

SNS Applications Management Platform

Automated, proactive monitoring for SNS timekeeping and sensor technology

Optimizing Facility Operations

- **Continuously Monitor** sensors, equipment and clocks
- **Automated Alerting** for proactive system maintenance
- **Recorded Timestamp** for sensor and synchronization data
- **Secure Remote System Management** for configuration and updates
- **Scalable** to support hundreds of clocks, sensors or other devices



AMP Temperature Sensor Graph

Increasing Facility Management Efficiency

Facility products that are able to monitor themselves through system software and communicate over the network when they need maintenance save significant overhead and labor cost over a product life span. This is achieved by the device automatically sending diagnostic information, rather than manually checking or waiting for problems. With SNS, if a clock or sensor device on the network needs attention or the equipment it is monitoring requires service, the Applications Management Platform (AMP) can alert the key people responsible for maintaining that particular device. The Primex Wireless AMP is a web browser based application accessible anywhere on your network.

AMP Quick Status Page



Around the Clock Monitoring and Reporting

SNS leverages your existing WiFi infrastructure and your Ethernet network (LAN) allowing the system clocks and sensors to utilize two-way communication with the AMP across your network. This ensures the accuracy and synchronization of clocks as well as provides the ability to report diagnostics and sensor data. As documentation of time accuracy is playing an increasingly important role in today's facility management, the AMP logs every time an SNS clock is synchronized or a sensor captures data. This allows your organization the ability to provide critical proof of synchronization and monitoring reducing risk of potential legal concerns.

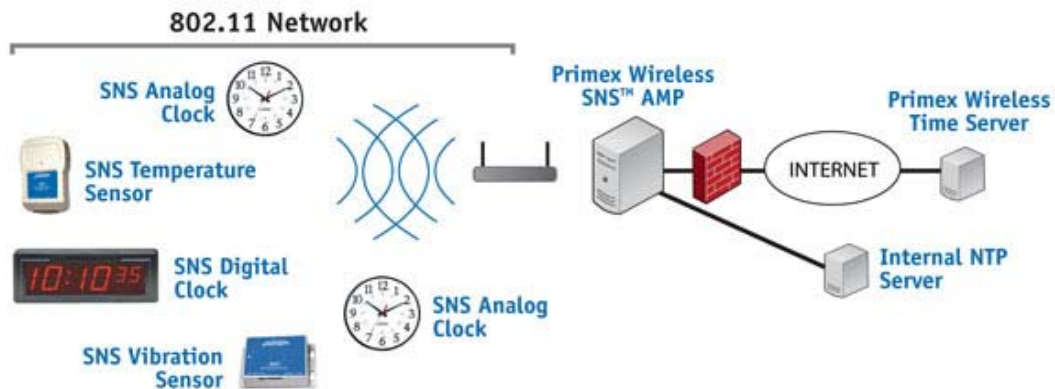
SNS clocks and sensors report key diagnostic information to the AMP, such as battery level of each device, access point signal level, and last synchronization or check in time. Furthermore, clocks or sensors can be grouped by floor, department or building, with the ability to assign responsibility so that only the appropriate people are notified. Because all SNS devices are IP based, you can change configurations via the AMP as your needs evolve around the facility. In addition, the AMP can be used to upload any firmware updates and adjust device settings. The AMP stores all diagnostic and synchronization data, allowing for easy access to system records.

Synchronized Time Maintenance Made Easy

Time system management has traditionally required a reactive maintenance approach where no one can respond to a clock problem until something is visibly wrong. Whether it's a clock that is out of sync or low batteries, maintenance staff cannot be alerted until its visible and a reported problem. Today, the SNS AMP marks the first synchronized time system with the ability to monitor itself and alert the right people via email for necessary maintenance before there is a visible problem. The result? Your time system is always accurate and overall organizational efficiency is increased.

Monitoring Temp Humidity and Vibration

Working in conjunction with SNS Sensor devices which monitor temperature, humidity and vibration levels around the facility, the SNS AMP captures and records all the data accumulated by the sensors over time. The important information about refrigeration equipment which may be protecting valuable assets is logged for proof of performance and historical data analysis. The AMP allows you to set upper and lower limit performance thresholds for each sensor that when surpassed, alerts the important staff required to maintain the equipment.



Flexible Deployment Configurations:

The SNS Applications Management Software can be deployed in either a hardware server appliance or in a software only model.

Hardware AMP

When configured with a hardware server, the AMP software is delivered preinstalled in a rack mountable Linux server, ready for deployment. The hardware server is convenient for those with either limited IT environments or for situations where the SNS installation is to be maintained physically separate from other infrastructure.

Specifications:

- 1U Rack Mount
- Height: 1.67" (42.42 mm)
- Width (without rails): 16.93" (430.02 mm)
- Depth: 20" (508.00 mm)
- Maximum Weight: 33 lbs (15 kg)
- Power: 110-240 VAC, 50/60Hz
- Hard drive: SATA 160 GB
- Memory: 2 GB DDR2
- Operating System: OpenSUSE 11.1
- Processor: 2.0 GHz Celeron 440 CPU

SNS Virtual AMP

The Virtual AMP provides all the central control and management for all SNS products with the added ability to install on existing customer supplied hardware. This also allows SNS to accommodate various IT environment needs such as installing on standardized hardware, better utilization of computing resources and simplifying the data backup processes.

Specifications:

Supported Host Operating Systems:

- VMware's ESX3.5
- VMware Workstation 6.5
- VMware Server 2.0

Guest Operating System (SNS Virtual AMP):

- SUSE 11.1
- MySQL database

Virtual Machine Requirements:

- 2 CPU Processors
- 2G Memory
- 40G Disk Space