

Information

The Siemens HiPath Wireless Standalone Access Point brings enterprise-class wireless LAN (WLAN) capabilities to small businesses. Featuring dual-radio 802.11a and b/g functionality, the Standalone Access Point can be quickly and easily integrated with any existing IP network through an intuitive browser-based setup. Neighbouring access points can automatically form WLAN clusters that facilitate roaming and create a seamless network experience for end-users.

The HiPath Wireless Standalone Access Point makes it easy for small offices to deploy converged wireless networks that deliver voice and data services along the same infrastructure with the high performance, rich features, and robust security today's businesses demand. In conjunction with optiPoint WLAN telephones and the HiPath 2000 Communication System, Siemens is able to deliver a unique, optimized end-to-end voice over WLAN solution.

HiPath Wireless Standalone Access Point

Small businesses today have a variety of options available to them when considering to add wireless mobility to their networks. Many consumer-grade appliances offer basic wireless LAN (WLAN) functionality at a very low cost, and there are a number of small-office products like firewalls or routers that also include basic WLAN features.



HiPath Wireless
Standalone Access Point

However, these devices typically lack the wireless security, voice, or management capabilities that businesses expect today. While enterprise-grade "Fat APs" offer this functionality, they are often more costly and complex than a small business is willing to accept. The HiPath Wireless Standalone AP provides a unique offering that delivers all of the advanced WLAN functionality required today, with the simplicity that is essential for today's small businesses.

Flexible deployment options

One or more HiPath Wireless Standalone Access Points can be seamlessly integrated into virtually any wired IP network environment in order to extend wireless LAN mobility capabilities to your business. However, the benefits are considerably enhanced when the Standalone AP is deployed along with optiPoint WL2 professional 802.11 WLAN telephones and the HiPath 2000 real-time IP communications system, resulting in a powerful converged wireless communications solution. If your network is set to growing beyond a small deployment, a simple software upgrade is all that is needed to integrate Standalone Access Points with more robust Controller-based HiPath Wireless environments.

Multiple antenna options for complete coverage

There are two models of HiPath Wireless Standalone Access Point. The HiPath Wireless Access Point AP2630 uses internal, omnidirectional antennae, while the AP2640 can be equipped with a variety of external antennae for additional coverage and minimal interference in difficult to reach areas such as hallways or behind pillars.

Intelligent Standalone AP Clusters

Up to five Standalone Access Points on a single network can create intelligent WLAN clusters. By sharing session information among member Access Points, Standalone AP Clusters considerably enhance the manageability, performance, and security of the wireless LAN. This allows the network to support so-

phisticated functions like seamless voice roaming, and provides a unified view of multiple APs and users from anywhere on the network.



Management Features

Simplified network installation

Standalone Access Points can be set up in minutes through an intuitive web-based management interface. Upon installation, the Standalone AP handles the rest, automatically detecting the presence of other Standalone APs connected to the same wired Ethernet network, and creating a WLAN cluster.

Straightforward configuration and monitoring

The Standalone AP's integrated management interface makes it easy to add or modify configuration data, or to gather performance and usage data through easy-to-read status and statistics screens. In clustered environments, it is possible to view the status and session information of all associated clients within the cluster, making it possible to determine the source of utilization issues or security breaches.

Multiple SSID and VLAN flexibility

Standalone Access Points support up to eight separate SSIDs, each with its own configuration, security and policy settings. The Standalone AP also supports VLAN trunking, making it possible for each SSID to map over to a separate VLAN on the wired network. As a result, it is actually possible to segment the wireless network into eight "virtual WLANs" for every physical unit.

Performance Features

Quality of Service (QoS) for real-time communications

Standalone Access Points support a number of features to improve performance and reliability, particularly for real-time applications like voice-over-WLAN (VoWLAN) that are heavily dependent on a consistent throughput level. Wireless QoS is delivered via the WMM standard for traffic prioritization – which is based on the 802.11e industry standard – making it possible to distinguish voice from data traffic, and create a dedicated queue that prevents latency and packet loss that would disrupt voice sessions. The Standalone AP also supports ToS

(Type of Service) and DSCP (DiffServ) prioritization mechanisms on the wired network, ensuring end-to-end QoS.

Siemens optimized for converged voice and data

The Standalone AP features a number of performance optimizations designed to get the most out of 802.11-based VoIP handsets like the optiPoint WL2 telephone to offer high-performance end-to-end VoWLAN. The Standalone AP utilizes TSPECs – an advanced subset of the 802.11e standard – to ensure consistently high voice performance. Additionally, U-APSD support offers an advanced power management scheme that maximizes handset battery life.

Fast and secure roaming

As users move about the office network, Standalone AP clusters ensure that their sessions are seamlessly handed over from one AP to the next to sustain a consistently high level of performance. This is especially vital for voice-over-WLAN sessions, where any disruption incurred while roaming from one access point to another could result in poor call quality or even disconnection. Standalone APs are able to do this in a way that does not compromise security.

Security Features

Standards-based authentication and encryption

HiPath Wireless Standalone APs are secured and protected using the latest technology standards to achieve the right level of security, performance, and client compatibility for your network. WEP is available for environments that only need a quick and simple security solution, while those with more sophisticated security requirements can choose from WPA or WPA2 using PSK authentication. A range of encryption methods are available to ensure the confidentiality of user data, including RC4, TKIP, and AES.

Flexible access control

The Standalone AP is able to easily determine which users can access the wireless network. User access can be restricted so that only those devices that have been accepted in the AP's table will be authorized. Network managers can either pre-configure this information, or they can accept each user as they attempt to access the network.

HiPath Wireless Standalone Access Point Supported Features

	Feature	Benefit
Management	Straightforward Installation: - Intuitive browser-based setup - Network-independent	Minimal on-site configuration and expertise required, dramatically reducing deployment time and costs
	Remote Web-based Management	APs can be easily configured and monitored from a central location with less personnel.
	Intelligent WLAN Clusters	APs in the same cluster share user information to deliver seamless network coverage
	Multiple SSIDs and VLANs	Each Standalone AP divide the network into 8 separate "virtual WLANs"
Performance	Wireless QoS via WMM, 802.11e, TSPEC, and U-APSD standards	Standards-based performance optimization for mobile voice and video applications
	Fast and Secure Roaming	Voice session integrity is preserved in a secure manner, even when users move across APs
	Simultaneous Voice Calls: 6 (802.11b, G.711, R>80)	APs meet the quality and capacity demands of today's VoIP applications
	Simultaneous Users: 127 per radio	Managers can stretch their investment further
Security	Security via WEP, WPA (TKIP), WPA2 (AES) with PSK authentication	Support for the most sophisticated standards ensures that user sessions are secure
	VPN Pass-through Support: IPSec, PPTP, L2TP	VPN interoperability provides added security and leverages existing network infrastructure
	Access Control	MAC address-based network access can be set for specific user devices for granular security

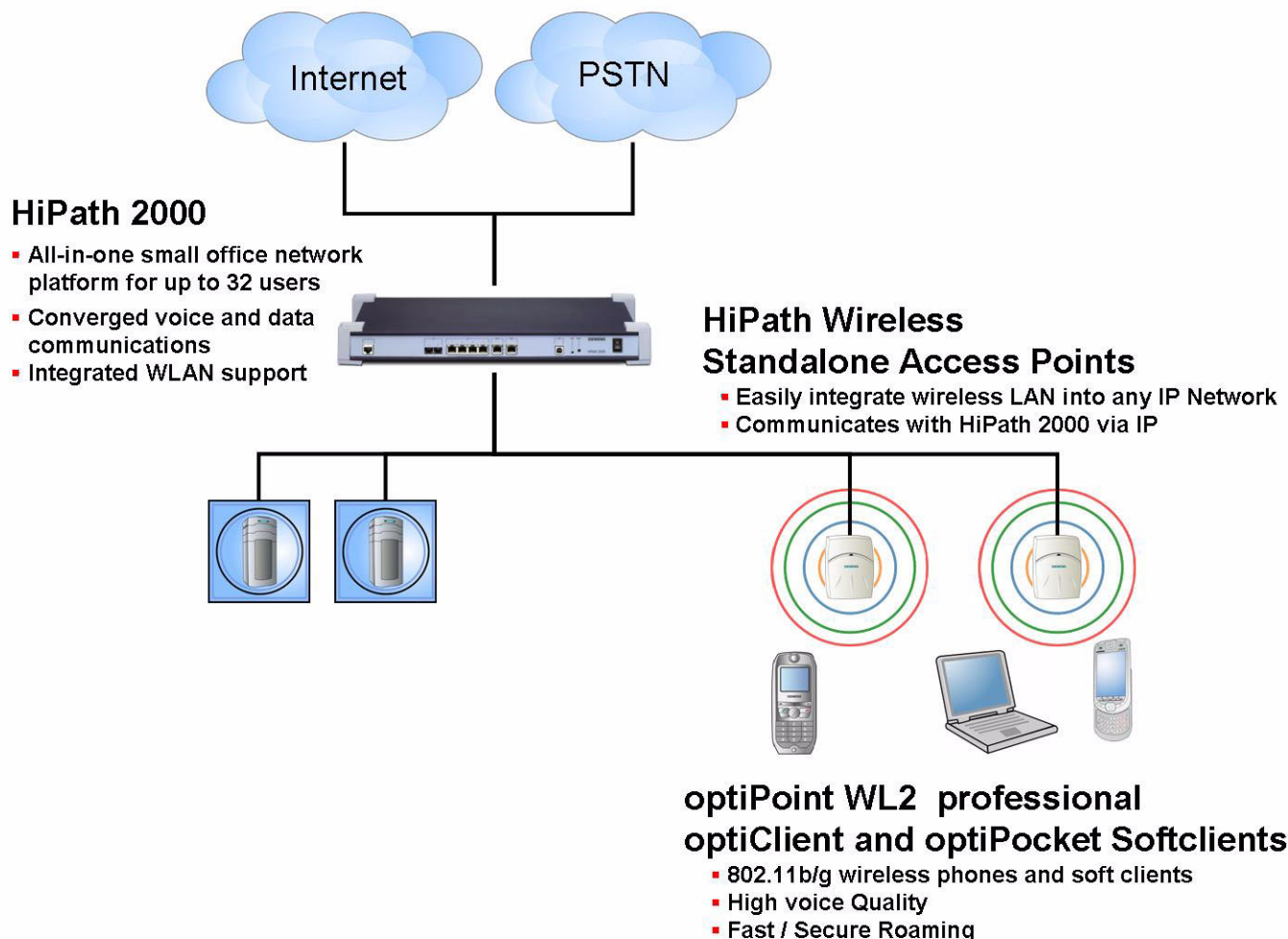
About the HiPath Wireless Converged Office Solution

The HiPath Wireless Converged Office Solution delivers enterprise-grade wireless voice and data capabilities to small offices within a single easy-to-deploy infrastructure. The solution combines HiPath Wireless Standalone Access Points, optiPoint clients and devices, and the HiPath 2000, along with intuitive management software and services for planning and implementation.

Siemens' solutions provide more than just data connectivity without wires. With the HiPath Wireless Converged Office Solution, small companies can exploit the benefits of a truly mobile communications solution.

- Converged voice and data networks using Voice over Wireless LAN, offering productivity with a lower cost of ownership compared to proprietary wireless voice solutions
- "Always on" access to corporate data and true user mobility throughout the premises with seamless roaming
- An easy to implement and manage solution that allows small companies to focus on business while the technology handles the communications.

HiPath Wireless Converged Office Solution



HiPath Wireless Standalone Access Point – 2630/2640

Product Specifications

Data Rates

- 802.11a: 6, 9, 12, 18, 24, 36, 48, 54 Mbps
- 802.11b: 1, 2, 5.5, 11 Mbps
- 802.11g: 1, 2, 5.5, 6, 9, 11, 12, 18, 24, 36, 48, 54 Mbps

Frequency Bands*

- 802.11a:†
 - 5.15 to 5.25 GHz (FCC / IC / ETSI)
 - 5.25 to 5.35 GHz (FCC / IC / ETSI)
 - 5.470 to 5.725 GHz (ETSI)
 - 5.725 to 5.825 GHz (FCC / IC)
- 802.11b/g:
 - 2.400 to 2.4835 GHz (FCC / IC / ETSI)

Wireless Modulation

- 802.11a: OFDM
- 802.11b: DSSS
- 802.11g: DSSS and OFDM

Integrated Antenna (2630 only)

- 2.4 / 5.0 GHz - 4 dBi Gain

External Antenna (2640 only)

- 2.4 GHz / 5.0 GHz - 4 / 5 dBi Gain

Receive Sensitivity (Typical)

- 802.11a: 6 Mbps/-89 dBm, 36 Mbps/-78 dBm, 48 Mbps/-73 dBm, 54 Mbps/-70 dBm
- 802.11b: 1 Mbps/-91 dBm, 2 Mbps/-90 dBm, 5.5 Mbps/-89 dBm, 11 Mbps/-87 dBm
- 802.11g: 6 Mbps/-89 dBm, 36 Mbps/-79 dBm, 48 Mbps/-74 dBm, 54 Mbps/-72 dBm

Available Transmit Power*

- 802.11a:
 - 5.15 to 5.25 GHz: 17 dBm (FCC/IC), 18 dBm (ETSI)
 - 5.25 to 5.35 GHz: 18 dBm (FCC/IC/ETSI)
 - 5.470 to 5.725 GHz: 18 dBm (ETSI)
 - 5.725 to 5.850 GHz: 15 dBm (FCC / IC)
- 802.11b/g: 18.5 dBm (FCC / IC), 15 dBm (ETSI)
- Transmit (selectable per radio):
 - 100%, 50%, 25%, 12.5%, 6.25%

Dimensions and Weight

- 40 mm x 115 mm x 175 mm (1.5" x 4.5" x 7")
- AP2630 weight: 272 g (9.6 oz)
- AP2640 weight: 363 g (12.8 oz)

Interface and Indicators

- Auto-sensing 10/100bT Ethernet interface
- LED indicating AP status and connectivity

Environmental

- Operating Temp: 5°C to 40°C (41°F to 104°F)
- Storage Temp: -40°C to 85°C (-40°F to 185°F)
- Humidity (Non-Condensing): 10 to 95%

Power

- 802.3af Power over Ethernet
- Class 0 (12.95 Watts Max)
- Typical Power: 9.75 Watts DC Power
- Voltage: +6 V DC
- Current: 1700 mA max. at +6 V DC

Compliance Standards

- Ethernet IEEE 802.3 / 802.3u / 802.3af
- Wireless IEEE 802.11a/b/g
- Wireless IEEE 802.11h

Safety

- UL / IEC / EN 60950
- CAN/CSA 22.2 # 60950-1-03
- UL 2043 Plenum Rating

EMC & Radio

- FCC CFR 47 Part 15, Class B
- ICES-003 Class B
- FCC Subpart C 15.247
- FCC Subpart E 15.407
- RSS-210
- EN 301 893 V1.2.3
- EN 300 328 V1.6.1
- EN 301 489 1 & 17
- EN / UL 60601-1-2
- EN 50385
- EN 55011 (CISPR 11) Class B Group 1 ISM

*Bands, frequency settings, and maximum power settings will vary according to channel and individual country regulations.

For more detailed and up-to-date specifications, please visit
<http://www.siemens.com/hipath>

For SCALANCE W please visit
<http://www.siemens.com/scalance>

