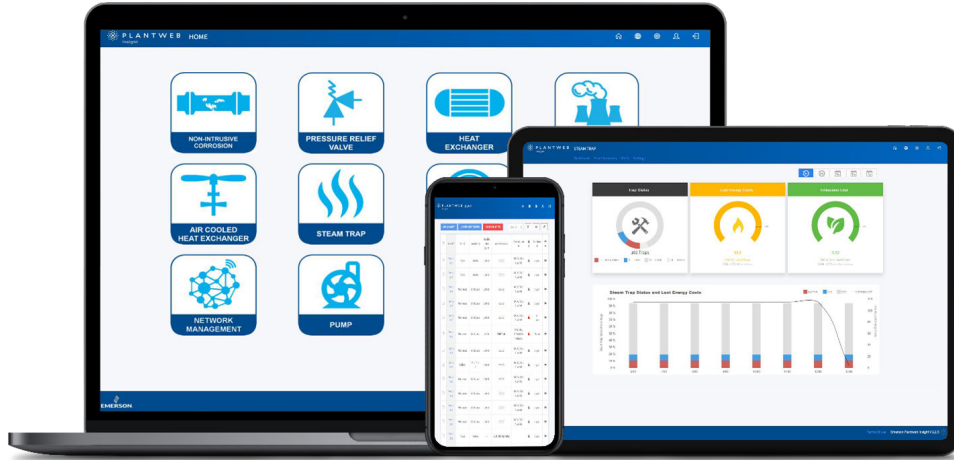


# Emerson Plantweb Insight™

## Pressure Relief Valve Monitoring Application



- Visualization and analytics software platform providing strategic interpretation and monitoring of plant assets
- Relevant-time actionable information and insights about abnormal situations, asset status, asset health, energy costs, emissions loss, etc.
- Seamless system integration, simple installation, and minimal configuration or set-up are not dependent on the host system or historian.
- Prepackaged analytics based on decades of process and industry experience
- Human-centered design and a user-tested interface for consistent and intuitive navigation

# Features and benefits

## Gain real-time insights into abnormal situations

- Suite of asset monitoring applications identifying abnormal situations and failures using data analytics and models.
- Learn about issues before they impact the bottom line with alerting and failure identification.
- The intuitive and easy-to-read views highlight high-priority, actionable information.



## Lightweight, secure, and reliable software package allows seamless integration into current infrastructure

- Easily deployed via a virtual machine.
- Access the interface anytime from a multitude of web browsers.
- Human-centered design considerations allow for quick and intuitive start-up and configuration.
- Integrate with existing wireless ecosystem to expand capabilities and leverage current investment.
- Not dependent on DCS, host system, or historian.



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## **Monitor one asset or thousands with a fully scalable software package and numerous applications**

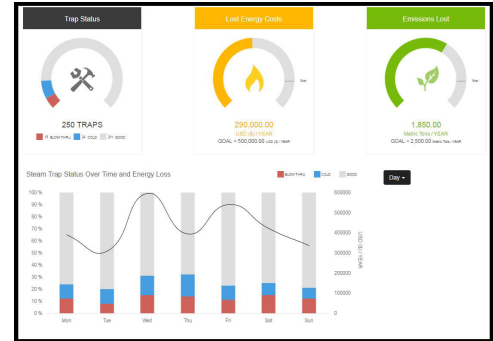
- Applications are based on key assets such as steam traps, pumps, heat exchangers, pressure relief valves, and many more.
- Start small or monitor all your assets in one spot.
- Integration with other business systems, such as data historians.
- Deploy in small, large, or enterprise-wide operations.

# User interface

Every application in the Plantweb Insight suite has a similar look and feel for a consistent user experience. The main views can be broken into three layers:

## Dashboard

The dashboard page is an umbrella overview of the asset class being monitored. This page will provide an aggregated view of the entire asset class and the most important insights. These insights will vary from application to application, with examples including asset status, asset health, energy costs, emissions loss, critical alerts, etc. A brief trending of these key insights is also provided for historical tracking and trending.



## Asset summary

The asset summary page is a tabular view of all assets being monitored. This view provides a similar perspective as the dashboard but on an asset-by-asset basis. This page is fully sortable, searchable, and filterable for quick prioritization and identification. The asset summary page can also be exported via CSV or Excel® for reporting.

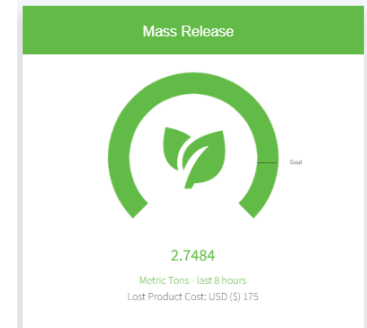
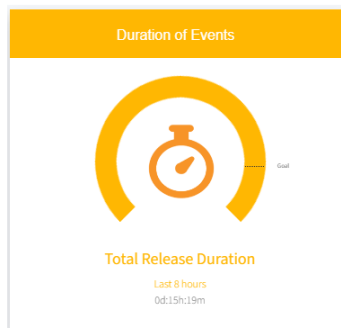
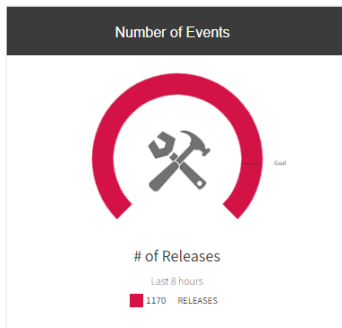
Asset ID	Site	Location	Asset Status	Energy Loss (LHD (L) / Year)	Carbon Emissions (Metric Tons / Year)	Downtime
ST101	Site 1	Unit 1	Good	---	---	15 days
ST102	Site 1	Unit 1	Good	---	---	15 days
ST103	Site 1	Unit 1	Blow Through	2096	60.32	1 day
ST102	Site 2	Unit 1	Blow Through	1245	42.29	20 days
ST103	Site 2	Unit 1	Good	---	---	13 days
ST104	Site 2	Unit 1	Good	---	---	6 hours
ST104	Site 1	Unit 2	Good	---	---	10 hours
ST105	Site 1	Unit 2	Good	---	---	25 days
ST106	Site 1	Unit 2	Flooded	---	---	2 hours
ST105	Site 2	Unit 2	Good	---	---	1 day
ST106	Site 2	Unit 2	Blow Through	1552	48.17	5 hours
ST107	Site 2	Unit 2	Plugged	---	---	20 days
ST107	Site 1	Unit 3	Plugged	---	---	9 hours
ST108	Site 1	Unit 3	Plugged	---	---	3 hours
ST109	Site 1	Unit 3	Healthy	---	---	1 day
ST110	Site 1	Unit 3	Good	---	---	5 days
ST110	Site 2	Unit 3	Good	---	---	12 days
ST110	Site 2	Unit 3	Good	---	---	4 days
ST120	Site 2	Unit 3	Good	---	---	12 hours

## Asset details

The asset details page provides specific asset details. These details include location, process, application, asset, and device details for each individual asset. It also provides calculated insights such as relevant-time status, health, energy, emissions, additional information, and a brief asset history. A notes section allows users to add notes and flag assets for follow-up.

The configuration page is divided into several sections: Location Detail, Steam Trap Detail, Process Detail, and Asset History. The Asset History section shows a line graph of trap status over time, with a legend for Plugged, Blow Thru, Flooded, Good, Healthy, and Out of Service. A Notes section is also present at the bottom right.

# Pressure Relief Valve application



## Features

- In-depth monitoring of pressure relief valves (PRV) and pressure relief valves
- Provides real-time indication of PRV releases leaks
- Event log records all PRV releases for one year for EPA reporting
  - Start time
  - Duration
  - Production loss
  - Inspection ID, date, and justification
- Release and leak algorithm release algorithm based on real-customer data points and analytics
- Economic and environmental impact displayed in terms of emissions and production loss
- Prioritize maintenance based on most problematic or highest impact PRVs

## Calculated insights

- PRV status
  - Releasing
  - Leaking
  - Healthy
- Production loss
- Mass release



## Related products

- Emerson 1410S Wireless Gateway with 781S Smart Antenna
- Rosemount 708 Wireless Acoustic Transmitter
- Rosemount 2051 Coplanar Pressure Transmitter
- Rosemount 3051 Coplanar Pressure Transmitter
- Rosemount 3051S Coplanar Pressure Transmitter

# Communication specifications

## Inputs

**HART-IP™ client** Plantweb Insight acts as a HART-IP client for polling information from HART-IP sources, such as Emerson 1410S Gateways.

## Outputs

**Modbus® TCP server** Plantweb Insight contains a Modbus TCP server. Functions, registers, and tags are clearly defined within Plantweb Insight. Calculations, statuses, etc., can be sent to Modbus TCP clients.

**OPC UA Server** Plantweb Insight contains an OPC UA server. Calculations, status, etc., can be sent to OPC UA clients.

**REST API** Plantweb Insight can provide asset details and alerts via REST API.

# Ordering information

## Ordering process

1. Build and order your subscription order code.
2. You will receive instruction on where to download your application and framework software if you have not already done so.
3. Upon installation of an application onto the framework, the software will instruct you how to request a license key.
4. A license key will be generated upon request based on your subscription order code.

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**Note**

Subscription duration starts at the time the license key is generated.

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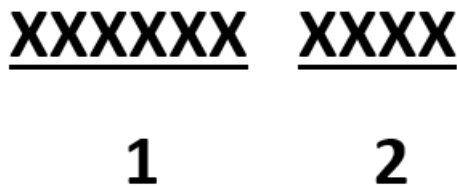
## License key

Plantweb Insight applications require a valid license key to be used. License keys are delivered upon placing an order for a subscription order code and submitting a locking ID from the software. Plantweb Insight license keys are provided as a file.

## Subscription order code

The subscription order code contains the details related to the software subscription used to generate a license key. This code is not your license key to activate your software. Exact subscription order codes will vary; an example of a typical subscription order code is shown in [Figure 1](#).

**Figure 1: Subscription code example**



1. Required subscription component (7002PR base code)
2. Subscription type (subscription duration and maximum number of assets to be monitored)
  - An asset is a single pressure relief valve
  - Trial licenses are limited to the smallest asset capacity (requires new or existing infrastructure)

**Sample subscription code**

**7002PR C250**

## Emerson Plantweb Insight Pressure Relief Valve application subscription ordering information

### Subscription application

Code	Description
7002PR	Plantweb Insight Pressure Relief Valve Monitoring application

### Subscription duration and assets

Code	Description
T001	90-Day trial
A050	1-Year subscription for 50 assets
A125	1-Year subscription for 125 assets
A250	1-Year subscription for 250 assets
A500	1-Year subscription for 500 assets
A999	1-Year subscription for custom number of assets per site
B050	2-Year subscription for 50 assets
B125	2-Year subscription for 125 assets
B250	2-Year subscription for 250 assets
B500	2-Year subscription for 500 assets
B999	2-Year subscription for custom number of assets per site
C050	3-Year subscription for 50 assets
C125	3-Year subscription for 125 assets
C250	3-Year subscription for 250 assets
C500	3-Year subscription for 500 assets
C999	3-Year subscription for custom number of assets per site
E050	5-Year subscription for 50 assets
E125	5-Year subscription for 125 assets
E250	5-Year subscription for 250 assets
E500	5-Year subscription for 500 assets
E999	5-Year subscription for custom number of assets per site



# Specifications

## System requirements

Plantweb Insight is delivered as a fully developed virtual machine (e.g.: .ova file) and applications are installed once the virtual machine is deployed.

## On-Premise Host system

### Virtualization software

- VMware Workstation Pro™ 15 or higher (requirements can be found in [VMware Desktop Hypervisor](#))

OR

- VMware vSphere® 6.5 or higher (requirements can be found in [VMware vSphere](#))

OR

- Microsoft® Hyper-V Configuration version 8.0 or higher (requirements can be found in [Introduction to Hyper-V on Windows](#))

### Hardware requirements (minimum)

- Processors = 4 dedicated cores<sup>(1)</sup>
- Memory = 8 GB RAM
- Hard drive = 512 GB of free space

### Hardware requirements (recommended)

- Processors = 8 dedicated cores
- Memory = 16 GB RAM

## Cloud environment capability

- Plantweb Insight has the ability to be hosted in the cloud on an Emerson Microsoft Azure instance.

## Web client

### Browsers (recent versions supported)

- Google Chrome™
- Microsoft® Edge™

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(1) Most PC operating systems (i.e. Windows®, Linux®, Mac®) will use one to two cores.





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