

Video Surveillance for Smart Cities



“The video surveillance system with a Cambium Networks communication infrastructure allows for intelligent traffic management, and the images are consistently clear. The system will scale for expansion, and provides IP bandwidth that is leveraged for interoffice connectivity.”

- RAJASEKHAR
POPOLU, MANAGING
DIRECTOR,
BRIHASPATI
TECHNOLOGIES PVT.
LTD

Challenge

KURNOOL CITY IS A LEADING CITY IN THE

Indian state of Andhra Pradesh. With the city emerging as the primary hub for agricultural and industrial development, the Kurnool Municipal Corporation recently focused on enhancing the quality of life and developing the area into a leading participant in India’s Smart City program, which is sponsored by Chief Minister N. Chandrababu Naidu.

With the rapid population growth, new businesses entering the commercial district, and increase in tourism, city leaders found that they needed to increase public safety measures. They elected to add video surveillance to provide the existing first responders with 24/7 information. They contacted Brihaspathi Technologies based in Hyderabad to design and implement a video surveillance solution that would cover the city.

Solution

“BRIHASPATI TECHNOLOGIES HAS RICH AND VALUABLE EXPERTISE IN OFFERING END-to-end CCTV Surveillance solutions,” says Rajasekhar Popolu, Managing Director, Brihaspathi Technologies Pvt. Ltd. “For Kurnool City, we used Cambium Networks wireless broadband connectivity in the 5 GHz frequency to connect 120 closed circuit cameras at 30 intersections. To monitor the system, there are 3 Central Monitoring Stations, each with multilevel data storage to maximize security. This combination of cameras, infrastructure, and monitoring gives us a world-class solution.”

For the communications infrastructure, it was important that the system provided high performance and was scalable to support growth as the network continued to grow. Brihaspathi Technologies chose ePMP 1000™ connectorized Access Points (AP) with synchronization, and Integrated ePMP Subscriber Modules (SM). They used the LINKPlanner software to develop the network design and model system performance.

“Based on the design model, we could support all of the 120 cameras and have complete city-wide surveillance with 5 ePMP AP locations and 30 ePMP SMs,” says Popolu.



eMPP 1000 Distribution Network Solution

Frequency	2.4 and 5 GHz
Throughput	100 Mbps in a 20 MHz channel

Results

“THE KURNOOL MUNICIPAL CORPORATION IS VERY MUCH SATISFIED with the solution,” says Popolu. “From our perspective, installation was easy and we were able to get great support from Cambium Networks. This success has contributed to our brand and reputation as a global solutions provider.”

Being IP-based, the system is able to be leveraged for multiple purposes. “The City is able to use the network for video surveillance and traffic management, for sure,” says Popolu. “But the network is also able to be leveraged for other applications such as Internet access, audio conferencing, video conferencing, Geo Tagging, and GPS tracking.”

When delivering a complex solution, planning is vital to success. Brihaspathi cites three main factors that contributed to the success of their deployment:

1. **Detailed site survey** to identify specific locations with Line of Sight (LOS) connectivity.
2. **Optimal location** of Access Point equipment to provide connectivity to all of the Subscriber Modules.
3. **Professional support** from Cambium Networks to guide the integrator in designing, installing, and delivering the solution.

Next Steps

BRIHASPATI TECHNOLOGIES HAS BEEN CONTACTED TO EXPAND THE coverage to include new areas. Based on their experience and enhanced reputation on this project, they are planning to offer more connectivity services to the City of Kurnool and other locations.



Cameras at intersection location

About Brihaspathi Technologies Pvt. Ltd

Brihaspathi Technologies Pvt. Ltd is an IT Products and Solutions company, based in Hyderabad, India. By focused leadership and dedicated workforce, we have excelled and exceeded all our customers' expectations in the domains of Software Development, Mobile Applications, E-Communications, E-Security Systems, Global Positioning Systems and Corporate Training. Brihaspathi Technologies Pvt. Ltd., has over 3900+ clients spreading across various industries & vertical markets.

- **Network planning** with LINKPlanner software to model performance and identify any weaknesses before installation.
- **System Reliability** for “hassle-free” operation on a completely stand-alone network with high uptime.
- **Network Scalability** to support expansion in the near future.



Chief Minister Mr. Chandrababu Naidu having discussion with Brihaspathi team