

# Plantweb Optics

- Provides an unprecedented view of plant reliability and operational performance.
- Modern communication tools for fast, accurate decision making
- Integration of multiple technologies for a holistic view of asset health
- Secure yet flexible architecture
- Interface with other applications through OPC UA



Use the Plantweb Optics Mobile App to stay on top of developing issues.

## IIoT and Reliability

With the arrival of the Industrial Internet of Things (IIoT), technology advances are making it easier than ever to stay on top of asset health. Applications for smart phones and tablets keep personnel in touch to collaborate on developing production issues. Data from various predictive intelligence applications are aggregated to create a holistic picture of asset health. And all this information is available anytime and from anywhere.

## Plantweb Optics for Improved Asset Management

Plantweb Optics is the Emerson software application for managing asset health across the enterprise. Plantweb Optics combines the data from multiple applications into asset-centric information, then delivers persona-based alerts and KPIs for improving the reliability of your rotating equipment, instruments and valves.

The Plantweb Optics supports the latest OPC UA technology for easy integration to third-party applications that expand the capabilities of your program. Built on SQL and utilizing thin clients, Plantweb Optics installation and maintenance processes are simple and non-intrusive. The platform allows for flexible installations within complex network architectures.

Plantweb Optics is connected to assets in the field using Asset Source Interfaces (ASIs), which can be installed independently of the Plantweb Optics server. This allows for a secure connection to lower level data sources while still allowing for higher level connectivity to Plantweb Optics.

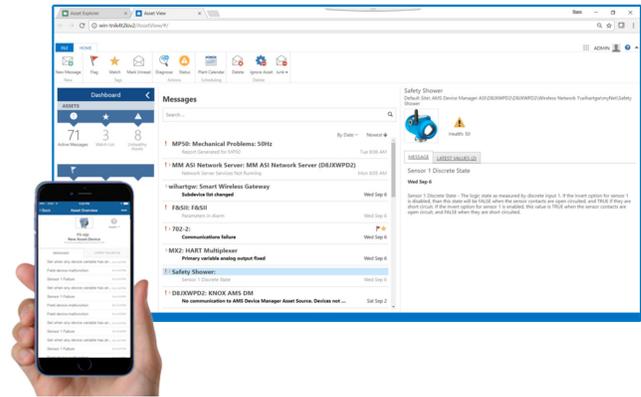
## Plantweb Optics Utilities

Plantweb Optics is built using intuitive interfaces and utilities to streamline setup and navigation:

The **Asset Viewer** utility provides a KPI dashboard view of monitored assets and alerts you to developing issues on the assets you define as critical to your production. The interface is similar across desktop/tablet/smart phone views for ease of use, while the Plantweb Optics Mobile App provides a multi-site view for easy review of alerts across the enterprise. Asset Viewer allows you to drill down on individual alerts for more details and launch diagnostic applications for asset health diagnostics.

The **Asset Explorer** utility allows you to quickly define assets for the site and the roles/responsibilities across the enterprise. Asset Explorer periodically polls the network architecture to discover wired and wireless assets added to or removed from installation and makes the appropriate adjustments in Plantweb Optics. Within minutes of getting started, you'll be able to look at the health of your installation. Additional options for advanced users includes:

- Defining a community by assigning roles per asset class or site location.
- Creating composite assets from individual primary assets. For example, a pump may consist of vibration, chassis temperature, and acoustic transmitters.
- Defining site turnarounds by allowing users to ignore specific assets that are scheduled to be fixed during the next outage.
- Delivering summary results to personnel with cross-asset functionality, such as safety, custody transfer, and environmental reports.



*Asset Viewer utility delivers visibility to asset health from desktops, tablet, and smart phones.*

## Plantweb Optics Asset Source Interfaces

Functionality is added to Plantweb Optics by installing Asset Source Interfaces, or ASIs. An ASI creates connectivity between Plantweb Optics and specific asset types while providing information and diagnostic capabilities specific to the asset class. Available ASIs include:

**Emerson Wireless Gateway ASI** – connects 1410/1420 gateways and Cisco 1552 WU to Plantweb Optics for discovering and reporting on the health of all devices connected to the gateway.

**AMS Device Manager ASI** – connects existing AMS Device Manager installations to Plantweb Optics, and replaces the need for the Wireless Gateway ASI above.

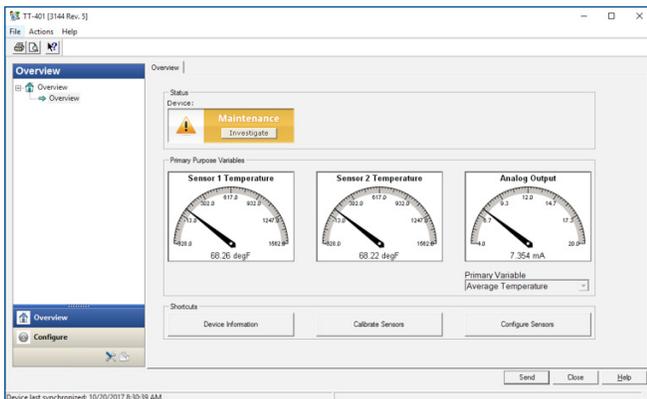
**AMS Machinery Manager ASI** – connects existing Machinery Manager installations to Plantweb Optics for discovery and reporting of rotating equipment assets.

Future connectivity to CMMS, advanced analytical tools, and other predictive intelligence programs will allow you to stay on top of issues that can impact production from anywhere you are and at any time they occur.

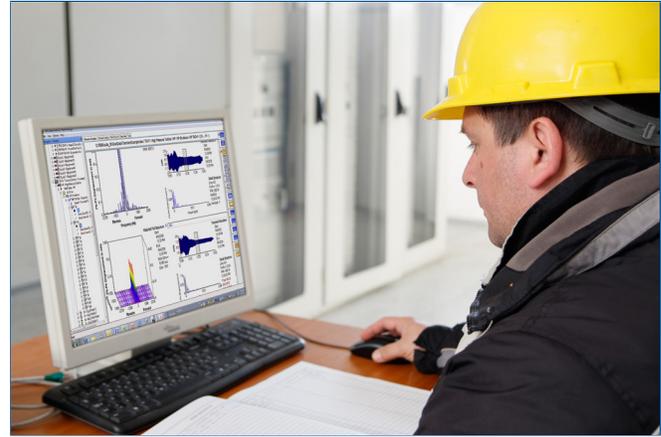
## AMS Device Manager ASI

The AMS Device Manager ASI enables access to the health of your intelligent field devices from Plantweb Optics. Connecting the powerful AMS Device Manager application with Plantweb Optics software allows users to leverage their existing AMS Device Manager installation and deliver valuable health and diagnostic information. Asset health is then delivered to the relevant users in a clear, meaningful way. This means you can act before the process is affected by poor quality, or worse, a costly shutdown.

Using the AMS Device Manager ASI you can remotely view the process variables, and monitor device health from HART, WirelessHART, FOUNDATION Fieldbus, Profibus, and other devices connected to your host system, including DeltaV™, Ovation™, RS3™, PROVOX™, as well as many other vendor's technologies. With just a few key strokes, your entire AMS Device Manager system is imported to Plantweb Optics and ready to monitor. This means no huge engineering effort or mapping tasks are necessary.



Easily launch from Plantweb Optics into a device dashboard in AMS Device Manager for further health status information and diagnostic capabilities.



The AMS Machinery Manager ASI connects Plantweb Optics users to their machinery health databases for additional diagnostic information.

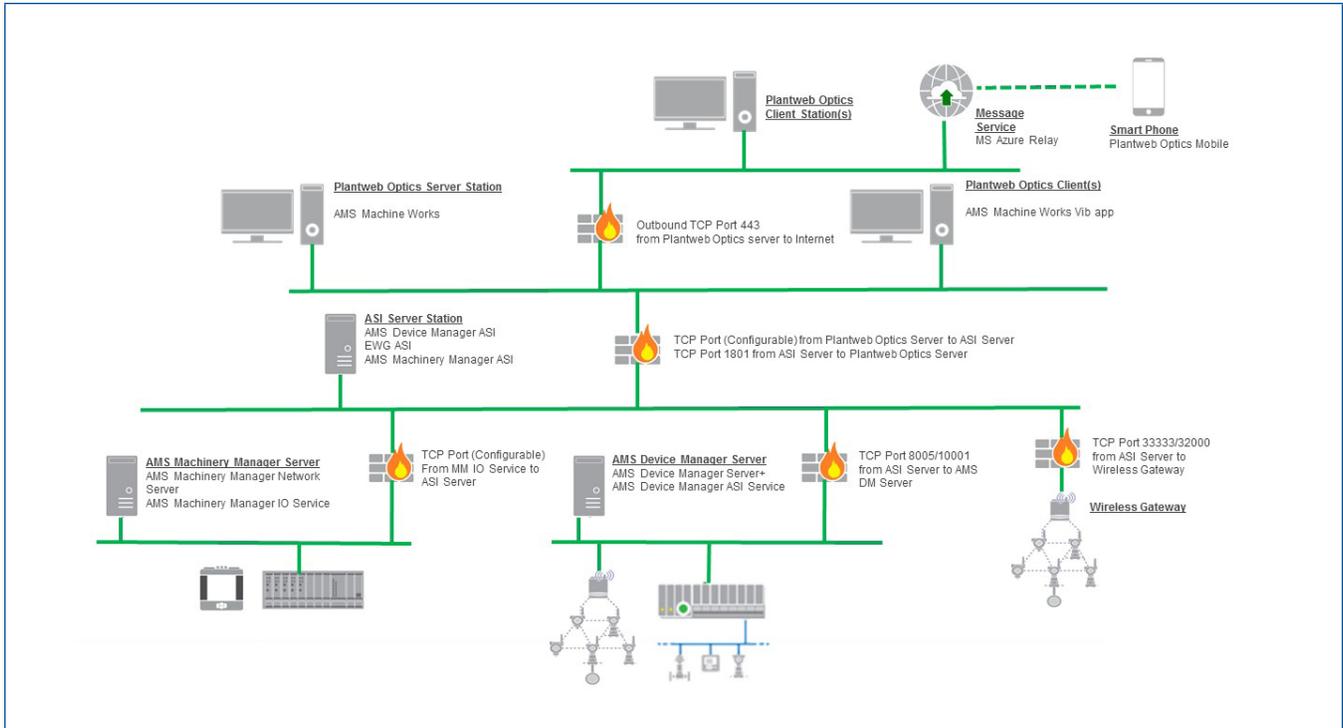
## AMS Machinery Manager ASI

With the AMS Machinery Manager connection to Plantweb Optics, users can monitor the health of their rotating equipment and collaborate on maintenance and production activities from wherever they are. The Machinery Manager database hierarchy is quickly and easily imported to Plantweb Optics for shared access to machinery health information.

With the Machinery Manager ASI, you'll have on-the-go access to a wide range of notifications and information, including:

- Routes that have been downloaded for data collection
- Case history information
- Alerts to high vibration levels from both portable and online data collection
- Exception reports
- Measurements flagged on the route

Using the ASI, users can navigate easily from Plantweb Optics to the AMS Machinery Manager application for a closer, detailed look at developing problems.



Plantweb Optics runs in a secure network environment to deliver the information you need from your plant assets.

## Plantweb Optics Deployment Services

To take advantage of Plantweb Optics as quickly as possible, Emerson offers install services performed by certified Plantweb Optics experts. Customized to your installation, these services include:

- Pre-install readiness plan and onsite kick-off meeting
- Network setups
- Installation and database import for software applications and ASIs
- Configuration and setup for Plantweb Optics and the mobile app
- Basic training for your team
- Documentation and backup of configurations



Emerson-certified experts in Plantweb Optics installation will customize a plan for your site or enterprise.

## Plantweb Optics Basic Specifications

For more details or answers to frequently asked questions, refer to *Plantweb Optics System Requirements and Frequency Asked Questions (FAQs)*

Plantweb Optics Server	
Operating System	Windows Server 2012 R2 Standard Windows Server 2016 Standard
CPU Architecture	x64
Processor	2.4 GHz 4-core processor or faster - minimum 3.6 GHz 8-core processor or faster - recommended
RAM	16 GB - minimum 32 GB - recommended
Available Disk Space	150 GB - minimum 200 GB - recommended
Browsers	Internet Explorer 11 (required, even if not used as the primary browser) Chrome v64 or later Edge 40 or later

Additional Considerations	
Ethernet	One or more Ethernet ports
Internet Connectivity	An Internet connection is required to receive push notifications on the mobile application
Virtualization	VM ware 6 Hyper-V 2012
.NET	Microsoft .NET 3.5, SP1
Supported Anti-virus	Symantec Endpoint Protection McAfee Endpoint Norton Security with Backup

Refer to individual spec sheets for software applications, ASIs and services for additional specifications.

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