

EnGenius SOHO Range



1. SOHO Product Lines
2. The Wireless Evolution
3. 802.11n Technical Overview
4. Advantages of 802.11n
5. SOHO Product Features

- **Data Communications**

Broadband Router



11b/g/n Broadband Router

WLAN Client: USB Adapter & PCI Adapter



11a/b/g USB Adapter



11a/b/g PCI Adapter



11n USB Adapter

Gigabit Ethernet



5/8 Port Gigabit Switch



5 Port Switch (w / PoE)

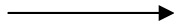
Wireless has become Business Oxygen

- Business applications have gone mobile
- Wireless is evolving to meet needs for high performance, pervasive connectivity

802.11
(2Mbps)

**Point
Applications**

- Inventory Management
- Barcode Scanning



802.11b
(11Mbps)

Mobile Data

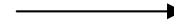
- Email
- Web browsing



802.11a/g
(54Mbps)

Business Ready

- Voice, Video, Data



802.11n
(300Mbps)

**Next
Generation
Wireless**

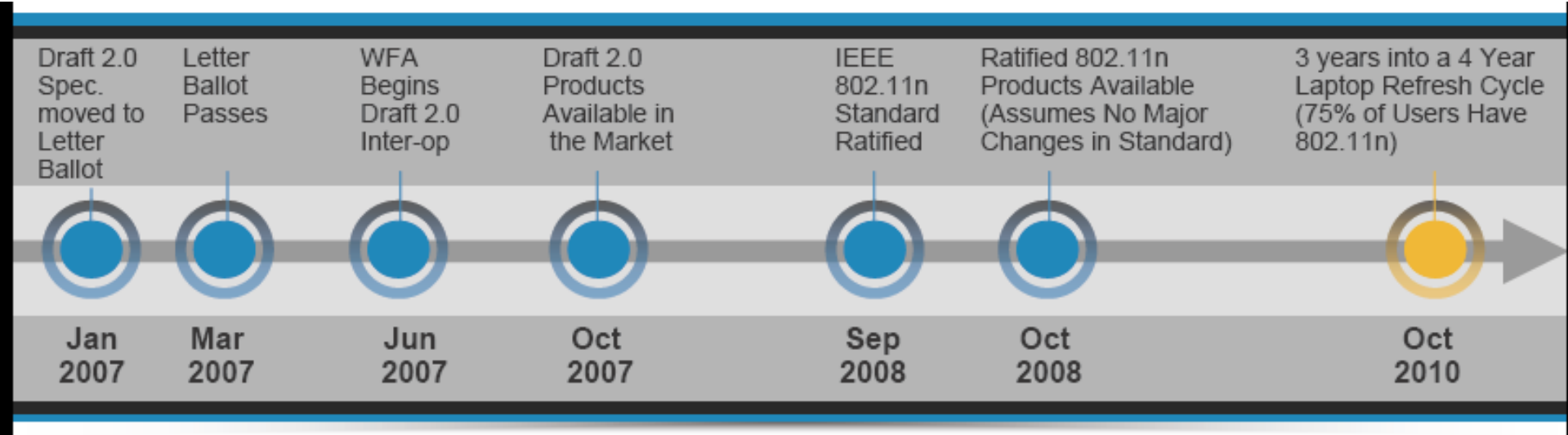
- Ubiquitous mobile computing

What does 802.11n deliver?

Better end-user experience for data, voice and video

- Throughput – Up to 5 times greater than existing networks
- Reliability – Fewer packet retries
- Predictability – Consistent coverage and throughput
- Compatibility – Backwards support for 802.11a/b/g clients

802.11n Standard Update



Primary 802.11n Components:

- **Multiple Input Multiple Output (MIMO)**
 - Beam Forming
 - Spatial multiplexing
- **Channel Bonding**
- **Packet Aggregation**

Greater reliability

- MIMO has able to communicate over multiple antennae eliminate dead spots
- Maintain optimal performance at greater distances

Greater throughput

- Combination of MIMO, channel bonding and packet aggregation allow 802.11n networks to achieve data rates as high as 300Mbps per radio

Greater coverage predictability

- 802.11n networks can support more clients using high-bandwidth applications

Backward compatibility with Existing Platforms

- 802.11n networks able to backward compatible with clients built under previous 802.11a/b/g wireless standards
- 802.11n Access Points will interoperate easily in mixed environments
- 802.11n can incorporate 802.11a/g clients with minimal performance loss

Why choose EnGenius 802.11n products?

- Compatible to 802.11n draft 2.0 standard.
- Fully interoperable with IEEE 802.11b/g/n devices.
- High Speed Data Rate Up to 300Mbps.
- Advanced Security Features.
- Easy Configuration.
- Universal Plug and Play.

Wireless-N Router

- **Fully interoperable** with IEEE 802.11b/g/n devices.
- Complies with IEEE draft 802.11n standards.
- Built-in 4-ports 10/100/1000Mbps **Gigabit Switch**.
- **High Speed** Data Rate up to 300Mbps.
- **Firewall** support Virtual Server Mapping, DMZ, IP Filter, ICMP Blocking and SPI
- **Advanced security** feature that support 802.1x authenticator
- **VPN** pass through.
- **QoS** function that support WMM with Wireless Intelligent Wireless Stream Handling
- Wi-Fi Protection Setup (**WPS**)



ESR-9710

Wireless-N USB Adapter

- **High speed** up to 300Mbps data rate.
- Complies with IEEE draft 802.11n standards.
- Capable of **handling heavy data** payloads such as MPEG video streaming, on-line gaming,...etc
- Support **Wireless Multimedia** Enhancements Quality of Service (QoS)
- **Detachable Antenna** design that enable flexible deployment.
- **Advanced security** features such as WPA/WPA2 and WEP 64/128.



EUB-9701 EXT2

Wireless-N USB Dongle

- **High speed** up to 300Mbps data rate.
- Complies with IEEE draft 802.11n standards.
- Advanced **Power Management**.
- Support **Wireless Multimedia** Enhancements
Quality of Service (QoS)
- **Advanced security** features such as WPA/WPA2
and WEP 64/128.
- EUB-9701 (2T X 2R Radios)
- EUB-9702 (1T X 2R Radios)



EUB-9702



EUB-9701

Wireless Broadband Router

- **Fully interoperable** with IEEE 802.11b/g devices.
- Built-in 4-ports 10/100Mbps **Switch**.
- **Firewall** with Stateful Packet Inspection.
- **Advanced security** features that support 802.1x authenticator.
- Support **WEP/WPA/WPA2**
- **Hide SSID**
- Denial of Service (**DOS**) **Protection**.



ESR-1220

Wireless USB Adapter

- Compatible to **IEEE 802.11b/g** (EUB-362EXT) **IEEE 802.11a/b/g** standards (EUB-862EXT).
- High Speed Data Rate** up to 108Mbps in Super G mode.
- Powerful data security** such as AES, TKIP, WEP and WPA.
- Advanced security** features that support 802.1x authenticator.
- Support 802.11e** which is critical importance for applications such as VoIP, Streaming Multimedia.
- Support **eXtended Range technology**.
- Detachable Antenna** design that enable flexible deployment.



EUB-362 EXT



EUB-862 EXT2

Wireless USB Dongle

- Compatible to **IEEE 802.11b/g** (EUB-3701) and **IEEE 802.11a/b/g** (EUB-8301) standards.
- Powerful data security** such as AES, TKIP, WEP and WPA.
- Support 802.11e** which is critical importance for applications such as VoIP, Streaming Multimedia.
- Light Weight & Low Power** consumption
- Easy configuration**
- Support **USB 2.0 / 1.1**



EUB-3701 / EUB-8301

Wireless PCI Adapter

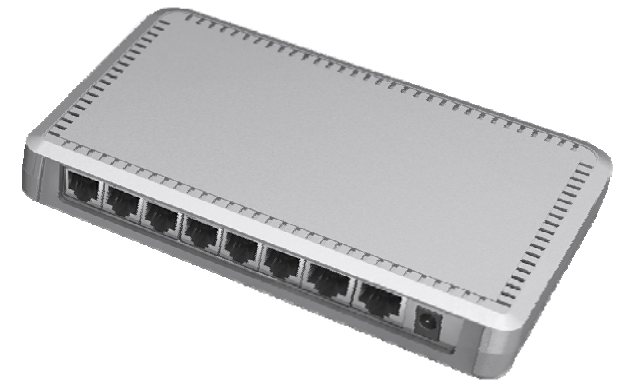
- Compatible to IEEE 802.11b/g standards.
- High Speed Data Rate** up to 108Mbps in Super G mode.
- Support **Enhanced Security Features** such as AES, TKIP, WEP and WPA.
- Support 802.11e** which is critical importance for applications such as VoIP, Streaming Multimedia.
- Excellent Range Coverage** up to 1500 metres.



EPI-3601S

Gigabit (10/100/1000Mbps) Switch

- Available as 5-Port / 8-Port Switch.
- Excellent Switching Architecture.
- **Support cascading** for scalable capacity expansion.
- **Support 802.3x Flow Control** to minimise dropped packets.
- **Support 802.1P** which is critical importance for VoIP, Video Streaming,..etc



**ESG-8805 /
ESG-8808**

5-Port Desktop (10/100Mbps) Switch with 1 PoE Port

- Support for **Auto-MDI/MDI-X** on all ports.
- Provide power to **PoE-enabled devices** such as Wireless Access Point, IP Phones and IP Camera.
- Light Weight** and Compact.
- No configuration** required.
- Compatible to **IEEE 802.3af** standard.



EPE-6818af

Q & A