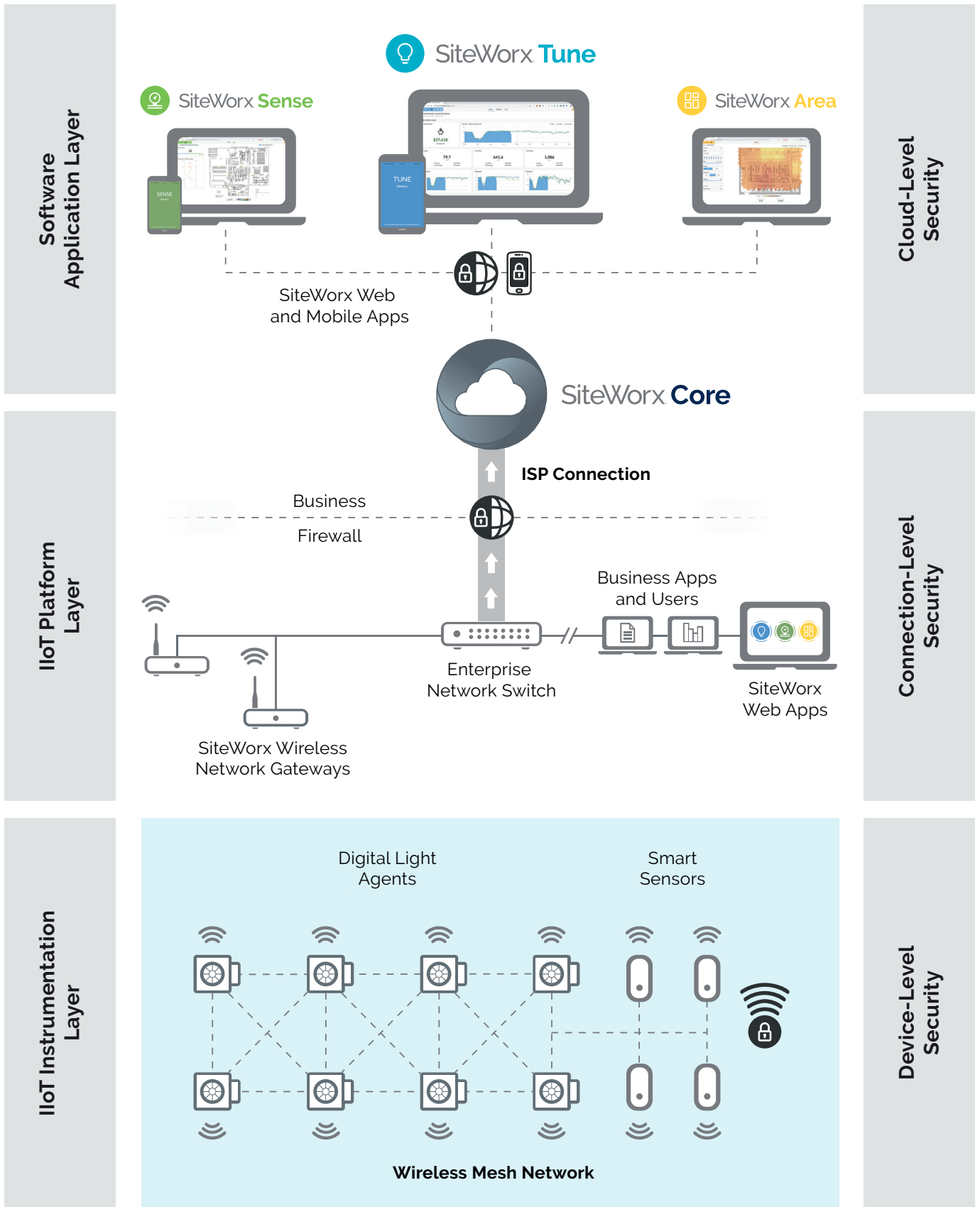




SiteWorx[®] Technical Requirements



- Access rights and User Credentials defined by customer
- Data is backed-up daily



- Outbound Authentication Request
- Persistent websocket
- Hardware-based TLS Encryption
- 3rd party penetration validation



- Encryption (TLS) at time of commissioning if desired

SiteWorx® is a cloud-based Industrial IoT (IIoT) platform used for advanced lighting and energy management and monitoring. Through a customizable and easily expandable network of smart sensors, SiteWorx applies advanced controls for facility-wide analysis and data-driven operational insights to create new value streams for industrial customers across the globe. With a fully-integrated cloud solution, real-time activity and insights are collected from across your spaces and made instantly available via intuitive, easy-to-use lighting control and facility management software.

Network Requirements:

SiteWorx requires connection to reliable high-speed internet and utilizes an average of <10kB/s in bandwidth per gateway. Cellular modems are not supported.

Gateways

- Require a PoE connection for power (24-48 VDC) or external AC/DC power supply
- Assigned an IP address from a DHCP server or configured with a static IP address
- Ethernet (CAT-5/5e/6) connection runs for gateways should not exceed 328 ft (100 m)
- Gateways must be able to connect to the Internet, with outbound firewall access via the following ports:
 - **443 (HTTPS - TCP):** Secure HTTP, used for SiteWorx Core services
 - **844 (WAMP - TCP):** Web Application Messaging Protocol, used for SiteWorx Core services
 - **123 (NTP - UDP):** Network Time Protocol, used for synchronizing time between sensors and SiteWorx
 - **6514 (syslog over TLS - TCP):** Secure Syslog used for SiteWorx logging and diagnostics
 - **53 (DNS - TCP):** Domain Name Server, used for DNS lookup

Operating System:

IEEE 80215.4 Wireless Communication

IEEE 802.15.4 is a low-power, low-bandwidth communications protocol that minimizes the time the radio transmitter is on, helping to reduce power use. In beaconing networks, nodes only need to be active while information is being transmitted. It is a self-healing line of sight protocol — if a node in the network is removed, the message will take the next best route to its destination. IEEE 802.15.4 is designed to require minimal power (1mW) with a sight range of about 50 ft (15 m).

The IEEE 802.15.4 protocol is specifically designed to limit interference with 802.11 traffic. Some IEEE 802.15.4 channels do overlap with WiFi (in 2.4 GHz band), but are so weak in comparison that they do not interfere. For more information, please refer to "[Co-existence of IEEE 802.15.4 at 2.4 GHz Application Note](#)" (NXP Laboratories UK (formerly Jennic), 2013).

Communication on the wireless IEEE 802.15.4 network can be encrypted using AES-128 during installation.

Site Configuration & User Interaction Backup

Site configuration and user interaction data is available only to SiteWorx Software USA Support and Engineering teams, and is never shared with other organizations and never used for sales and marketing purposes. This data provides SiteWorx Software USA with basic user metrics to assist in analysis and product improvement. Control applications and data are stored on a secure Amazon Web Services cloud server. Access to this data is secured by TLS/SSL protocol. Customer data and configurations are backed up daily.