

# Plantweb Optics

- Provides a collaborative environment to improve plant reliability and operational performance.
- Connect experts to their assets.
- Integration of multiple interfaces for a holistic view of asset health.
- Secure yet flexible architecture.
- Workflow integration to drive proactive operations with CMMS integration.
- Built-in historian for immediate asset health and parameter history.



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

## Enabling an Integrated Workflow

Plantweb Optics asset performance platform improves reliability and availability by enhancing the visibility to the health of your assets. Experts in your facility are always connected to assets they care about most. Through open protocols, operational data is centralized and contextualized from disparate data sources. The data is delivered to your experts with personalized content and dashboards. Plantweb Optics provides the information you need in a collaborative environment to enhance your workflow and drive corrective actions.

## Plantweb Optics for Improved Asset Management

Plantweb Optics is Emerson's asset performance platform for managing holistic asset health. Plantweb Optics combines the data from multiple applications into asset-centric information, then delivers persona-based alerts and KPIs for improving the reliability of assets throughout the facility.

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 are installed independently of the Plantweb Optics server. This allows for a secure connection to lower level data sources while also allowing for higher level connectivity to Plantweb Optics.

## Plantweb Optics CMMS Interface

The Plantweb Optics CMMS interface allows you to connect Plantweb Optics directly to SAP and IBM Maximo CMMS. This significantly reduces the time spent generating work notifications, so experts can spend their valuable time focused on the most productive activities.

The Plantweb Optics CMMS interface maps assets from Plantweb Optics to your CMMS systems, so you can create CMMS notifications proactively, before process upsets occur in the facility. This allows you to integrate your workflow and drive corrective actions.

Plantweb Optics also allows you to create CMMS work notifications directly from analytics or monitoring alerts. With a mobile solution, you can create CMMS work notifications from anywhere and also see the status of existing notifications. The ability to see open and completed notifications reduces the chance of a duplicate entry and can help you identify any bad actors in your facility.

## Plantweb Optics Historian

To improve process reliability, you need to be able to see the status of your critical assets and know how they've performed over time. Being able to trend historical values can provide insights that will help you troubleshoot and identify the root cause faster.

The Plantweb Optics historian is embedded into every Plantweb Optics asset performance platform. Once installed, no configuration is required to start storing the history of every parameter associated with an asset. This ability to store all parameters gives the most complete view of historical health and performance. Because Plantweb Optics historian is already built into the platform, users can quickly bulk select which assets they want to historize and the historization process immediately starts.

## Plantweb Optics Asset Source Interfaces

Functionality is added to Plantweb Optics by installing Asset Source Interfaces. Each interface creates connectivity between Plantweb Optics and specific asset types while providing information and diagnostic capabilities specific to the asset class. Available Interfaces:

**AMS Device Manager Asset Source Interface** – connects existing AMS Device Manager installations to Plantweb Optics, and allows you to monitor device health from anywhere.

**AMS Machine Works Asset Source Interface** – provides predictive analytics for data acquired through the Emerson Wireless Gateway and AMS Device Manager using AMS 9420 Wireless Vibration Transmitter and also the AMS 6500 ATG.

**Plantweb Insight Asset Source Interface** – brings analytics based on decades of process and industry experience into Plantweb Optics. Plantweb Optics users now have timely, actionable information about key assets such as Pumps, Heat Exchangers, Steam Traps, and Air Cooled Heat Exchangers.

**AMS Machinery Manager Asset Source Interface** – connects existing Machinery Manager installations to Plantweb Optics for discovery, monitoring, and reporting of rotating equipment assets.

**Emerson Wireless Gateway Asset Source Interface** – 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.

Each Asset Source Interface has an individual datasheet available with more information.

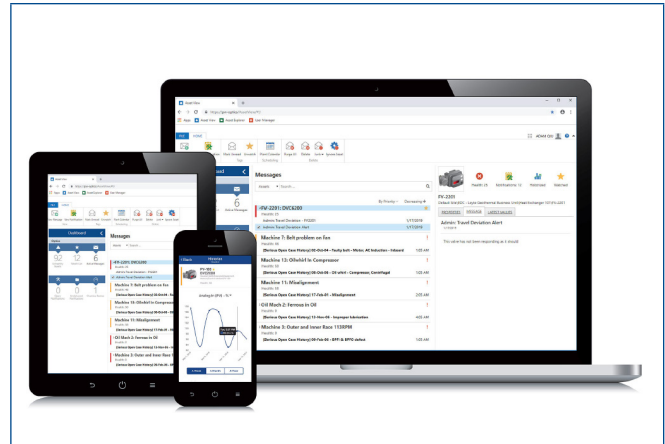
## Plantweb Optics Utilities

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

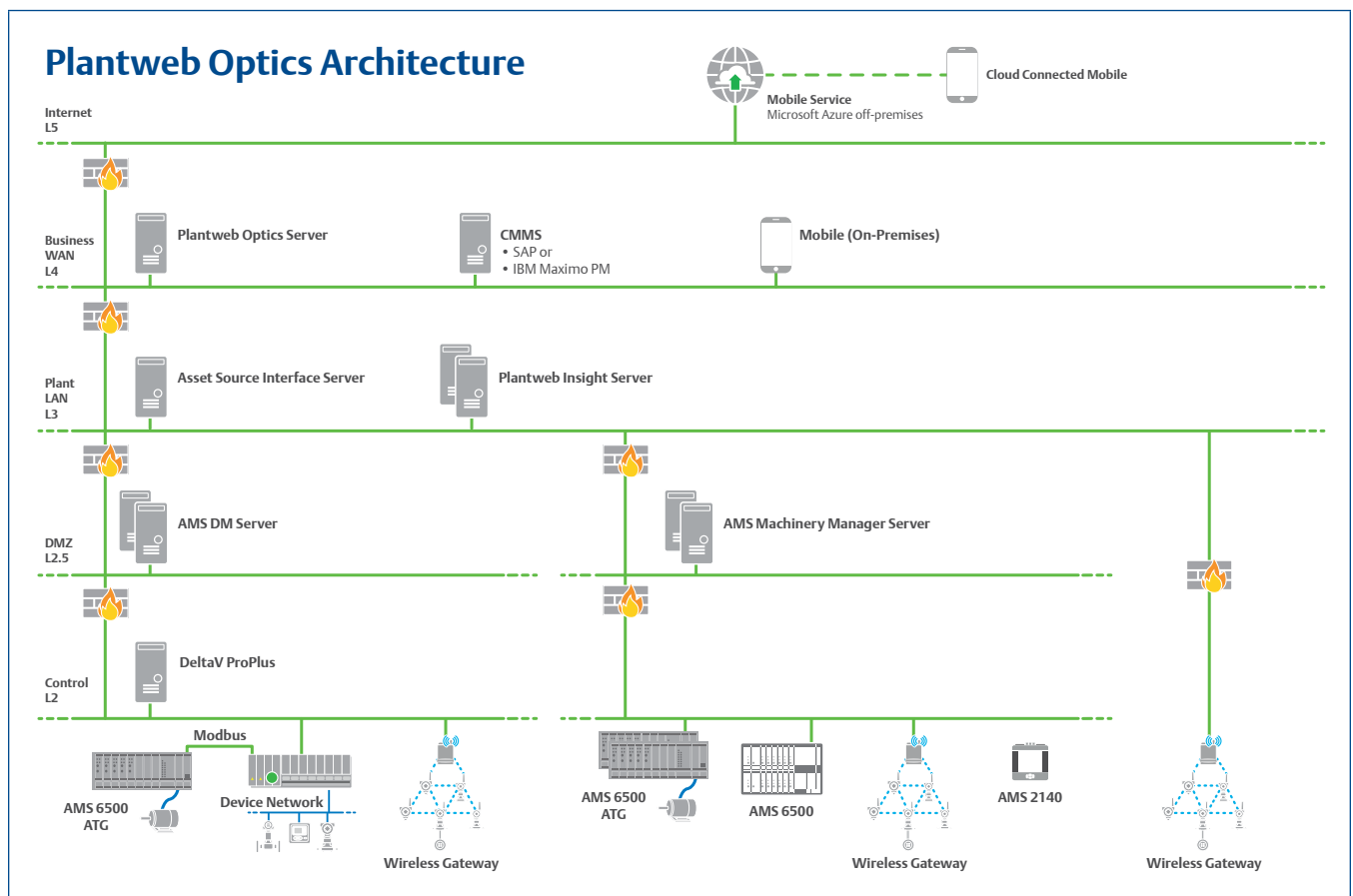
The **Asset View** utility provides a KPI dashboard view of monitored assets and alerts you to developing issues on any asset you define as critical to your production. The interface is similar across desktop/tablet/smart phone views for ease of use, while the Plantweb Optics Mobile App provides a multi-site view for easy review of alerts across the enterprise. Asset View 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 assets. Additional options for advanced users includes:

- Defining personas 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.
- Historize assets to track health and parameters over time.



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



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

## Plantweb Optics Roadmap

In future Plantweb Optics releases, user can expect to see enhancements such as:

- Increased total assets in the platform
- Increased total users
- Integration with 3rd party data
- Connection to DeltaV Insight
- Increased configuration and architecture flexibility
- Enhanced KPI's and reporting

## 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 Requirements	
<b>Operating System</b>	Windows Server 2016 Datacenter Windows Server 2016 Standard Windows Server 2016 R2 Datacenter Windows Server 2016 R2 Standard
<b>CPU Architecture</b>	64-bit
<b>Internet Information Services (IIS)</b>	v8.0, v10 (supplied with OS)
<b>Microsoft SQL Server</b>	MS SQL Server 2017 Express or MS SQL Server 2017 Full (recommended) MS SQL Server 2017 Express Edition (supported)
<b>Browsers</b>	Google Chrome (latest version) Internet Explorer v11 or later (supported)
<b>Processor</b>	3.2 GHz, 8-core processor, Intel Xeon-scalable (Gold 6134) or faster (recommended) 2.4 GHz, 4-core processor, Intel Xeon-scalable (Gold 5115) or faster (minimum)
<b>RAM</b>	32 GB (recommended) 16 GB (minimum)

<b>Hard Drive</b>	SSD hard drive (recommended) SAS hard drive (10K RPM) (minimum)
<b>Available Disk Space</b>	100 GB (minimum)
<b>Screen Resolution</b>	Full HD (1920 x 1080 pixels) (maximum) SXGA (1280 x 1024 pixels) (minimum)
<b>Network</b>	2 x 1 GB NIC (use 2 NICs to isolate Tier 3 traffic from Tier 2 traffic) (recommended) 1 x 1 GB NIC (supported)

Additional Specifications	
<b>Ethernet</b>	One or more Ethernet ports
<b>Internet Connectivity</b>	An internet connection is required to download installations and patches, register software, and receive alerts and messages on the mobile application.
<b>Supported Virtualization</b>	VMware 6 Hyper-V 2012
<b>Software</b>	Microsoft .NET 3.5, SP1 Microsoft .NET Framework 3.5 is required to install Planweb Optics. See KBA NK-1600-0300 for instructions.

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

©2019, Emerson. All rights reserved.

The Emerson logo is a trademark and service mark of Emerson Electric Co. All other marks are the property of their respective owners.

The contents of this publication are presented for informational purposes only, and while diligent efforts were made to ensure their accuracy, they are not to be construed as warranties or guarantees, express or implied, regarding the products or services described herein or their use or applicability. All sales are governed by our terms and conditions, which are available on request. We reserve the right to modify or improve the designs or specifications of our products at any time without notice.

**Emerson**  
**Reliability Solutions**  
835 Innovation Drive  
Knoxville, TN 37932 USA  
☎ +1 865 675 2400

🌐 [www.emerson.com/plantweboptics](http://www.emerson.com/plantweboptics)