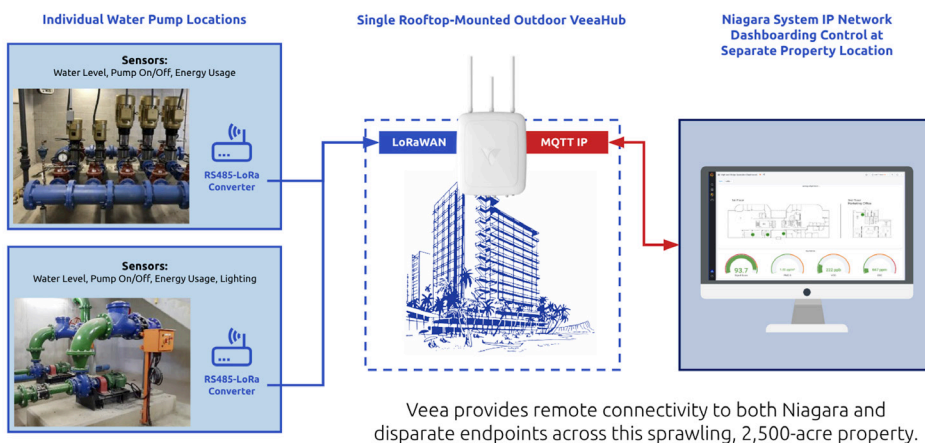veea

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Remote Water Flow Management at Vidanta Nuevo Nayarit-Vallarta Resort

Vidanta Nuevo Nayarit-Vallarta is a luxury resort on the Pacific Ocean looking to monitor its water sump pumps more efficiently to better control water levels across the property. Spanning over 2,500 acres, it has been named one of the Top Hotels in Mexico and Top Hotels in the World by Travel + Leisure's World's Best Awards. This expansive destination provides a high-end experience including three golf courses, a shopping plaza, an entertainment plaza, multiple spas, countless pools, and the fabulous beach.

To meet this need for more efficient water management, Veea's strategic partner Tecno Buildings installed outdoor VeeaHubs at the Vidanta Resort. Utilizing a long-range wide-area network (LoRaWAN) for connectivity, the deployed solution controls sump pump mechanical systems to remotely manage water flow, while also controlling energy consumption of the sump pump station itself.

LoRaWAN + Containerized Portable Niagara Solution

With a single rooftop-mounted outdoor VeeaHub®, the Vidanta resort is now monitoring individual water pump locations with sensors that report water levels, on/off status, and energy usage. The VeeaHub converts and processes LoRaWAN to MQTT IP to the Veea Edge Platform with Niagara Framework System IP Network Dashboarding Control at a separate property location for remote access to all the end-points and collected data.

Veea provides remote connectivity to both Niagara and disparate endpoints across this sprawling, 2,500-acre property.

The combination of the Veea Edge Platform™ running Containerized Portable Niagara within LoRaWAN is improving efficiency, sustainability and productivity across the Mexican resort. The benefits of this solution include reduced energy consumption and more efficient control of water levels.

Partners

- Tecno Buildings
- Tridium

Project Overview

- **Customer:**
  Vidanta Nuevo Nayarit-Vallarta Resort

- **Solution:**
  LoRaWAN + Containerized Portable Niagara from Tridium

- **Outcomes:**
  - Remote water flow management
  - More efficient control of water levels across the resort
  - Reduced energy consumption

Intelligently Connected™

- **Ease of deployment**

  - Pre-provisioning of VeeaHubs so that the installer only wires for power, net, and mounts
  - Capability to bootstrap over cellular
  - Scheduled, over-the-air updates
  - Applications configured remotely
  - Bulk configuration capabilities

- **Wireless as a cost-effective way to extract and send data**

  - LoRa / IP COTS Converters allow the collection of data over large distances without the need for directly wiring devices back to control rooms
  - Integrated 4G / 5G reduces wiring to extend existing customer Internet connectivity to additional end points

- **Bridging the gap between operational and information technology**

  - Segregation of complex, IT-managed environments from the collection and management of IoT data from the same location
  - Secure connection to a customer's existing LAN while simultaneously maintaining a WAN-based cloud connection
  - Flexibility for multiple network scenarios and corresponding configurations

With its LoRa edge hubs, Veea provides an all-in-one-box solution for a complete LoRaWAN deployment on one site. Where it usually requires one or multiple LoRa Gateways, a local network to support those gateways and a local or cloud solution for the LoRa Server, Veea offers everything in one box along with the ability to easily expand LoRa coverage through the unique Veea Mesh technology, enabling long-range, low-power communication for IoT devices in smart city, industrial, and agricultural applications. This built-in capability allows for seamless integration with sensors and devices across large areas, offering efficient and reliable data transmission.

CPN with Edge Intelligence

The Tridium Niagara Framework® is a comprehensive software infrastructure that serves as a central console for connecting real-time operational data to the people and systems that manage workflows in smart buildings, data centers, industrial processes, smart cities and other aspects of business enterprises.

Veea collaborated closely with Tridium, a global leader in business application frameworks, to develop CPN. With CPN running on VeeaHub® products, the Niagara Framework benefits from the full range of wired and wireless networking solutions to connect to electro-mechanical systems onsite at the Vidanta resort, while offering easier installation and maintenance as well as reliability afforded through network redundancy.

The Veea Edge Platform enables building managers and property developers to experience more efficient deployments, higher speeds, and lower latencies with more networking options, a wide range of expansion options, less downtime, and significant cost savings, along with the simplicity of remote management and monitoring of IoT devices.

→ **Learn More About Precision Agriculture Solutions from Veea**
Find out how your organization can benefit by contacting us at sales@veea.com or by visiting **veea.com/resources**

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BR-4B70.01EN