

Samsung
Wireless Enterprise 

WLAN Solution

Think Enterprise WLAN, Think Samsung



SAMSUNG

WLAN Solution

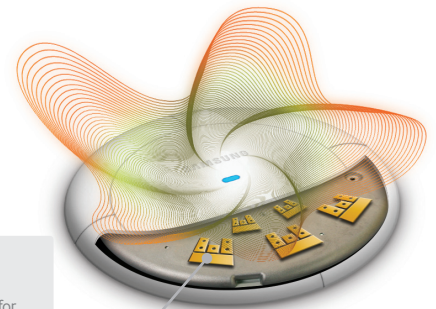
Enjoy seamless connectivity and mobility with
Samsung Wireless Enterprise Solution

The wireless enterprise environment has faced a new paradigm shift with the introduction of the smart device. Due to their explosive expansion and trends such as bring-your-own-device (BYOD) in the enterprise, the wireless LAN infrastructure has become an essential part of any IT plan to ensure corporate data security and great mobile user experience. The Samsung WLAN Solution for Wireless Enterprise enables businesses to drive optimized and efficient wireless work environments by providing additional levels of security, voice quality and seamless service for voice, video, and data.



Intelligent Beam Selectable Antenna (IBSA)

A Samsung AP contains 14 antennas. Two antennas are used for monitoring and the remaining 12 provide an optimized RF pattern, selecting a beam for each environment. As a result, dead zones are minimized, service coverage is expanded, and the receiving sensitivity is 2 dB higher than competitors. This means that the antenna can accurately receive signal from a mobile device with weak Tx power even from long distances.



WEA303i (built-in AP) Beam Selectable antenna

- Number of antennas: six each for 2.4 GHz and 5 GHz, and two for monitoring
- Selectable per environment or user



AirMove*

In legacy Wi-Fi handover, a device scans for other APs and connects to an appropriate AP when the AP signal detected by the device is below a certain threshold. This technology basically requires a long scan time and degrades service quality. Samsung AirMove uses LTE Handover technology that allows the AP controller to determine the best timing and target AP for handover. This way, you can enjoy seamless service during voice calls and video play, and a greater throughput that is double than what legacy Wi-Fi handover guarantees.

* Availability depends on smartphone model.





Samsung's Powerful WLAN technology!



- Compact and robust enterprise-class access point
WEA300 series: 802.11a/b/g/n, dual concurrent radio, diameter of 174mm
WEA400 series: 802.11a/b/g/n/ac, dual concurrent radio, diameter of 205mm
- Provides optimized wireless environment for smartphones as well as notebook PCs by applying automatic handover and cell design through mobile technology integration
- Independent RF sensing offers enhanced security via its embedded, dedicated security RF monitoring module, and reduces total investment cost
- Guarantees coverage and fairness that exceed the limitation of legacy wireless LAN through mobile telecommunication and multi-antenna technology
- Cost effective operation with an existing enterprise network environment by providing support for L3 routing, powerful firewall, 10G interface and power redundancy
- Provides stability and operational convenience through wire/wireless integrated management
- Quick troubleshooting anytime, anywhere through remote management using smart devices

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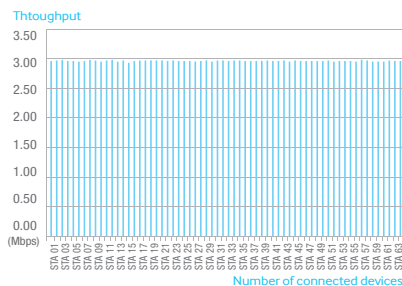
AirEqualizer

Samsung's Traffic Schedule technology ensures the most optimized Wi-Fi service by allocating equal airtime to multiple devices. This technology guarantees airtime fairness when multiple devices connect to an AP at the same time. It also allows seamless service in environments where devices use different traffic types. In addition, it can maximize the AP's total cell throughput by more than 50% when compared with others, providing performance that adapts to the Wi-Fi connection specifications (11a/b/g/n) and signal intensity characteristics.



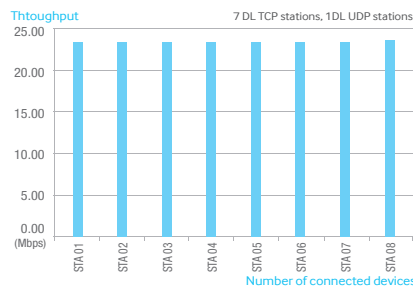
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Guarantees fairness in a multiple-device environment



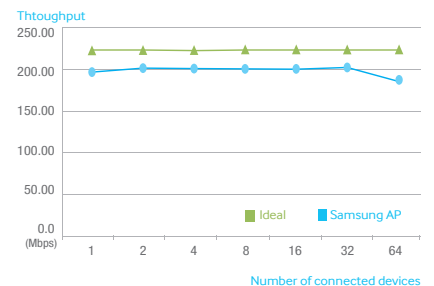
- Guarantees airtime fairness for 64 802.11n devices
- Third party APs do not guarantee airtime fairness, because airtime is different for each device; and device throughput decreases as the number of devices increases

Guarantees fairness in an environment where different types of traffic are used



- Provides the same quality service to each device regardless of traffic type (TCP, UDP)
- Guarantees fairness even for traffic that does not have end-to-end flow control, such as UDP

Guarantees performance in a multiple device environment



- Supports up to 64 devices
- Total throughput is over 50% higher than competitors

Wireless Enterprise WLAN Solution



Self-Organizing Network (SON)

By adding LTE technology to the existing Tx power and channel optimization technology through wireless resource management, cell configuration and coverage are automatically optimized to suit specific network requirements. This allows a high level of quality management during

operations, dramatically shortens design schedule, and reduces design cost.

Item	SON	Legacy Wi-Fi Radio Management
Type	LTE (Voice, Data)	WLAN (Data)
Feature	Accurate automatic cell configuration and size optimization to suit the specific needs of data and voice services.	Uses legacy technology to automatically adjust channel and power for neighboring access points.



Voice Aware Traffic Scheduling (VaTS)*

VaTS, a Samsung's patented technology, efficiently sends voice frames to multiple devices using mobile communication traffic scheduling technology. This means that there is no voice quality degradation due to an increase of devices in concurrent calls. This technology increases the concurrent call capacity by 50% even in areas with high call volume.

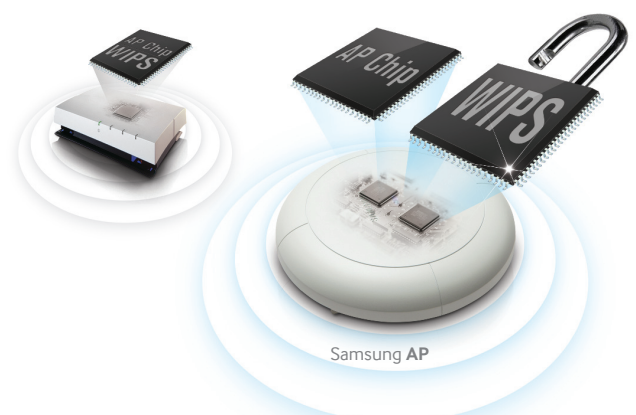
* Availability depends on smartphone model.



Equipped with Dedicated Security RF Monitoring Module

The importance of security in the enterprise communication environment cannot be over-emphasized. Particularly for the WIPS that provides security through RF sensing, a sensor AP for RF sensing is also required in addition to the APs for service provision. There are two types of WIPS architectures: overlay that uses additional RF sensors, and time slice that splits the service and sensing by time on the same radio.

Samsung Wireless Enterprise Access Points combine the advantages of the two configurations and enabled a dedicated security RF monitoring chip embedded independently of the service RF chip for continuous real-time monitoring of data service. This maximizes the RF sensing performance and reduces design cost.





- User friendly menu configuration
- Provides enhanced view of network status
- Maximizes visibility of important events



Wire/Wireless Integrated Management

The Samsung WLAN Manager supports the access switch management function for Access Points as well as for the Access Point Controllers. It provides efficient wireless infrastructure control by supporting Samsung L2 switch functions, including the AP connection port control for AP failure or remote AP reboot through its integrated UI. In addition, it supports the remote management function to help system administrators respond to any event by using smartphone fault monitoring and notification functions.



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Remote Management Using Smartphones

You can use your smartphone to control remotely the wireless network status anytime, anywhere and quickly respond to any issues. You can easily identify the Critical/ Major/Minor alarm status. When a fault occurs, you can send its related information and a linkable URL to a specified device via SMS to check the status and troubleshoot in real time.



Access Point



11ac Access Points - WEA400 Series

The Samsung Access Points WEA400 series support 802.11ac, the next generation of Wi-Fi, offering higher throughput, higher capacity, and less interference, while providing easy and reliable management. The WEA400 series are dual concurrent radio products, each radio capable of running in either 2.4 or 5GHz band



WEA400 Series

		WEA412i	WEA403i	WEA403e
Wireless	Standard	802.11a/b/g/n/ac	802.11a/b/g/n/ac	802.11a/b/g/n/ac
	# of radio	Dual Concurrent Radio	Dual Concurrent Radio	Dual Concurrent Radio
	Frequency	2.4 GHz, 5 GHz	2.4 GHz, 5 GHz	2.4 GHz, 5 GHz
	Antennas	Internal Type	Internal Type	External Type
	MIMO	2 X 2 MIMO, 2 Spatial Streams	3 X 3 MIMO, 3 Spatial Streams	3 X 3 MIMO, 3 Spatial Streams
	PHY Rate	867 Mbps	1.3 Gbps	1.3 Gbps
H/W	Network I/F	2 GE (RJ45), 1 Console (RJ45)	2 GE (RJ45), 1 Console (RJ45)	2 GE (RJ45), 1 Console (RJ45)
	PoE	802.3af/802.3at	802.3at	802.3at
	Environment Class	Indoor	Indoor	Indoor
Dimension	Diameter / Height	205 mm / 45 mm	205 mm / 45 mm	205 mm / 45 mm
	Weight	820 g	920 g	920 g
Security	Standard	802.11i, WPA/WPA2	802.11i, WPA/WPA2	802.11i, WPA/WPA2
	Multi SSID	Maximum 16	Maximum 16	Maximum 16
	# of Multi VLAN over SSID	Maximum 1,024	Maximum 1,024	Maximum 1,024
	Encryption	DTLS	DTLS	DTLS
QoS	Standard	802.11e	802.11e	802.11e
	WMM	Yes	Yes	Yes
Management	Operation	Controller Based	Controller Based	Controller Based
Certification	WiFi Certified	WPA/WPA2, WMM, WMM-PS	WPA/WPA2, WMM, WMM-PS	WPA/WPA2, WMM, WMM-PS
	KC	Yes	Yes	Yes



Access Point

11n Access Points – WEA300 Series

The Samsung Access Points WEA300 series are compact and powerful access points with multiple spatial streams 802.11a/b/g/n that deliver data rates of 300/450 Mbps and ensure ultimate coverage, easy management and secure wireless network.



		WEA302i	WEA303i	WEA303e
Wireless	Standard	802.11a/b/g/n	802.11a/b/g/n	802.11a/b/g/n
	# of radio	Dual Concurrent Radio	Dual Concurrent Radio	Dual Concurrent Radio
	Frequency	2.4 GHz, 5 GHz	2.4 GHz, 5 GHz	2.4 GHz, 5 GHz
	Antennas	Internal Type	Internal Type	External Type
	MIMO	2 X 2 MIMO, 2 Spatial Streams	3 X 3 MIMO, 3 Spatial Streams	3 X 3 MIMO, 3 Spatial Streams
	PHY Rate	300 Mbps	450 Mbps	450 Mbps
H/W	Network I/F	1 GE (RJ45), 1 Console (RJ45)	1 GE (RJ45), 1 Console (RJ45)	1 GE (RJ45), 1 Console (RJ45)
	PoE	802.3af/802.3at	802.3af/802.3at	802.3af/802.3at
	Environment Class	Indoor	Indoor	Indoor
Dimension	Diameter / Height	174 mm / 34.1 mm	174 mm / 34.1 mm	174 mm / 34.1 mm
	Weight	560 g	640 g	640 g
Security	Standard	802.11i, WPA/WPA2	802.11i, WPA/WPA2	802.11i, WPA/WPA2
	Multi SSID	Maximum 16	Maximum 16	Maximum 16
	# of Multi VLAN over SSID	Maximum 1,024	Maximum 1,024	Maximum 1,024
	Encryption	DTLS	DTLS	DTLS
QoS	Standard	802.11e	802.11e	802.11e
	WMM	Yes	Yes	Yes
Management	Operation	Controller Based	Controller Based	Controller Based
Certification	WiFi Certified	WPA/WPA2, WMM, WMM-PS	WPA/WPA2, WMM, WMM-PS	WPA/WPA2, WMM, WMM-PS
	KC	Yes	Yes	Yes

WLAN Controller



Enterprise WLAN Controller – WEC8500

The Samsung Access Point Controller WEC8500 is specially designed for mission-critical wireless networking in mid-sized to large enterprises. By applying LTE technology, this high-performing controller is able to simultaneously manage up to 500 access points*, 10,000 client devices* with 20Gbps data plane, offering a fast and reliable network.



WEC8500

		WEC8500
Scalability	Maximum # of APs	500
	# of Client	10,000
H/W	Network I/F	2 10GE, 8 GE, 1 Console
	USB	1
	System Redundancy	Redundancy
	Redundant Power	Yes (Optional)
	Form Factor	1 RU
Network	Routing	Yes
	VLANs	1024
	DHCP	Server, Relay, Proxy
	QoS	Shaping, Policing, 802.1p, Voice Quality Monitoring
	System Redundancy	Active-Active, Active-Standby
Security	Firewall	Yes (License required)
	Authentication	802.1 x
	MAC Filtering, ACL	Yes
	Encryption	DTLS
	AAA	Radius server
RF Manager	RRM	Power, Channel, Coverage hole
	RF Spectrum Analysis	Yes
Handover	L2	Inter / Intra controller
	L3	Inter / Intra controller
Management	CLI	Yes
	GUI	Yes
	SNMP	Yes
	Syslog	Yes

* The number of supported access points and client devices scales up in future software releases

WLAN Controller



SMB WLAN Controller – WEC8050

Designed with small to medium sized businesses in mind, the Samsung Access Point Controller WEC8050 can manage up to 75 access points and 1,500 client devices simultaneously and ensures the same enterprise, cutting-edge functionality as the WEC8500 model.



WEC8050

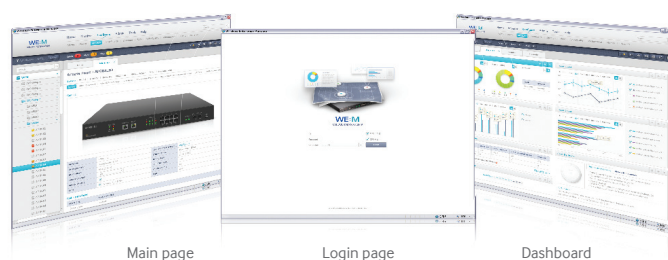
Scalability	Maximum # of APs	75
	# of Client	1,500
H/W	Network I/F	4 GE, 1 Console
	System Redundancy	Redundancy
Network	Routing	Yes
	VLANs	128
	DHCP	Server, Relay, Proxy
	QoS	Shaping, Policing, 802.1p, Voice Quality Monitoring
Security	Firewall	Yes (License required)
	Authentication	802.1x
	MAC Filtering, ACL	Yes
	Encryption	DTLS
	AAA	Radius Server
RF Manager	RRM	Power, Channel, Coverage Hole
	RF Spectrum Analysis	Yes
Handover	L2	Inter / Intra controller
	L3	Inter / Intra controller
Management	CLI	Yes
	GUI	Yes
	SNMP	Yes
	Syslog	Yes

WLAN Manager



WEM

The Samsung WLAN Manager (WEM) monitors access points (APs) and WLAN controllers, ensuring that users get the best network capabilities out of their products. It also tracks the status of the wireless environment, granting operators fast and reliable WLAN access. The WEM provides operational convenience that enables network administrators to monitor and resolve any possible service disruption.



WEM

Scalability	Maximum # of APs	3,000
	Maximum # of APCs	6 (500 APs supported, based on APC)
	OS	Linux
	Form Factor	Server software
Security	Rogue AP detection, Blocking Monitoring	Support
Location	Location Tracking Monitoring	Support
Management	General	High availability
		Monitoring
		Status / Statistics
		Database
		Self diagnostics
	Fault	Alarm history
		Alarm statistics
		Alarm monitoring
	Configuration	APC configuration
		AP configuration
	Performance	Status monitoring
		Statistics
	Security	User ID / Password management
	IP access control	
QoS	Voice quality monitoring	
Reporting	Network status, Performance, Device, Station	
	File (Excel, PDF) save, print	

Wireless Desk Phone



SMT-i5343

The SMT-i5343 is a top-of-the line executive phone with advanced features, functionality and design that enhances productivity and collaboration. The SMT-i5343 can be wired and wirelessly connected; and through the use of Near Field Communication (NFC) technology, the SMT-i5343 allows users incorporate smartphones or tablets as AOMs (add-on modules).



- Top of the line full UC featured IP phone for executives
- Full duplex speakerphone
- 4.3" TFT color LCD (480 x 272)
- 2 10/100/1000 Mbps Ethernet
- Support Wi-Fi (802.11 a/b/g/n)
- NFC / Bluetooth
- Support PoE (IEEE 802.3af)
- USB camera (Option)
- Wideband Codec (G.722.2, AMR-WB)
- sRTP, TLS, IPSec, 802.1x

Application



WE VoIP (FMC Client)

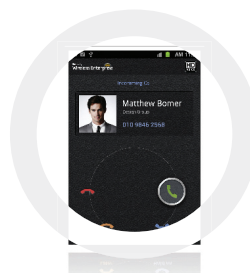
- Samsung WE VoIP is a smartphone application that provides corporate users voice-over-IP communications over private Wi-Fi networks when in the office and public Wi-Fi or 4G/LTE network when out of the office.
- Supports HD Voice technology, which ensures crystal clear voice quality.
- The Samsung WE VoIP turns your mobile device into a full-featured Samsung IP phone, providing conference calling, transferring, call back later, and hold functions over your corporate Wi-Fi network.

Integrated Dialer



Integrates conventional dialer with VoIP dialer without using an additional application

Work-specialized receiving function: Later / Wait



You can answer a call during a meeting by selecting the Wait function and then connect to the caller and speak after getting out of the meeting room. When you select Later, the call is rejected and the caller's number is added in the call back list.

HD Voice



Application of Samsung Voice Engine optimized for smartphones Wideband Codec (G.722), Super Wideband Codec (SILK) Seamless handover support during calls while moving between AP cells

WireLESS,
Communicate MORE



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Samsung WLAN Solution



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