Intelligent Transportation System

Proxim Transportation Solutions

Proxim products bind all the different components of a transportation system over hundreds of square miles with an end-to-end wireless network. Proxim's high-bandwidth, high-availability solutions have enabled a broad range of ITS applications including traffic signals, digital messaging signs, electronic toll collection, and speed sensors. These solutions facilitate scalable, reliable and cost-effective Transportation systems over different terrains.

Advantages

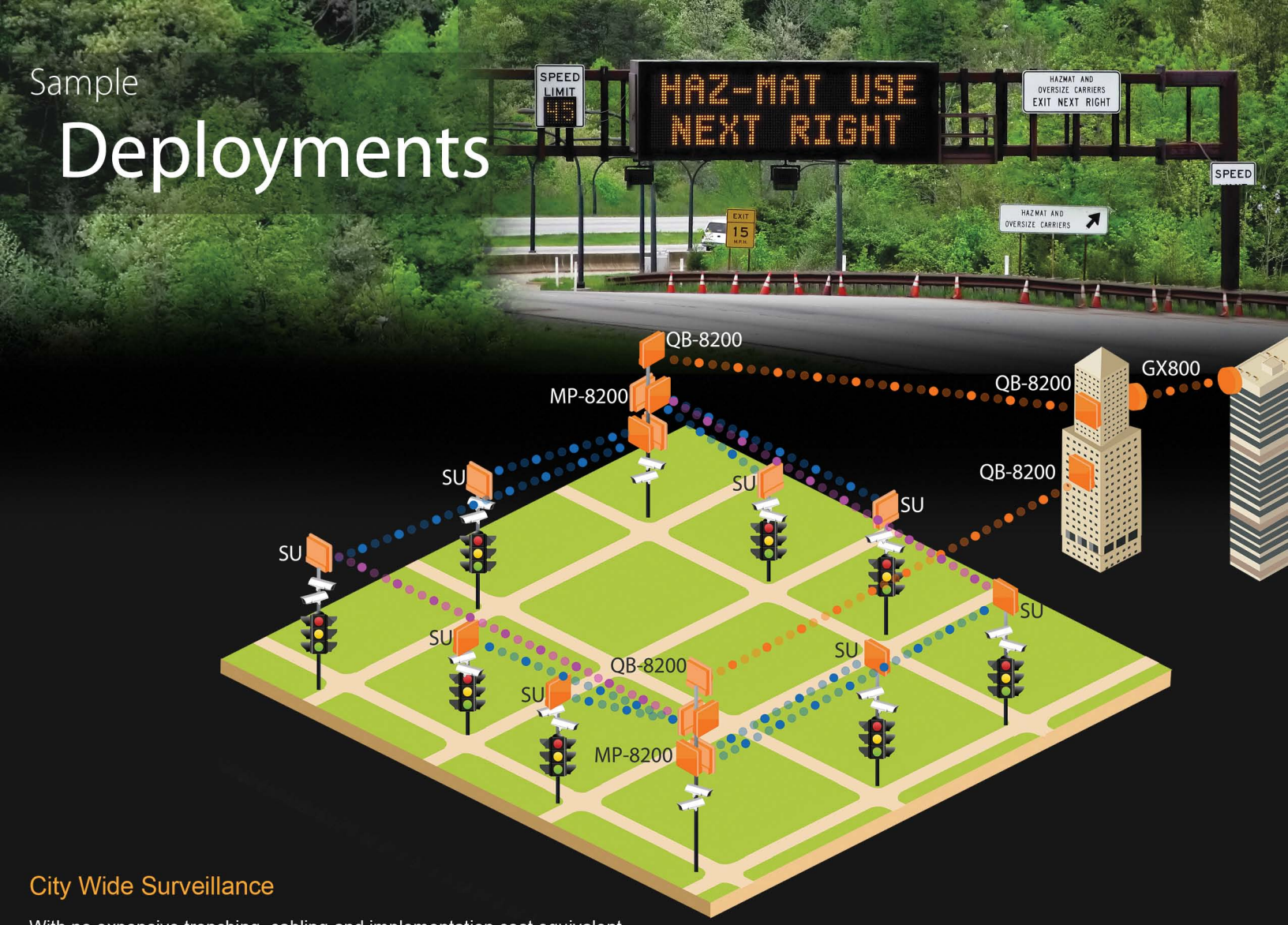
- Cost-effective: Does not require any cabling/ trenching thus avoiding huge expenditures
- Carrier-class uptimes: Ensures non-stop real-time transmission from surveillance cameras and other ITS components
- Scalable: Deploys virtually anywhere - across rugged terrain, bodies of water and remote areas and within no time

Applications

- Update dynamic message signs along highways to warn drivers of road conditions, accidents and detours
- Seamless connectivity to traffic management centers
- Solar power traffic detection radar sites
- Wireless remote management

Sample

Deployments



City Wide Surveillance

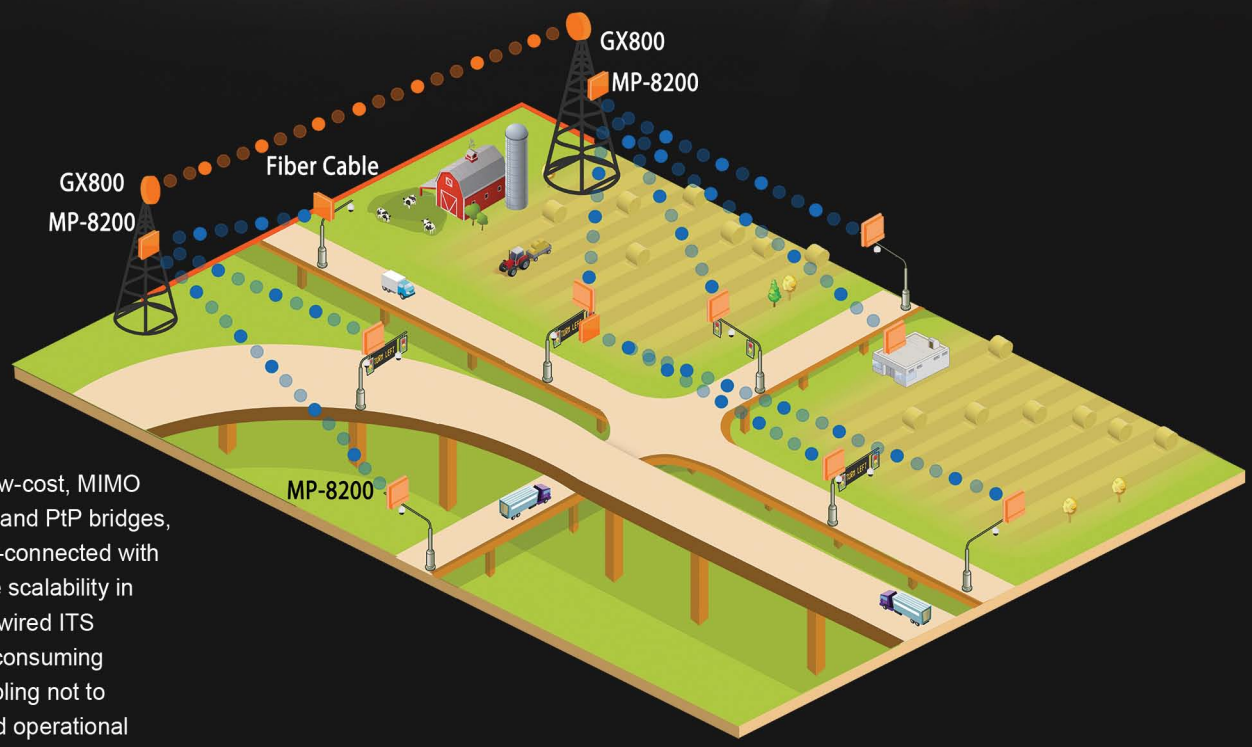
With no expensive trenching, cabling and implementation cost equivalent to 1/10th of a wire based surveillance network. Proxim's wireless solutions prove to be an ideal choice for an exclusively private, city wide surveillance network. Powered with MIMO and proprietary WORP® technology, Proxim's solutions enable high resolution, real-time video from security cameras to be transmitted to the surveillance centers where various activities and infrastructure of your city can be monitored.

Education

With wireless solutions from Proxim, educational and academic institutions can be assured of a safe and secure campus. Proxim based ITS applications for the education space involve comprehensive solutions ranging from video surveillance of properties and assets such as school buses, parking spots etc to remote administration of traffic applications within the campus .

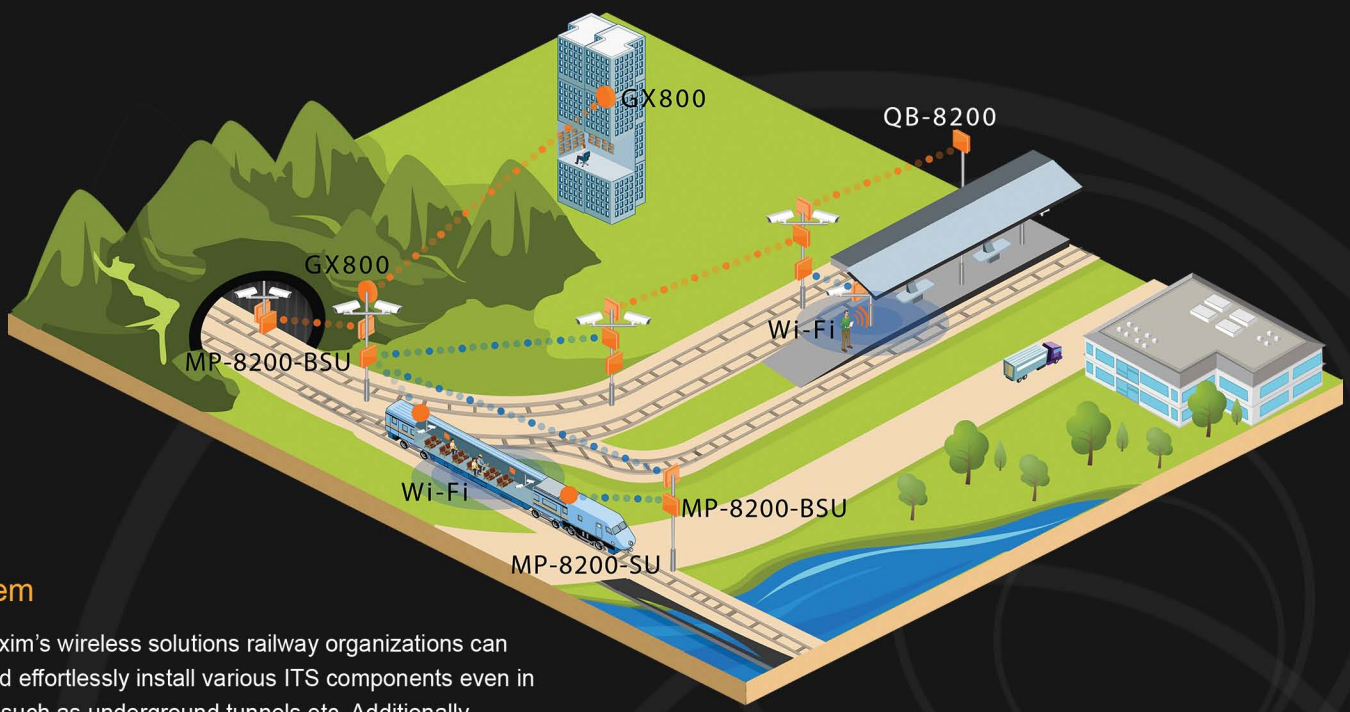
Sample

Deployments



Highway

With Proxim's high uptime, low-cost, MIMO based PtMP subscriber units and PtP bridges, ITS devices can now be inter-connected with much less expense and more scalability in comparison to the traditional wired ITS solutions which involve time consuming activities of trenching and cabling not to mention the heavy capital and operational expenditure.



Railway System

By leveraging Proxim's wireless solutions railway organizations can cost effectively and effortlessly install various ITS components even in challenging spots such as underground tunnels etc. Additionally Proxim's 8200 series with its roaming capability allows passengers accessing the internet via Wi-Fi hotspots and control stations to seamlessly receive and transmit data from fast moving mobile trains.

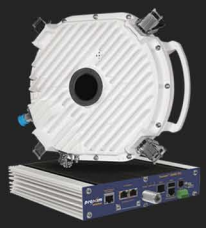
Mesh Vs

WORP®

WORP®	Wi-Fi Mesh
Polling Based Protocol	Contention Based Protocol
WiMAX	Ethernet
LTE	Wi-Fi
Distance measured in miles	Distance measured in meters
Designed for WAN based deployments	Designed for LAN based deployments
Base Station driven protocol using WORP®	Client driven protocol using CSMA/CA
Base Stations tells each client when they can transmit	Every client listens before transmitting
Certified installers are required	Simpler to deploy
Best performance for small to large networks	Good for small networks but doesn't scale to large networks
Fewer radios required	More radios
Lower latency with fewer hops	Higher latency
Lower cost	Higher Cost

Wireless Backhaul Portfolio

Tsunami® 8200 Series
4.9 - 5.9GHz
300Mbps
25.8 dBm



Tsunami® GX800 Series
6-23GHz
622Mbps
27 dBm

ORiNOCO® Series
802.11a,b,g,n dual radio
320Mbps
19.5 dBm

Tsunami® 8100 Series
2.3 - 6GHz
300Mbps
21 dBm

Tsunami® .11 Series
4.95 - 5.85GHz
54Mbps

proxim® wireless

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