

Qorvus Qnode™

WIRELESS MESH ROUTER FOR OUTDOOR USE

The Qorvus Qnode™ wireless IP networking system utilizes robust and reliable 900 MHz, 2.4 GHz, or 5.8 GHz single or dual-radio mesh technology. This proven solution allows you to offer your clients a dramatic improvement over traditional higher-priced wired, wireless Internet or LAN distribution methods.

DESCRIPTION

Qnode comes pre-loaded with the highly-regarded Qorvus Qcode™ 4.5 embedded Linux mesh software. Qcode is an advanced, dynamic-routing Layer 3 wireless mesh networking and repeater technology that allows streaming IP video data packets to hop wirelessly from node to node (over many miles if needed), until the data reaches the client's NAS, NVR, laptop, PDA, bar-code scanner, or VOIP phone. This approach produces consistent high signal strength, and allows for a rapid free-form deployment throughout the required coverage area, without buried cable or expensive centralized wireless distribution methods. Qorvus has integrated industry-standard Linux code and secure wireless technology and added integral user-friendly SSL web-based and ssh console setup, central portal and server-based network management, monitoring, and provisioning, and numerous reliability enhancements, thus creating an extremely robust, reliable, and easily installed industrial-strength wireless networking solution. During the last six years, over a thousand instances of Qcode have been deployed in a variety of settings, and it has set an unparalleled record of uptime performance, reliability, and ease of installation.



PICTURED
Qnode™ equipped with 5.8 GHz backhaul and 2.4 GHz diversity radios (photo courtesy Keener Technologies, Inc.)

Qnode's powerful technology can be used to provision up to 40+ mb/s net IP video payload at the customer's server (5.8 GHz) or up to 15 mb/s (900MHz, 2.4 or 4.9 GHz) and can be deployed with only minimal site preparation, little or no intermediate gateway and routing hardware, and no hardwired backhaul provisioning except at one gateway. The Qorvus Qnode™ / Qlite™ wireless mesh system allows for greatly reduced site and system engineering, easy scalability, and is inherently hack-resistant, hidden-node resistant, remotely manageable, and fault-tolerant.

This high-performance, low-cost manageable device can also serve as a tower-mounted Point-to-Multipoint node, and a with installation of a second radio local NAT and DHCP WiFi hot-spot or serving up local and internet-based content in infrastructure mode, while simultaneously backhauling data via secure IP tunneling through its mesh routing architecture. It can even backhaul VOIP SIP sessions as a client or server

in mesh or PtMP star topology, while performing all of its other functions, without mandating additional hardware, software, or third-party devices.

FEATURES

- Supports single or multiple FCC-certified Atheros modular radios
- Sophisticated user-friendly GUI with built-in VPN hosting
- Ultra-compact rugged form factor
- Wide input voltage range (+9-18VDC)
- Low 4-watt power draw for solar, vehicular, or airborne applications
- Lower hardware investment than our major competitors without sacrificing service quality or performance
- Latest Qcode™ embedded Layer 3 mesh and autorouting firmware included
- Sustained end-to-end throughput of up to 40+ mb/s for IP Video and VOIP



TECHNICAL SPECIFICATIONS

Built with Proven Components Including:

- Pentium-class CPU w/ 128 or 256 meg dram
- Field-programmable 500 meg CF flash-memory
- FCC certified radios
- Up to four N-bulkheads and two ethernet connections for multiple antenna/radio options
- Built-in hardware watchdog with logging and alerts
- IP-66 machined aluminum housing with integral waterproof ethernet
- Custom engineered solutions available
- 18-volt PoE with injector, draws only 4 watts

Supports Most Wanted Features Including:

- Encrypted client traffic using PPTP VPN laptop-to-node security
- Multi-modal client authorization via built-in Radius, Autovac and open or closed portal with custom redirects
- Automatic detection and configuration of attached Mobotix IP cameras
- Class-based bandwidth-shaping and firewall
- Wired or wireless NAT, DNS, and DHCP client services
- NIST AODV and WDS based mesh routing
- Built-in support for VPN, RSA, and encrypted tunnels
- Adjustable RF output, 1 Mw up to 700 Mw depending on radio type
- Complete remote or local management via HTTPS GUI, VPN, SSH, and Customer Management Portal





PICTURED

Town of Stevenson, Washington. 50 miles east of Portland on the Columbia River.
Image source: Mobotix M22 transmitting video via Qorvus Wireless Network.

ABOUT QORVUS

Qorvus Systems designs, manufactures and delivers advanced, fully pre-configured wireless IP video surveillance and CCTV solutions for use in your most challenging environments.

- **Industrial, Commercial and Governmental CCTV applications**
- **Port Safety and Security**
- **Gated Residential Communities and Condo Complexes**
- **Municipal Wireless Projects**

Our surveillance products and services are available only through qualified integrators and Value Added Resellers. With our pre-configured solutions, you can easily bring high-quality IP and megapixel CCTV surveillance, reliable wireless connectivity, and UL-listed remote video monitoring services directly to your clients, even if you have little or no previous wireless networking experience.

Because of our unique remote-access VPN tunneling technology, our technicians are available at any time during the installation process to help you adjust your camera focus, field-of-view, alarm zones, antenna alignment, NVR and router configuration. You are never alone.

Spec sheets and manuals for additional Qorvus products - including the Qnode™, Qlite™, TriCam™, MeshCam™, and Qscan™ - can be found at www.qorvus.com.

For additional information, please contact Tom Sharples, President at 800.757.1571 ex 100 or sales@qorvus.com.

CUSTOM DESIGNED SOLUTIONS

Do you have an application that requires a **custom built system**? We specialize in custom designed video solutions for challenging projects. **Give us a call at 800.757.1571 to discuss your project.**

Qorvus' unique, state-of-the-art integrated and pre-configured solutions approach saves a great deal of valuable installer time, insures a high likelihood of success, and provides a close to painless approach to complex outdoor wireless networks.

Qorvus is totally committed to the success of your installations.

OUR SERVICES

Qorvus Systems will work with you from surveillance network concept to rollout, and anywhere in between.

Our services include:

- Consultancy on wired and wireless IP CCTV and connectivity technologies and engineering
- Complete turn-key equipment, software and network design, installation, and technical support
- Field-engineering and optimization of both new and existing networks
- Rollout strategies, product and company positioning
- Domestic and off-shore manufacturing, with established contacts in Silicon Valley, Mexico, Japan, Taiwan, Hong Kong, Canada and Germany

