



WIRELESS NETWORK SOLUTIONS KEEP YOUR CAMPUS CONNECTED

DELIVER BETTER MOBILE INTEROPERABILITY OUTDOORS



For many workers, the need to use multiple devices is simply all in a day's work. When they're indoors, they rely on an office phone and a mobile computing device to run job-specific applications. Outside, they may use a two-way radio, mobile computer or cell phone for communications. Reliable network connectivity is needed to support those devices both inside buildings and outside in campus environments. The right network and mobility solution can consolidate the functionality of those disparate devices into one, as well as bring a host of new business critical applications outdoors. The implications can dramatically impact future CAPEX costs and lower the TCO of your operations. Innovative, proven solutions exist to make this scenario possible.

EMPOWERING CRITICAL EFFICIENCIES

For one industrial customer, different job functions meant the need for different, disparate devices: security crews needed to carry two-way radios, maintenance crews required mobile computers with bar scanning capabilities to access job-specific applications, as well as two-way radios for frequent communications with security crews. Faced with budget constraints from a difficult economy, IT evaluated solutions to streamline the functionality of worker devices without losing key interoperability, reduce costs and improve worker productivity.

Another key priority involved cost-effectively improving network coverage outdoors to support highly mobile worker functions in a cost-effective manner – in a campus environment where variable terrain and obstructions from buildings and trees impact the network design. IT also wanted to ensure that in the future its outdoor network infrastructure investments could support advanced applications such as video. To accomplish both objectives, the company chose to deploy our mesh AP 7181 and TEAM Express solutions.

A POWERFUL COMBINATION

The AP 7181 is a high performance, multi-radio 802.11n access point featuring superb network capacity, high data rates and our exclusive intelligent ADEPT (ADvanced Element Panel Technology) antenna system. The ADEPT system allows the AP 7181 to achieve maximum data rates by delivering a reliable dual data stream in an outdoor environment. Leveraging multiple transmit and receive RF chains and dual polarized antennas, the AP 7181 achieves outstanding mesh throughput throughout a coverage area. What does this mean for you? Less equipment required for maximum coverage.

With an AP 7181 backbone, you can achieve robust outdoor connectivity for campus workers and provide access to business-critical applications at the point of activity. The flexibility and scalability of its design allows you to cost-effectively add more coverage or new capabilities as required, increasing mobile worker productivity as well as overall operational efficiencies.

The TEAM Express solution provides a fast, easy, cost-effective way to enable push-to-talk communications among multiple, disparate devices, including our own voice-capable mobile computers and TEAM devices operating in a single subnet¹. Completely server-less, TEAM Express improves employee accessibility, responsiveness and productivity while leveraging existing IT investments. Combining TEAM Express with the TEAM Radio Link Solution (RLS) enables PTT interoperability between TEAM-enabled devices and two-way radios, providing valuable interoperability between otherwise disparate devices.

The combination of TEAM Express, TEAM RLS and the AP 7181 creates a robust, scalable outdoor network platform providing mobile workers with instant PTT access to the people they need to reach as well as access to critical, job-specific applications wherever they are within your enterprise campus – completing security checks, work orders, asset management reports, inspections, etc. Instead of carrying multiple devices, security, maintenance and logistics personnel can use a single device that is best suited to their job while still maintaining interoperability with others carrying different devices. Productivity goes up while device training, maintenance and support costs go down.

¹ TEAM Express is designed to operate on a single WLAN subnet.

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PERVASIVE SECURITY

No matter your network size or type, security remains a critical concern and one we've addressed in every aspect of the MWAN (Mesh Wide Area Network) portfolio. Our latest mesh solutions provide complete end-to-end security with WPA, WPA2-PSK, WEP, 802.11i, RADIUS, 802.1X (includes EAP-TLS, EAP-TTLS) on the client side. Motorola's Secure Mesh technology ensures the highest data security between meshed Wi-Fi network nodes. Malicious or rogue intruders cannot gain access to the network because once identified, the network automatically locks them out. Additionally, network components support user name and password security for all networking interfaces and can distinguish between radios that are part of your network from radios that are not.

RELIABLE RESULTS

Wise IT investments must be made during this time of economic turbulence. They need to meet coverage and bandwidth requirements today while providing a scalable platform for tomorrow. Interoperable communications and converged devices allow you to achieve greater efficiencies, significant productivity gains and lower costs. When the functionality of those devices can be reliably extended outdoors, your business operations can become more flexible, your workers more accountable. Wireless connectivity is our specialty. Time-tested, field-proven solutions will help you plan, design, implement and manage all network components easily, achieve business objectives effectively and better serve your customers today and in the future.

ABOUT WIRELESS NETWORK SOLUTIONS

We deliver the seamless connectivity that puts real-time information in customers' hands and the agility needed to grow business or better protect and serve the public. Integrated with world-class devices, our solution portfolio includes indoor WLAN, outdoor wireless mesh, point-to-multipoint, point-to-point networks and voice over WLAN solutions. Combined with powerful software for wireless network design, security, management and troubleshooting, wireless network solutions deliver trusted networking and anywhere access to organizations across the globe.

For news and comments on the industry join the conversation at wirelessnetworkpulse.com



MWAN AP 7181 with ADEPT

The ADEPT antenna system enables the electronics to be built into the radio. Four antenna panels surround the center electronics enclosure, creating a compact and streamlined design. Each of the ADEPT panels is identical and contains up to six antenna arrays inside a plastic radome.



ADEPT antenna panel

A single ADEPT panel is shown here. Four panels create a complete ADEPT antenna system. All the control signaling to antenna panels is communicated through RF cables.