



## Take Control of your Natural Gas Distribution Network

### Zedi Natural Gas Distribution

Effortlessly integrate data from any source to rapidly enable better business decisions while increasing safety, production, profits and sustainability.



# Maximize Gate Station Uptime and Safety by Gaining Real-time Operational Visibility

Gate stations with customized monitoring and control methodologies meet both safety and business critical needs.

To meet uptime as well as pressure management and contractual supply obligations, a variety of pneumatic and electronic devices are used for local and remote automation. These devices provide redundancy to ensure safety across all emergency scenarios.

Distribution companies need an integrated system to gather, calculate, store, communicate and visualize data across the infrastructure.

Emerson's secure, scalable Zedi IIoT platform protects people around the world by compiling data from any digital monitoring hardware via gateways that support a variety of protocols. We provide end users with a web interface, as well as the ability to push data to third party platforms, allowing remote control and optimization via cloud data and actionable insights for authorized end user access.



## Increase Safety

- Connect anything, anywhere
- Acquire & analyze data
- Monitor and manage
- Ensure compliance
- Reduce windshield time
- Increase efficiencies



## How Your Tech Stack Can Impact Safety



**Transportation accidents were the biggest cause of workplace injuries in 2020**

Reduce travel risk with remote access to operations and assets.

Reduce Windshield Time

**18%**

**Preventable workplace deaths have increased +18% since 2009**

High demands on limited skilled employees can quickly increase risk

Ease High Stresss Demands

**45%**

**Increased cybersecurity risks from unmanaged devices for remote users**

Secure mobility with anytime, anywhere authorized access

Cloud Security & Authentication

# Take Control

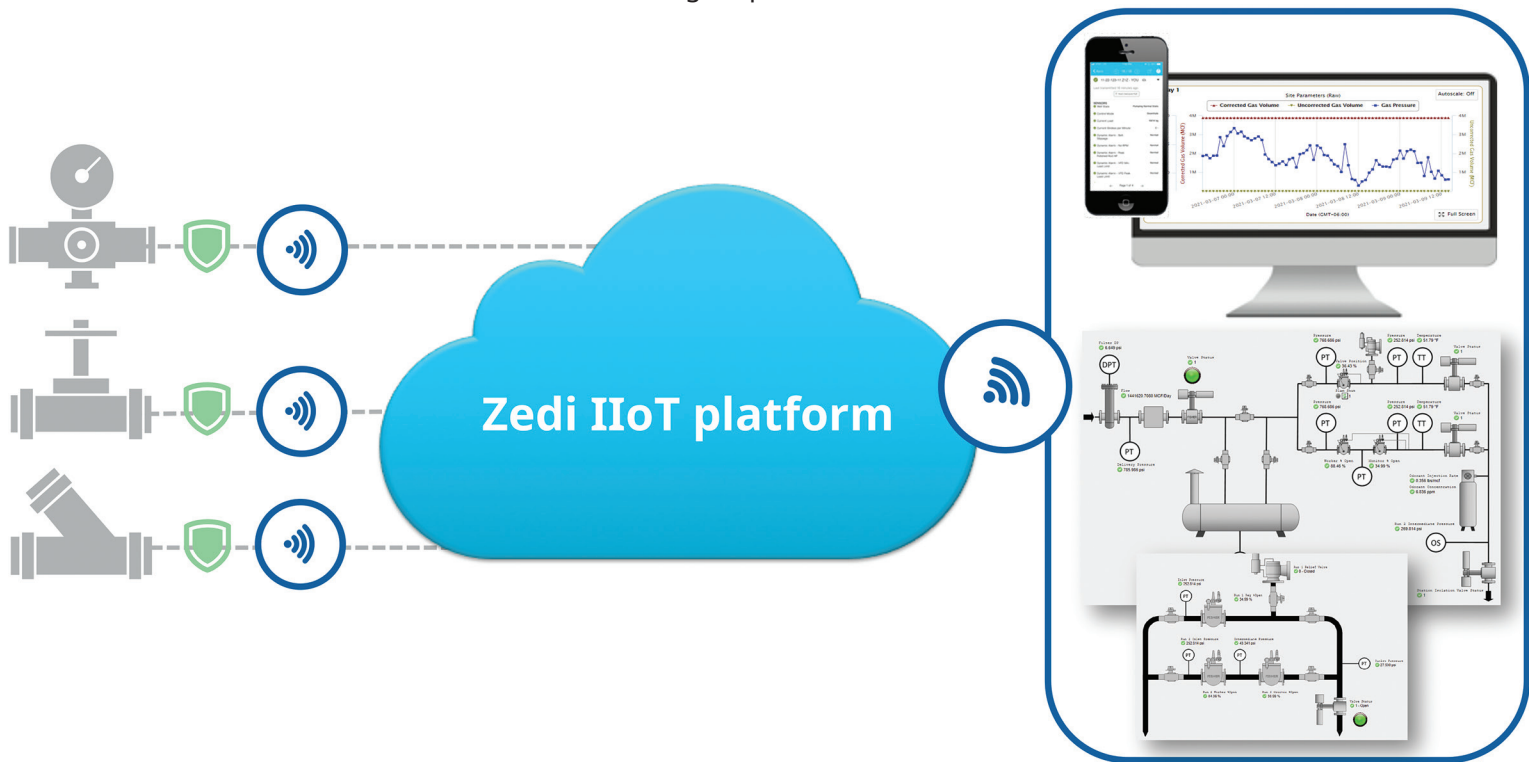
Monitor and gain control of your gate and regulator stations with increased overpressure protection, all while you easily manage allocations, achieve stronger focus on core business and ease your skilled employee stress levels.

## Manage Assets

- Pipeline network & gate stations
- Regulator & odorization stations
- Pressure & flow control valves
- Measurement hardware
- Leak detection systems
- Allocation contracts

## Manage Maintenance

- Monitor pressure
- Track & control flow
- Monitor measurement
- Monitor pipeline
- Manage stabilized pressure
- Manage repairs & maintenance



## Software as a Service



Unlock the most value from your data with our SaaS cloud-based solutions.

Easily and seamlessly access current, user-friendly data for real-time, accurate decision-making safety gains. Our software applications are built for operations and are delivered as a service to ensure evergreen enhancements, secure storage and full support. Increase operational excellence with our software solutions or better performance, stronger safety and streamlined compliance.

### Acquire, manage, and analyze your operational data while ensuring safety

- Unlimited users, no seat or site licenses required
- 24/7/365 customer support
- Application upgrades
- User training
- Access anytime, anywhere
- Data center
- Business continuity
- Infrastructure management



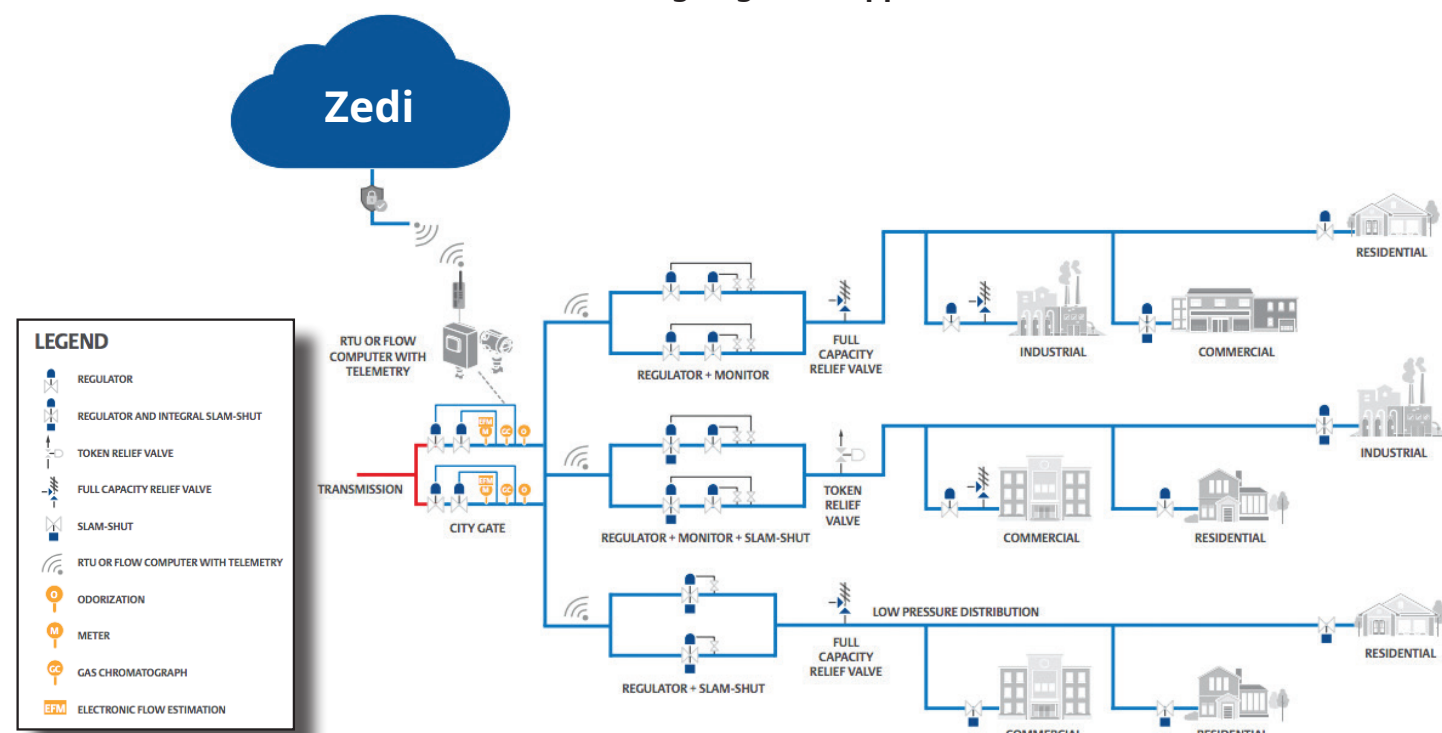
Learn more online at: [www.Emerson.com/Zedi](http://www.Emerson.com/Zedi)

## Monitor and Control

Strategically placing pressure monitoring points throughout the distribution network assists with on-time alerts and triggers prompt reactive measures. Any overpressure or underpressure events can be handled remotely through our configurable control solutions, ensuring a centralized and more efficient response.

### Increase safety with total control of your gas distribution network

- Reduce your cost of ownership
- Gain rapid deployment & easily scale
- Flexibility for any sized operations
- Ongoing 24/7 support



### Gate Station

Main custody transfer station where natural gas is delivered by transmission companies to the distributor



### Regulator Station

Gas pressure drops or regulated to safer pressure before flowing to the distribution pipeline network



### Metering Station

Mechanical or digital volume correctors or flow meters measure the gas volume flowing to customer(s)



### Pipeline Recorder

Pipeline network pressure monitored at multiple points to validate enough gas is in the network for delivery



### End of Line Pressure

Minimum set pressure indicates connection to the network with access to gas for customer(s)



### Odorizer Station

Odorized if a leak happens, people can recognize it - with storage tank, injection pump, and a PLC

## Protect Your People, Assets and Reputation



A monitor system is a common option for single layer overpressure protection. This system is comprised of any two regulators in series both sensing the same downstream pressure. Upon the failure of one regulator, the other regulator will continue to maintain the downstream pressure.

Another common method for single layer overpressure protection is a regulator with a full capacity relief. These system are comprised of a single regulator controlling downstream pressure and a relief valve downstream of the regulator monitoring downstream pressure. Upon a failure of regulator, the relief valve will open relieving excess pressure to maintain the downstream pressure below the maximum allowable operating pressure.

Monitor system or a regulator and relief system as the first overpressure protection method offers maximum flexibility for adding a second level of protection. Depending on your existing system and based on considerations like footprint, emissions and service continuity, the second level can include the addition of a full capacity relief valve, a slam-shut or a monitor regulator.

## Extensive Flexibility

IIoT provides scalable system monitoring, from single sites to thousands of monitoring points, with easy integration of remote devices. Emerson offers a wide range of solutions.

### Existing Host networks

- Designed with flexible protocol connectivity to adapt to existing networks
- Remote storage protects data in cases of host connectivity issues

### On-Premise Host solutions

- Robust Zedi platform collects, stores & visualizes your infrastructure
- Tools, comprehensive trending & work flow modeling compliments control room activity

### Off-Premise Cloud Based Host solutions

- Zedi IIoT platform to replace or supplement on-premise SCADA for reduced cost of ownership
- Standard SCADA functionality is enhanced by a cloud based network



Learn more online at: [www.Emerson.com/Zedi](http://www.Emerson.com/Zedi)

# Highly secure, flexible IIoT cloud platform with effortless updates, hardware agnostic and complete with a mobile app



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