

Using Solar Power System for Continuous Area Monitoring



The Radius® BZ1 area monitor is often deployed in remote outdoor locations or worksites far from electrical infrastructure where access to power is limited or unreliable, such as oil and gas fields, landfills, and pipelines. Long-term operation in these conditions can be challenging. The new Solar Power System provides an ideal solution by harnessing renewable solar energy to power Radius® BZ1 area monitor and/or RGX® Gateway continuously under most conditions.

This durable solar-based system offers a wide range of options to extend the runtime of Industrial Scientific instruments, reducing the environmental impact and operational costs of gas detection. The system is also easy to install and maintain, requiring only minimal wiring and periodic battery checks. Some typical monitoring applications include:

- Gas leak detection around pipelines, pump stations, and storage facilities
- Area monitoring at loading docks, waste sites, utilities, and construction areas
- Perimeter monitoring at fences, water treatment plants, and reservoirs

Continuously use Radius® BZ1 in Zone 0

With an additional Intrinsically Safe cable of length up to 50 meters, the Radius® BZ1 can be placed in Zone 0, an area where an explosive gas atmosphere is present continuously or for extended periods of time. This allows the Radius® BZ1 to operate continuously with most sensor configurations without the need for frequent battery recharging or maintenance.

Using Solar Power System for Flexible Applications

The output ports of the Solar Power System are not only compatible with Industrial Scientific instruments, but also with accessories such as 4G routers and relays. These accessories provide more options for the application. For example, 4G routers can provide continuous network connectivity where 4G RGX is unavailable, while relays can transmit alarms in various forms.

Using Solar Power System under harsh conditions

The Solar Power System offers NEMA4 ingress protection, making it suitable for use in rainy or dusty weather. Additionally, the optional instrument enclosure provides double protection to the instruments.

