m), maximum length 100 ft. (30 m)
<b>Security Beep</b>	User adjustable interval from 5 seconds to 60 minutes
<b>Latching Peak Alarms</b>	User enabled
<b>Datalogging</b>	Blackbox datalogger that can be upgraded to a full datalogger at any time. Activation code and BioTrak PC software required. Full datalogger has user adjustable interval from 1 second to 60 minutes.
<b>Datalogging capacity</b>	See table
<b>Computer Interface</b>	IrDA
<b>Event Logger</b>	20 events including max, min, and average for all sensors, time and duration
<b>Alarms</b>	
<b>Visual</b>	Bright red LED alarm visible from top and sides
<b>Audible</b>	Dual Piezoelectric audible alarm, 92 dbA @ 1 foot (30.5 cm) PhD6 Alarm Loudness Test
<b>Vibrating</b>	Optional

Sensors									
	O <sub>2</sub>	LEL	IR CH <sub>4</sub> (%)	IR CO <sub>2</sub> (%)	PID (PPM)	CO	H <sub>2</sub> S	Duo-Tox CO	Duo-Tox H <sub>2</sub> S
<b>Ranges</b>	0-30 % by vol.	0-99 %	0-5.00%	0-5.00%	0-2000 PPM	0-999 PPM	0-200 PPM	0-999 PPM	0-200 PPM
<b>Resolution</b>	0.1%	1% LEL	0.05% CH <sub>4</sub>	250 PPM	0.1 PPM	1 PPM	1 PPM	1 PPM	1 PPM
<b>Warning Low alarm</b>	19.5%*	10%	0.5	0.5	50	35	10	35	10
<b>Danger High alarm</b>	23.5%	20%	1.0	3.0	100	100	20	100	20
<b>STEL alarm</b>	N/A	N/A	N/A	N/A	25	100	15	100	15
<b>TWA alarm</b>	N/A	N/A	N/A	N/A	10	35	10	35	10
<b>T<sub>90</sub></b>	<15 sec	<20 sec (methane)	<30 sec	<30 sec	<10 sec (isobut)	<20 sec	<20 sec	<20 sec	<20 sec
	CO-H	SO <sub>2</sub>	Cl <sub>2</sub>	NO <sub>2</sub>	NO	NH <sub>3</sub>	PH <sub>3</sub>	HCN	
<b>Ranges</b>	0-999	0-25	0-50	0-100	0-250	0-100	0-20	0-100	
<b>Resolution</b>	1 PPM	0.1 PPM	0.1 PPM	0.1 PPM	1 PPM	1 PPM	0.1 PPM	0.2 PPM	
<b>Warning Low alarm</b>	35	2	0.3	0.5	12.5	12.5	0.3	2.4	
<b>Danger High alarm</b>	100	5	0.5	1	25	25	1	4.7	
<b>STEL alarm</b>	100	5	1	1	25	35	1	4.7	
<b>TWA alarm</b>	35	2	0.5	1	25	25	0.3	4.7	
<b>T<sub>90</sub></b>	<20 sec								

\*Danger Low Alarm for O<sub>2</sub>

Battery Life	
Alkaline @ 70°F/22°C	17 hrs.
Li-ion @ 70°F/22°C	22 hrs.
Alkaline (with PID & LEL) @ 70°F/22°C	13 hrs.
Li-ion (with PID & LEL) @ 70°F/22°C	15½ hrs.
Pump added to above	subtract 4 to 6 hrs.
Shelf Life	
Alkaline	60 days
Li-ion	60 days
Datalogger Capacity	
	Maximum Sessions = 60
	1 sensor = 15,296 datapoints = 254 hr 56 min @ 1 Minute intervals
	2 sensors = 7,648 datapoints = 127 hr 28 min @ 1 Minute intervals
	3 sensors = 7,648 datapoints = 127 hr 28 min @ 1 Minute intervals
	4 to 6 sensors = 3,824 datapoints = 63 hr 44min @ 1 Minute intervals
Instrument	
Pump Tubing length	100 feet PhD6 Extended-length Tubing Test
Display	Front mounted graphic LCD, 1.4 in. x 1.4 in., simultaneously displays readings for all gases being monitored
Display Backlight	Bright white LED backlight. User adjustable to be always on, on in dark environment, or activated by Mode button for an interval adjustable from 5 seconds to 60 minutes.
Temperature range	Operating: 0 to 110°F/-18 to 43°C, Intermittent: -20 to 120°F/-29 to 49°C
Temperature range (Certification)	-20 to +50°C
Humidity Range	15 - 95% RH, non-condensing (0-95% < = 4 hours)
Pump Flow Rate	1 LPM nominal

## Find out more

Toll-free: 800.711.6776

# Honeywell