

Tank Farm Monitoring with the Radius™ BZ1 Area Monitor



Tank farms are used to hold a wide range of products. In the headspace of each of the tanks within the farm, any number of toxic or combustible gases may be present. Radius BZ1 Area Monitors can be set up near a tank farm to make sure those toxic or combustible gases are not escaping into the environment.

What features are needed for monitoring in this type of application?

- Portable:** Monitors should be set where gas is most likely to occur. Radius BZ1 Area Monitors can be placed at the foot of the tank or at a short distance downwind of it, to detect heavier gases, or high on the tank's catwalk where lighter than air gases may be found. At 29 x 29 x 55 cm (11.5 x 11.5 x 21.5 in) and just 7.5 kg (16.5 lbs), their smart design makes them easy to move from place to place, and stable once they are in place.
- Long battery runtime:** Continuous leak monitoring requires a gas detector that is capable of running and logging data for several days. Radius BZ1 Area Monitors run for 168 continuous hours (7 days) without charging and can log at least 3 months of data.
- Loud and bright alarms:** Because tanks may be many stories high, the monitor should have both a bright visual alarm and loud audible alarm to grab attention. Radius BZ1 features ultra-bright blue and red lights and an audible alarm that sounds at 108 dB at one meter.
- Rugged:** Monitors that can stand up to the heat, cold, rain, and other harsh realities of the environment are needed. Radius BZ1 Area Monitors are rated IP66 and can withstand temperatures ranging from -20° C to 55° C (-4° F to 131° F).
- Wide range of sensors:** With the variety of toxic and combustible gases that may be present in tanks, it's critical that a gas monitor offer a wide range of sensors. Radius BZ1 can monitor up to seven gases including combustible gases, ammonia, carbon monoxide, chlorine, hydrogen, hydrogen sulfide, hydrogen cyanide, nitrogen dioxide, oxygen, sulfur dioxide, and volatile organic compounds.
- Wirelessly linked alarms:** If a 360 degree perimeter is set up around a tank, workers need to see that a unit is alarming wherever they are around the base of the tank. Radius BZ1 is available with LENS™ Wireless, Industrial Scientific's proprietary mesh wireless network. LENS Wireless allows Radius BZ1 Area Monitors to share alarms, including the gas hazard and the concentration present. Or, view a unit's readings from any other linked unit.

To learn more about the Radius BZ1 Area Monitor, visit Industrial Scientific at www.indsci.com/radius.