

## AT WHAT HEIGHT SHOULD SENSORS BE MOUNTED

The sensor mounting height depends the type of application and on the density of the gas relative to air. Heavier than air gases should typically be detected 6 in / 15 cm (sometimes 12 in / 30 cm) from the floor, lighter than air gas sensors should typically be placed on or near the ceiling, and gases which have a density close to that of air should have sensors installed in the "breathing zone" 4 - 6 feet from the floor. The breathing zone refers to the area 4 - 6 feet from the floor, where most human breathing takes place. This is a good default location for sensors, as many gases often disperse well in air.

Sensors should be placed near the source of the gas if possible. For example, near the compressor or piping. Sensors should not be placed near ventilation fans or openings to outside. They should be placed in areas where there is good air circulation, but not in the path of rapidly moving air. Pay particular attention to "dead air spots" where there is little or no air movement. Consideration should be given to accessibility for calibration when locating sensors. For example, a sensor mounted 30 feet off the floor will be difficult or even hazardous to service.

Some applications may require the sensor to be mounted at a different height than indicated below. If you have any questions, please ask your Regional Sales Manager or our Technical Service Department.

### On or Near the Ceiling:

- Ammonia (NH<sub>3</sub>)
- Hydrogen (H<sub>2</sub>)
- Methane (CH<sub>4</sub>)

### 3 ft / 91 cm above floor:

- Hydrogen Sulphide (H<sub>2</sub>S)

### Breathing Zone (4 - 6 ft / 1.2 - 1.8 m above floor):

- Acetylene (C<sub>2</sub>H<sub>2</sub>)
- Carbon Dioxide (CO<sub>2</sub>)
- Carbon Monoxide (CO)
- Ethylene (C<sub>2</sub>H<sub>4</sub>)
- Formaldehyde (CH<sub>2</sub>O)
- Oxygen (O<sub>2</sub>)
- Nitric Oxide (NO)
- Nitrogen Dioxide (NO<sub>2</sub>)
- Phosphine (PH<sub>3</sub>)
- Silane (SiH<sub>4</sub>)
- TVOC (target gas dependent)

### 6 in / 15 cm above floor:

- Acetone (C<sub>3</sub>H<sub>6</sub>O)
- Alcohols
- Benzene (C<sub>6</sub>H<sub>6</sub>)
- Butane / Isobutane (C<sub>4</sub>H<sub>10</sub>)
- Chlorine (Cl<sub>2</sub>)
- Diesel Fuel
- Ethanol / Dimethyl Ether (C<sub>2</sub>H<sub>6</sub>O)
- Fluorine (F<sub>2</sub>)
- Gasoline
- Hexane (C<sub>6</sub>H<sub>14</sub>)
- Hydrogen Fluoride (HF)
- Isobutylene (C<sub>4</sub>H<sub>8</sub>)
- Isopropyl Alcohol (C<sub>3</sub>H<sub>8</sub>O)
- Jet Fuel
- Methanol (CH<sub>4</sub>O)
- Ozone (O<sub>3</sub>)
- Pentane (C<sub>5</sub>H<sub>12</sub>)
- Propane (C<sub>3</sub>H<sub>8</sub>)
- Propylene / Propene (C<sub>3</sub>H<sub>6</sub>)
- Sulphur Dioxide (SO<sub>2</sub>)
- Toluene (C<sub>7</sub>H<sub>8</sub>)
- TVOC (target gas dependent)
- Xylene (C<sub>8</sub>H<sub>10</sub>)

### 12 in / 30 cm above floor:

- Hydrogen Chloride (HCl)
- Hydrogen Cyanide (HCN)
- Refrigerants