

# ***Bid Specifications: Pulsar Gas Detector***

<b>Physical Characteristics</b>	
Size	Instrument shall not exceed 3.400”x 2.000”x 0.7500” in total size in vibrating and non-vibrating versions.
Weight	Less than 2.4oz (68 grams)
Handling	Unit shall easily attach to pocket, lapel, belt or hardhat.
Case Material	High strength non-corrosive plastic, will prevent spark generation.
Environmental Protection	Instrument shall be rated to IP54 protection levels for dust and water ingress (waterspray and fine particle dust).
Display Location	Display is viewable from the front of instrument.
Carrying Attachments	Unit shall be provided with various options for attachment <ul style="list-style-type: none"> <li>• Reversible, high strength metal clip</li> <li>• Suspender type clip with swivel D-ring</li> </ul>

<b>User Interfaces</b>	
Display Type	Liquid crystal display (LCD) with large, easy to read characters.
Keypad/Switches	Unit must have no more than one switch or pushbutton to operate. There shall be no requirement to access hidden or internal switches for any instrument operations.

<b>Monitoring Capability</b>									
Sensor Types	Instrument shall be available with one of the following gas sensing capabilities: <table border="1" style="margin-left: 20px;"> <thead> <tr> <th>Gas Type</th> <th>Range</th> </tr> </thead> <tbody> <tr> <td>Oxygen</td> <td>0-25%</td> </tr> <tr> <td>Carbon Monoxide</td> <td>0-500 ppm</td> </tr> <tr> <td>Hydrogen Sulfide</td> <td>0-100 ppm</td> </tr> </tbody> </table>	Gas Type	Range	Oxygen	0-25%	Carbon Monoxide	0-500 ppm	Hydrogen Sulfide	0-100 ppm
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<b>Basic Operational Features</b>	
Instrument Activation	Button to activate instrument on must be clearly marked.
Inadvertent Shutoff	The instrument must be designed to protect against accidental shut off.
Zero Adjustments	The O <sub>2</sub> version of the instrument shall provide a Fresh Air Setup (FAS) function at the user’s discretion.
Lifetime Remaining	The months remaining for the unit must be displayed on demand via the LCD.
Peak Reading	The H <sub>2</sub> S version shall provide a “peak” reading function at the user’s discretion.

<b>Instrument Alarms</b>	
Number of Alarms	Unit shall be equipped with two levels of alarm.
Visual Alarms	Visual alarms shall consist of bright flashing LED’s and a positive indication on the display as to which level of alarm has been exceeded.
Audible Alarms	The audible alarm shall be rated at 85 dB.
Vibrating Alarms	The unit will have a vibrating alarm option.
Oxygen Alarms	The oxygen unit will have alarm setpoint options for both oxygen deficiency and oxygen enrichment.
Alarms Setpoints	Several alarm set point combinations available for each gas type.

<b>Instrument Power</b>	
Battery	Long-life disposable lithium battery, no replacement or charging necessary.

