

# ZEECO GUARDIAN™



BURNERS | FLARES | THERMAL OXIDIZERS  
VAPOR CONTROL | RENTALS | AFTERMARKET



# ZEECO GUARDIAN™

## Landfill Flare Wireless Monitoring System

### The safeguard in landfill gas flaring applications.

At Zeeco, we understand the hassles landfill operators face when flaring issues happen. Troubleshooting multiple landfill flare systems and analyzing days of chart recorder data—all result in significant time loss for you and your service engineers. With ZEECO Guardian™, you gain access to complete 24/7 continuous wireless flare system monitoring backed by Zeeco's team of LFG industry experts.



### Remote diagnostics and control.

With ZEECO Guardian, operators can immediately identify and potentially correct the issue—wirelessly. Installed in new or existing landfill flare systems, ZEECO Guardian incorporates a fully automated alert notification system that can alert operators via text messaging, email, or voice call. Service technicians receive Guardian's detailed alert information, helping identify the faulty component and minimize costly flare downtime. ZEECO Guardian incorporates a wireless reset that allows you to remotely restart the flare with no site visit necessary.

### Keeps you in compliance.

The ZEECO Guardian meets the U.S. EPA Greenhouse Gas (GHG) reporting requirements. ZEECO Guardian's comprehensive data is recorded through cellular, satellite, or landline internet access and stored in a

secure cloud-based data center with up-to-the-minute status reports. Data can be accessed from any internet-enabled device, eliminating data collection site visits. ZEECO Guardian also serves as a backup data recorder should your primary chart recorder fail, keeping operators EPA GHG reporting compliant.



### Oversee multiple landfill sites simultaneously.

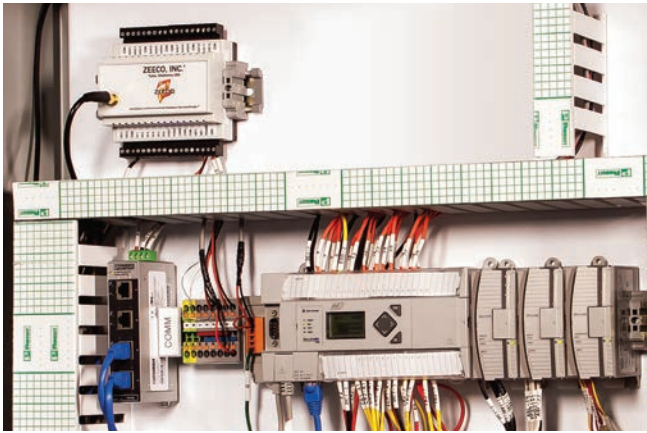
Managing multiple landfill sites is easy with ZEECO Guardian's Google Maps interface and online portal. Guardian's online portal displays a global or domestic map, pinpointing multiple landfill locations and their operational status. Preventative maintenance is tracked automatically, so you know exactly which flare is due for service. Flare documentation, drawings, and OEM manuals can be stored on the Guardian's cloud for quick, online access.



ZEECO® Guardian Google Maps Interface

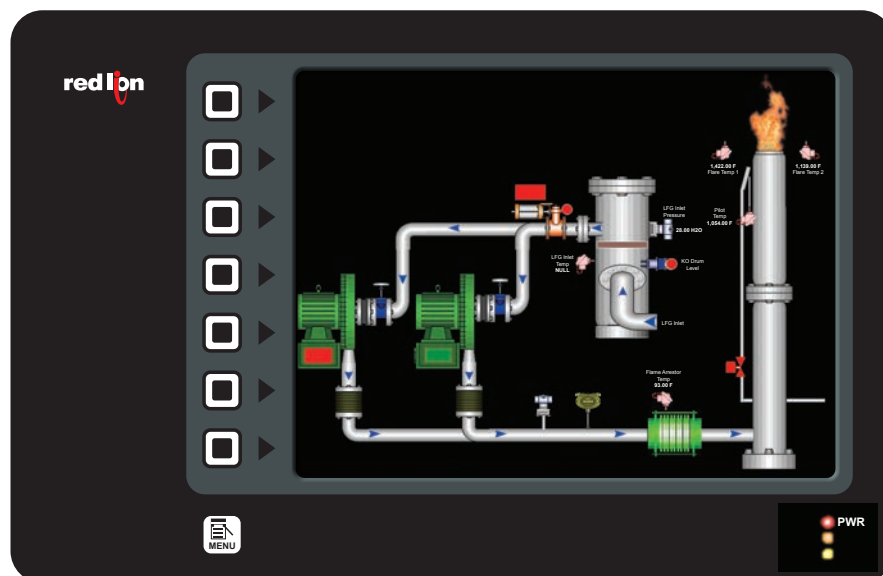
## Retrieve, review, and analyze.

- Monitoring of flow meters, thermocouples, blowers, valves, well field vacuum, pumps, and other systems, including industrial PLCs, power monitors, gas analyzer systems, and more
- Preventative maintenance is tracked automatically
- Online data graphs with exporting capability into CSV format
- Interface to virtually any industry standard sensor
- Google Maps overview with information summary of landfill sites
- User customizes selection of which points and alarms are displayed



## Device Features

- GSM/GPRS or CDMA cellular data modem
- Optional GPS receiver and second antenna connector
- Modbus RTU master/slave port
- CAN 2.0b J1939 engine monitoring port
- Programmable soft PLC included
- 2GB data flash for event and data logging
- Battery-backed real-time clock for timestamps
- Over-the-air control
- Over-the-air firmware update
- 12 universal inputs
- 0-10VDC, thermistor, dry contact
- 0-30VDC range on 2 inputs for battery monitoring
- 4-20mA with external resistor
- 16-bit sigma-delta converter, self-calibrating
- 8 discrete inputs
- Voltage sense or dry contact closure to ground
- Pulse count capability on 2 inputs
- 2 discrete outputs
- 30VDC 1A open drain FET
- Internal temperature sensor
- Hardened RS-485 serial port (Modbus RTU)
- USB port (connects to laptop for service)
- 32-bit ARM7 processor, 512K flash
- 128K EEPROM for configuration storage
- Operates from 10-30VDC or 12-24VAC, 0.5A at 24VDC
- DIN rail mounting, 100mm H x 105mm W x 60mm D







## The Zeeco Difference

By concentrating on what we do best, Zeeco has grown into a worldwide leader in combustion and environmental solutions. We are a privately held company whose ownership stays highly involved in daily operations, with upper management comprised of the world's leading combustion experts.

When you call Zeeco, we answer. When you make a request, you get a quick, efficient response. We are lean and efficient, able to make decisions quickly, without bureaucracy and red tape. Our sales, engineering, and purchasing groups work hand-in-hand to deliver highly competitive quotes and heroic turnaround times. We stand ready and willing to travel anywhere in the world to discuss upcoming projects firsthand, and to ensure that every existing project runs seamlessly.



Visit [zeeco.com/contact](https://zeeco.com/contact) for additional Global Location contact information



Choose to work with our dedicated, flexible, and innovative team, and you won't be disappointed. Call or email us today to request a quote or to learn more about our proprietary combustion systems.

Zeeco Headquarters  
22151 East 91st Street  
Broken Arrow, OK 74014

Learn more at [zeeco.com](https://zeeco.com)

✉ [sales@zeeco.com](mailto:sales@zeeco.com)

☎ +1 (918) 258 8551



REGISTERED  
ISO 9001: 2015

Certification applies to  
Zeeco Headquarters.