

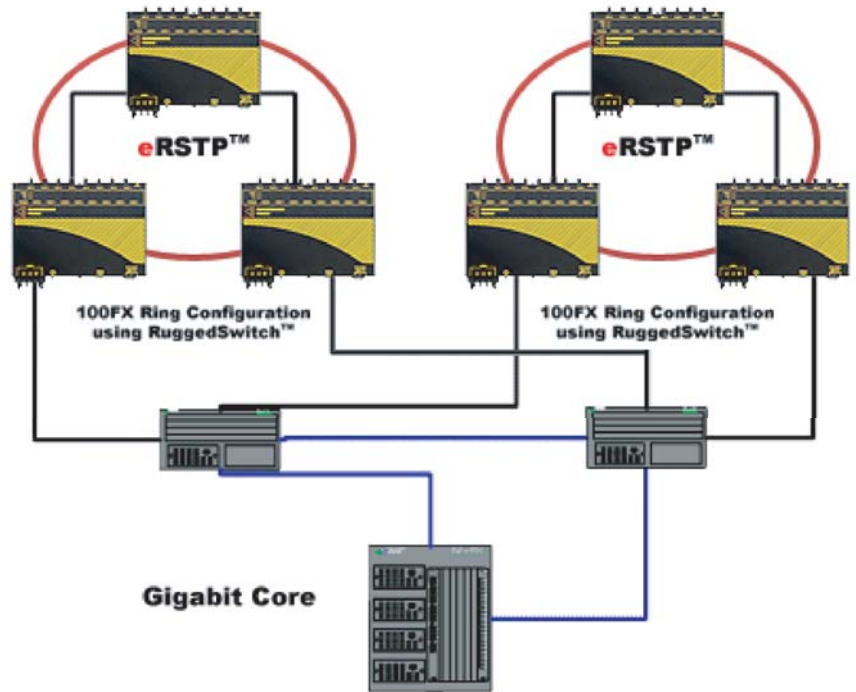
Palm Beach County Deploys RuggedCom RuggedSwitch™ to Network Traffic Control Devices

Customer Overview

Palm Beach County, centered 60 miles north of Miami Florida, is the largest county southeast of the Mississippi River and covers more territory than the states of Rhode Island or Delaware. The county Metropolitan Planning Organization (MPO) is responsible for managing a substantial network of roads including over 1500 intersections, and related traffic infrastructure. The Palm Beach County ITS Operations Facility serves as the nerve center for traffic management and deployment of ITS projects in the county. From there, all Palm Beach County ITS devices are monitored and controlled. The MPO has evaluated and is now implementing Intelligent Transportation Systems (ITS) and communications technology-based solutions to address the age-old challenge of traffic growth, making travel in the region safer and more efficient.

Modernizing the ITS Infrastructure

Palm Beach County began modernizing their ITS infrastructure in the late 1990's. Beginning in late 2001, they conducted an exhaustive evaluation of technology solutions, exploring options that ranged from upgrading existing equipment to complete system replacement. After considerable review, a decision was made to interconnect all new traffic controllers over a 1Gbps fiber optical Ethernet communication backbone with 100Mbps downlinks to control equipment. This gave the county the ability to continuously monitor and manage all of their traffic signals in real-time. In parallel, they began the replacement of analog video equipment with digital video devices, allowing video signals to be encoded for immediate transmission across the network. This conversion allowed the MPO to roll-out more cameras while using a smaller quantity of fiber.



Network Architecture

Field-Hardened RuggedCom® Switches Chosen

The comprehensive review evaluated Ethernet switches, traffic controllers, and video encoders from many different vendors. Devices were to be located in traffic control cabinets throughout the county. With a sub tropical climate and frequent electrical storms creating extreme operating environments, only the most rugged devices would be considered. That's why Palm Beach County chose RuggedCom's RuggedSwitch™ family of field hardened, fully managed Ethernet switches for all of their traffic control cabinets. Rated for reliable operation in temperatures ranging from -40°C to +85°C, and featuring RuggedCom Zero-Packet-Loss™ technology for immunity to electromagnetic interference, the RuggedSwitch family easily exceeded the NEMA TS 2 environmental requirements for traffic control equipment mounted in curbside cabinets.

