

Connectivity is the Heart of the City



"By upgrading to cnPilot, we brought reliable WiFi to the city center. Visitors and citizens are streaming videos, sharing data, and doing social networking."

- KRUNOSLAV IVANOVIĆ, CEO, KRK SISTEMI

Challenge

THE TOWN CENTER OF NOVI VINODOLSKI IN CROATIA IS A POPULAR COMMERCE AND

meeting spot. A few years ago, the city wanted to offer WiFi connectivity in the popular town square to promote business and tourism. While the initial WiFi solution was satisfactory in the early days, as more people began to stream video, and share their lives on social media, the system could not keep up and long wait times and outages made for a poor experience.

Town leaders contacted KRK Sistemi, a local Wireless Internet Service Provider who had experience in connecting many business and residential customers in the region. "The system that they had chosen could not support more than 30 simultaneous clients," says Krunoslav Ivanović, CEO of KRK Sistemi. "Today, people are streaming video and in a town square you can have hundreds on line at any given time. We had seen these situations before, and they needed a technology that would provide higher throughput and scale to a larger number of customers."

Solution

"THE CITY NEEDED A SOLUTION THAT THEY COULD TRUST THAT CUSTOMERS WILL BE

satisfied," says Ivanović. "We decided to extend our wireless broadband network to reach the city center with ePMP as an infrastructure, and then install cnPilot WiFi Hotspots as the access layer."

With 2x2 Multiple In Multiple Out (MIMO) 802.11n standards-based technology, the cnPilot Hotspot has 8 SSIDs and supports up to 128 concurrent users with ranges up to 600 feet (180 meters) with third party high gain antennas. The Hotspot provides 100 Mbps of low latency throughput to support on line data transfer, social media applications, and streaming video.

ePMP Infrastructure Solution	
Frequency	2.4 GHz, 5 GHz
Throughput	120 Mbps in a 20 MHz channel

cnPilot Outdoor WiFi Solution	
Throughput	Nearly 100 Mbps in a 20 MHz channel
Concurrent Clients	128

Results

THE HOTSPOTS TYPICALLY HAVE MANY SIMULTANEOUS USERS AT ANY

given time and the system has performed well through high wind storms that passed through the area.

"The twelve Hotspots were deployed around the city center two months ago, and they have worked perfectly," says Ivanović. "We deployed the Hotspots with the standard antennas and we see ranges of 100 meters. Now people can connect in the city center and in restaurants. The system has revitalized the town center."



ePMP Access Point

MODEL#

C005095H021A - ePMP[™] 1000 hotspot (ROW, no cord) 802.11n 5GHz WLAN AP with dipole Antennas, & Mounting bracket

C005095H023A - ePMP $^{\rm TM}$ 1000 Hotspot (EU) 802.11n 5 GHz WLAN AP with Dipole Antennas, & Mounting bracket

C005095H122A - ePMP™ 1000 hotspot (FCC) 802.11n 5 GHz WLAN AP with dipole Antennas, & Mounting bracket

C005095H221A - ePMP $^{\text{TM}}$ 1000 hotspot (ROW, EU Cord) 802.11n 5GHz WLAN AP with dipole Antennas, & Mounting bracket

C024095H021A - ePMP[™] 1000 hotspot (FCC, ROW, US Cord) 802.11n 2.4GHz WLAN AP; Dipole Antennas, & Mounting bracket

CO24095H221A - ePMP™ 1000 hotspot (EU, ROW, EU cord) 802.11n 2.4GHz WLAN AP; dipole Antennas, & Mounting bracket



ePMP 1000 hotspot 2,4 GHz providing WiFi on the beach

About KRK Sistemi

www.krksistemi.hr

Provides data connectivity to government, business, and residential customers in Croatia. Provides free wireless Internet access in cooperation with cities and municipalities across the country. Also provides high speed data connectivity for business and residential customers.

Customers include:

- City governments
- Municipal agencies
- Business clients
- Residential access clients

Why KRK Sistemi chose Cambium Networks

- Reliable connectivity that performs consistently
- Reasonable price for backhaul and access network equipment
- Capacity to continue to perform when system is operating under heavy demand conditions