2011DS Wireless IP Router







Deployable in a point-to-point or point-to-multipoint configuration, Spectrum Wireless' broadband access systems include the following components:

Wireless IP Router CPE

Routers are designed to be deployed at the customer's premises, providing integrated wireless transport and the IBOS™ IP feature set. There are three variations available:

Business Router –

This unit is designed for small to medium enterprise commercial deployments. Featuring a full IBOS™ network management feature set as well as VoIP and VPN, the unit is further enhanced by dual power supplies and the extra processing power required for business network applications. Choose either the base station supplied by the wireless system manufacturer (depending on system deployed) or a base station "blade" supplied by Spectrum Wireless, designed to fit into Spectrum's Chassis Unit.

Residential Router -

Our "entry level" model has all the IBOS™ features and functionality.

With Spectrum Wireless, you now get advanced IP performance with increased functionality at the edge of your network. You also have a choice in price and capabilities. Spectrum Wireless provides the most advanced level of IP networking integrated to a low cost CPE. Spectrum bands employed and under development include 1.9 GHz, 2.4 GHz, 2.5 GHz, 3.5 GHz and 5.8 GHz. This provides several choices for licensed (MMDS) and unlicensed (ISM and U-NII band) solutions. These frequencies deliver varying degrees of high bandwidth with a large base of capabilities to enable maximum market coverage. The system is easily scalable through sectorization and network overlays to accommodate network demand growth. The unique features of our IBOS™ offer IP capability which remains consistent across all radio platforms. For the first time, you can deploy in urban and rural areas, meet your ROI targets, and provide sophisticated IP services to all of your customers.

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CAPABILITIES BROCHURE



Trunk Link

Spectrum Wireless designs and produces state-of-the-art wireless IP routing technology with a sophisticated IP feature set to address the needs of demanding Internet users and networks.

Spectrum Wireless was formed in 1997 to develop the most sophisticated and full-featured wireless IP router available in the marketplace today. The company's technology is an effective replacement and augmentation to xDSL, cable modem and similar broadband transport systems. The use of ISM, U-NII and MMDS frequencies enables the most efficient last mile and wireless local loop solutions possible.

Spectrum Wireless pioneered the merging of networking and routing with radio technology to provide Internet access to urban and rural areas where wire lines are not readily available or economically viable.

Our design and development of feature-rich, spreadspectrum wireless routers for use in Fixed Wireless Local Loop infrastructures and Wireless Wide Area Networks integrates multiple radio systems for flexibility in frequency and performance. Our advanced routing platforms for multiple radio systems allow for deployment and interoperability with licensed and unlicensed systems.

Spectrum Wireless is a leader in unifying radio frequency (RF) and IP networking for high-speed broadband access to fixed wired networks to expedite advanced and economical delivery of IP, Voice over IP (VoIP), multimedia and secure data services.

Our radio agnostic approach offers support and integration of various wireless systems in a range of price points, frequencies, performance, and user capacities.

As the leading innovators and developers of intelligent, advanced, wireless IP routers that integrate radio technology to provide true IP networking, we enable you to deliver end-to-end service and networking directly to your customers.

Spectrum Wireless is the only provider to offer the Integrated Broadband Operating System (IBOS™) to Internet Service Providers (ISPs), Telecommunications Service Providers and Private Network Operators.

> Now you can offer high-speed data and voice services to your customers without worry.

Spectrum Wireless' IP-centric broadband access systems put the network intelligence where it counts - into the Customer's Premise Equipment!

Spectrum Wireless' unique technology conserves wireless bandwidth and delivers unparalleled security for our customers. We also offer a sophisticated feature set, excellent flexibility and unparalleled performance.

Spectrum Wireless delivers:

Quality of Service -

Built-in QoS mechanisms allow you to implement and automatically maintain customer Service Level Agreements.

Easy Deployment -

Internet

Network

Operations

Center

VoIP Gateway

PSTN*

*Public Switched Telephone Network

Collector/Cell Site

When preconfigured by you, your customer deployment will be as easy as plug and play.

Sophisticated Subscriber Features -

Routing, NAT, DHCP, Firewall, Traffic Shaping and

High Bandwidth -

ISM band systems deliver 11 Mbps over the air and up to 6 Mbps throughput.

Radio Agile -

Support for multiple radio systems means you have a choice in which radio system to deploy including 1.9 GHz, 2.4 GHz, 2.5 GHz, 3.5 GHz and 5.8 GHz.

Affordable –

ISM and U-NII band systems are inexpensive and easy to deploy.

Scalable -

Broadband systems can reach an aggregate of up to 830 Mbps on a 24 sector cell.

Upgradeable -

Both the software and radio of the CPE device can be upgraded, ensuring your investment protection.

Security -

Provides 168 bit encryption (3DES) with VPN.

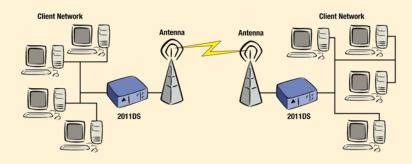
The Integrated Broadband Operating System (IBOS™)

Spectrum Wireless specifically designed the IBOS™ product for the competitive service provider. Here are some of the unique features of IBOS™ that will make your job a little easier:

- Variety of Radios Supported
- Dynamic Routing (RIP v1 & 2, OSPF)
- Static Routing
- DHCP
- NAT
- Firewall
- Bandwidth Control • SNMP (MIB I & II)
- DNS Forwarding

- Telnet
- TFTP
- Remote Radio Control
- Admin, Guest & User Logins
- Multiple IP Addresses per Interface
- NTP
- IP Diagnostic Utilities
- Application Layer Capability

Point-to-Point System



Point-to-Multipoint System

Radio Infrastructure Features: Multiple data rates Three (3) non-interfering channels

