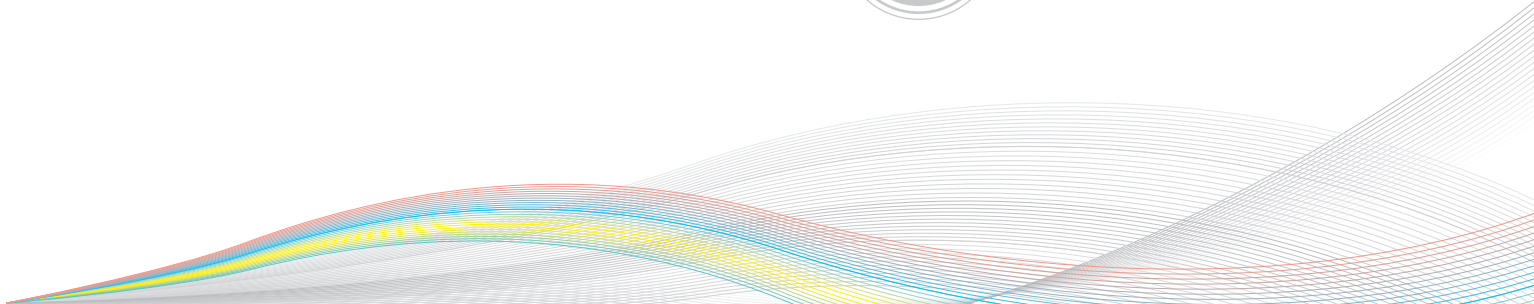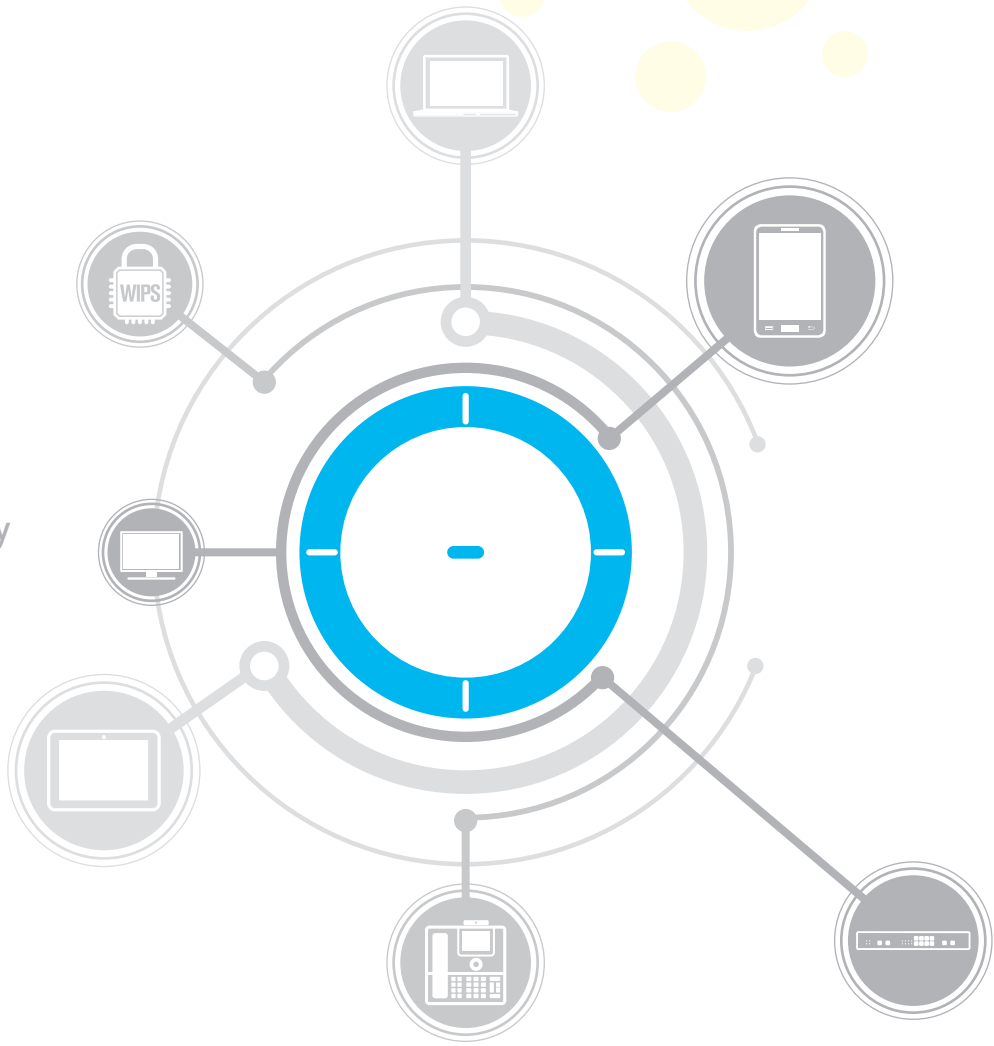SAMSUNG

The Hub of Your Connected World

Samsung **Smart WLAN**

Smart Capacity & Security
for Smarter Mobility

Technology Above and Beyond Expectations

When it comes to the enterprise, Samsung delivers the most powerful and innovative products and solutions for today and into the future.

From smartphones with the security you need, to reliable, award-winning multifunction printers to wireless LAN infrastructure and voice networking, Samsung's commitment is to transform the way you work - Total freedom for maximum collaboration, enhanced productivity and business agility. The mobile environment that you expect.

Samsung **Smart WLAN**

New

Samsung
Smart WLAN

The beginning of Samsung's new world of enterprise mobility starts now.
Experience the most sophisticated enterprise mobility, created by the industry leader in mobile devices.
Discover the ultimate wireless communications, employee productivity and enhanced security.
Connectivity redefined to a whole new level.

Why

True efficient business environments depend on a reliable and fast network to meet the rising demand for bandwidth. In order to support enterprise mobility trends like BYOD, the Internet of Things (IoT) and digital consumption, Samsung's WLAN solution provides an improved end-user experience with noticeably faster network connectivity. Higher network speeds allow users to get on and off the network quickly, which conserves batteries and maximizes airtime for all devices.

Efficiently manage overburdened networks with greater coverage and an optimized user experience with less interference.
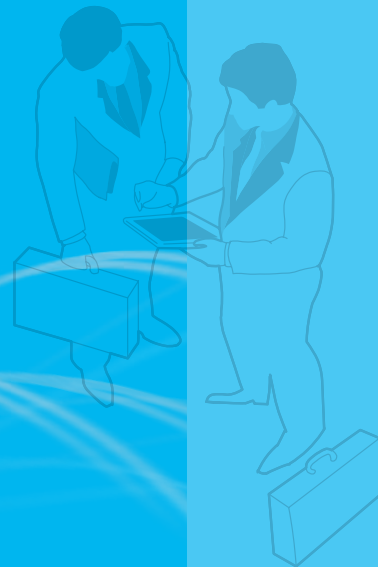
Samsung Smart WLAN Solution is the wireless infrastructure that handles even the toughest environments with the technology designed specifically to combat today's business needs and challenges.

Unlike many competitors, Samsung's WLAN technology is designed to function similarly to its own LTE solutions, fairly and efficiently optimizing the distribution of airtime, which leads to higher throughput, capacity, and an overall improved experience. Additionally, Samsung Wireless LAN simplifies network administration for IT managers, allowing for faster and more effective device management and service.

Samsung offers enterprise customers of all sizes higher throughput, more capacity and less interference.

Samsung **Smart WLAN** Solution

IT managers must support wireless networks in high density environments, pushing the limits of performance of their current infrastructure. Examples of these environments are schools, conference rooms, large venues and lobby areas where hundreds, and sometimes thousands, of users are simultaneously accessing the network on their connected devices. Samsung WLAN is the best wireless solution for these types of environments because of its ability to distribute airtime equally and provide the fastest Wi-Fi connections available today.

Intelligent Beam Selectable Antenna (IBSA)

Samsung APs has a total of 15 antennas. Three antennas are used for monitoring, and the remaining 12 provide optimized RF patterns, selecting a beam for each environment. As a result, dead zones are minimized, service coverage is extended, 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
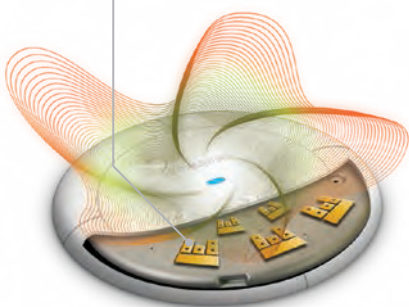
AirMove*

In legacy Wi-Fi handover, a device scans for other APs and connects to the 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 the handover. This way, users enjoy seamless service during voice calls and video, and a greater throughput that is double than what legacy Wi-Fi handover guarantees.

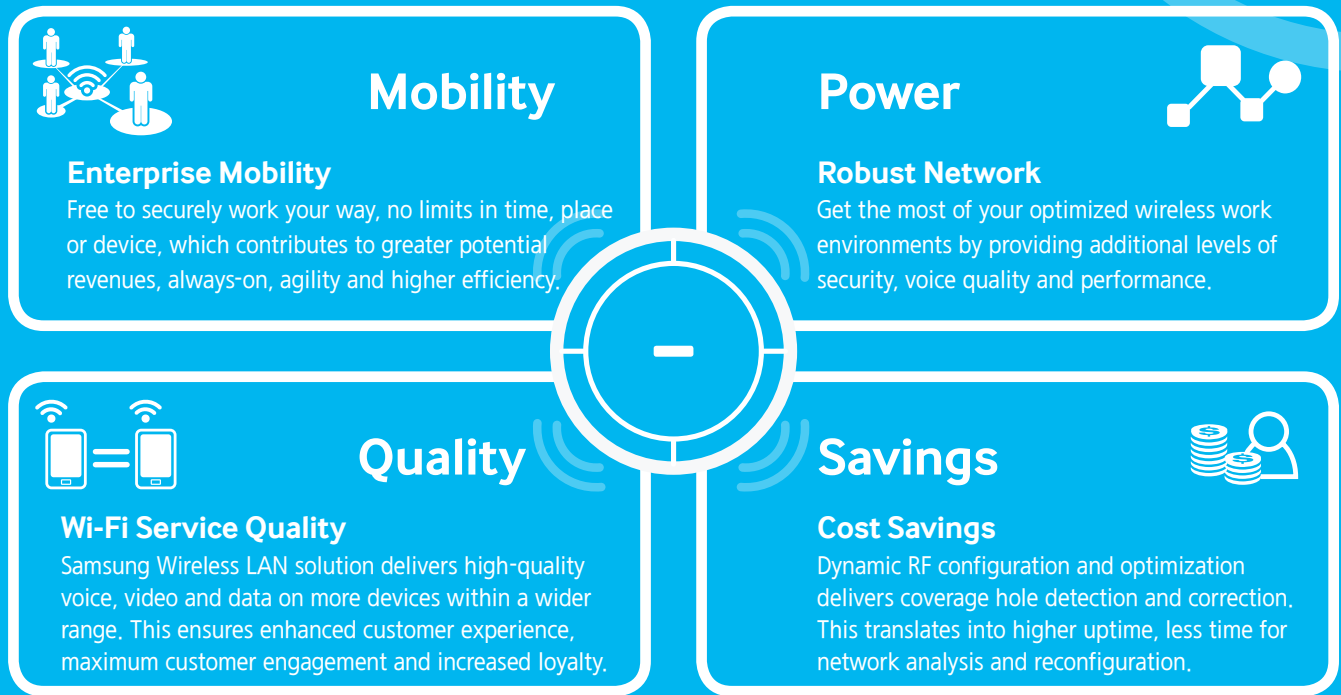* Availability depends on smartphone model.

AirEqualizer

Samsung's Traffic Schedule technology ensures the most optimized Wi-Fi service by allocating equal airtime to multiple devices. Ideally suited for environments such as classrooms and lecture halls, this technology guarantees airtime fairness where multiple users need to simultaneously connect to the network. It also allows seamless service even in an environment with multiple devices with different traffic types, without compromising service quality. In addition, it can maximize the AP's total cell throughput by more than 50% over competitor products, providing the best performance that adapts to the Wi-Fi connection specifications (11 a/b/g/n/ac) and signal intensity characteristics.

With Samsung WLAN, businesses and mobile users experience reliable, optimized and secure wireless access, allowing for maximum freedom and productivity throughout the workplace.

Mobility

Enterprise Mobility

Free to securely work your way, no limits in time, place or device, which contributes to greater potential revenues, always-on, agility and higher efficiency.

Power

Robust Network

Get the most of your optimized wireless work environments by providing additional levels of security, voice quality and performance.

Quality

Wi-Fi Service Quality

Samsung Wireless LAN solution delivers high-quality voice, video and data on more devices within a wider range. This ensures enhanced customer experience, maximum customer engagement and increased loyalty.

Savings

Cost Savings

Dynamic RF configuration and optimization delivers coverage hole detection and correction. This translates into higher uptime, less time for network analysis and reconfiguration.

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 shortening design schedule as well as reducing design cost.

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 enhances the concurrent call capacity and quality of voice service.

* Availability depends on smartphone model.

Dedicated Security Monitoring Module

Samsung access points combine the advantages of the overlay and time slice split configurations and implements a dedicated security RF monitoring chip embedded independently of the RF service chip for continuous real-time monitoring of data service. This maximizes the RF sensing performance of the infrastructure and reduces the need of additional security equipment.

Concurrent calls

+50%

WEA400 Series

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

WEA400 Series

Specifications

		WEA412i	WEA403i	WEA453e
Features		-	Dedicated WIPS module	-
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, 3T3R
	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
	Spectrum Analysis	Yes (Time sharing)	Yes	Yes (Time Sharing)
	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/at	802.3at	802.3at
	Environment Class	Indoor	Indoor	Outdoor, IP66, IP67
Dimension	Diameter / Height	205 mm / 45 mm	205 mm / 45 mm	267 mm / 184 mm / 57.5 mm
	Weight	790 g	860 g	2,600 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
	Rogue AP Detection	Yes (Time sharing)	Yes	Yes
QoS	Standard	802.11e	802.11e	802.11e
	WMM	Yes	Yes	Yes
Management	Operation	Controlled mode, Stand-alone mode	Controlled mode, Stand-alone mode	Controlled mode, Stand-alone mode
Certification	WiFi Certified	WPA/WPA2, WMM, WMM-PS	WPA/WPA2, WMM, WMM-PS	WPA/WPA2, WMM, WMM-PS
	Certification	KC, FCC/CE	KC, FCC/CE	KC, FCC/CE

802.11n Access Point

WEA300 Series

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.

Specifications

		WEA302i	WEA303i	WEA303e
Features		Dedicated WIPS module	Dedicated WIPS module	Dedicated WIPS module
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
	Spectrum Analysis	Yes	Yes	Yes
	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/at	802.3af/at	802.3af/at
	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	650 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
	Rogue AP Detection	Yes	Yes	Yes
QoS	Standard	802.11e	802.11e	802.11e
	WMM	Yes	Yes	Yes
Management	Operation	Controlled mode, Stand-alone mode	Controlled mode, Stand-alone mode	Controlled mode, Stand-alone mode
Certification	WiFi Certified	WPA/WPA2, WMM, WMM-PS	WPA/WPA2, WMM, WMM-PS	WPA/WPA2, WMM, WMM-PS
	Certification	KC, FCC/CE	KC, FCC/CE	KC, FCC/CE

Centralized WLAN Controller

WEC8500/WEC8050

Samsung's WLAN Controllers WEC8500 and WEC8050 are specially designed with small to medium sized businesses in mind, as well as, for mission-critical wireless networking in mid-sized to large enterprises. By applying LTE technology, these high-performing, 802.11ac-ready controllers are optimized to ensure that users benefit from the most reliable connectivity.

Major Functions and Benefits

Optimized integration of mobile devices in the Enterprise

- The system self-optimizes to suit other APs, users and the environment.
- Less detailed RF planning needed : large throughput increase : resulting in higher efficiencies and better user experience.
- Improved continuous coverage : less 'black spots' and interference (seamless handover)*

Powerful and Efficient Network

- Built-in authentication server, stateful firewall, and L3 routing function.
- Scalable capacity through clustering.
- Greater potential revenues, always-on (connected) and higher efficiencies (e.g. less employee downtime).
- Higher uptime, less time for network analyzing and reconfiguration leads to low total cost of ownership (TCO) vs. the competition.

* Supports Galaxy S3, S4, Note2, Note3, Tab10.1

WEC8500

- Enterprise WLAN controller optimized for large-scale organizations, headquarters, and branches.
- Capable of accommodating up to 3,000 APs when clustering in centralized processing mode (for single configuration: up to 1000 APs).
- Capable of accommodating up to 3,000 APs with one controller in a distributed processing mode.
- System stability secured by power redundancy.
- Two 10GE ports and eight GE ports.
- Built-in authentication server capable of accommodating up to 2,048 users.

WEC8050

- Special WLAN controller optimized for small-to-medium-scale organizations, branches as well as remote offices.
- Capable of accommodating up to 150 APs through clustering (for single configuration : up to 75 APs).
- Built-in authentication server capable of accommodating up to 512 users.
- Built-in stateful firewall.

Specifications

		WEC8500	WEC8050
Scalability	Maximum # of Aps (Central Processing Method)	1,000	75
	Maximum # of Aps (Clustering Structure)	3,000	150
	Maximum # of Aps (Distributed Processing Method)	3,000	75
	# of Client	10,000	1,500
H/W	Network I/F	2 10GE, 8 GE, 1 console	4 GE, 1 console
	USB	1	-
	System Redundancy	System redundancy	System redundancy
	Redundant Power	Yes (Optional)	-
Network	Routing	Yes	Yes
	VLANs	1,024	128
	DHCP	Server, Relay, Proxy	Server, Relay, Proxy
	QoS	Shaping, Policing, 802.1p, Voice quality monitoring	Shaping, Policing, 802.1p, Voice quality monitoring
Security	Firewall	Yes (License required)	Yes (License required)
	Authentication	802.1x	802.1x
	MAC Filtering, ACL	Yes	Yes
	Encryption (APC-AP)	DTLS	DTLS
	AAA	Radius server	Radius server
RF Manager	RM	Power, Channel, Coverage hole	Power, Channel, Coverage hole
	RF Spectrum Analysis	Yes	Yes
Management	CLI	Yes	Yes
	GUI	Yes	Yes
	SNMP	Yes	Yes
	Syslog	Yes	Yes

WEM* (Wireless Enterprise Manager)

Samsung's Wireless Enterprise Manager (WEM) provides operational convenience by enabling system administrators to monitor failure situations anywhere, at any time and quickly resolve them via integrated wire/wireless remote management using their smartphones.

Major Functions and Benefits

Integrated wire/wireless management

- Supports access switch management in addition to access point and WLAN controller management.
- Capable of managing general switches that provide standard management information base (MIB), as well as Samsung's own L2 switches.

Intuitive and user-friendly UI

- Supports dashboard and menu structure, designed for effective viewing so that the device status and network status can be clearly grasped.
- Provides a simple and clean layout to enable the full attention to data.
- Alerts administrators by marking important data in primary colors.
- Intuitive icons that facilitates easy understanding of features.

Specifications

		WEM
Scalability	Maximum # of Network Elements (AP, APC, Switch)	3,000
	OS	Linux
	Form Factor	Server software
Security	Rogue AP Detection / Interception Monitoring	Yes
Location	Location Tracking Monitoring	Yes
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 etc, File (Excel, PDF) save, Print

* Coming soon

WES (Wireless Enterprise Security)

Samsung Wireless Enterprise Security (WES) is an embedded system for continuous real-time monitoring of wireless services and optimization of the infrastructure's RF sensing performance. It effectively prevents a wide array of wireless threats such as rogue AP and Denial of Service (Dos) attacks, among others. Samsung WES solution consists of embedded sensors and a WIPS server. Samsung's built-in WIPS sensors in the AP provide low total cost of ownership (TCO), high-resolution monitoring, and optimized blocking.

WES

Samsung's built-in WIPS module in each AP provides excellent performance, accurately locating threats within 5 to 10 meters within a relatively large number of working sensors in the service space.

Major Functions and Benefits

Integrated AP / WIPS sensors through dedicated WIPS module

- Wi-Fi service performance is hardly affected because of the separate built-in WIPS module.
- An increase in the number of working sensors brings enhancement of detection performance and enables accurate location information.
- Detection and blocking is performed immediately after a scan by executing the detection / blocking algorithm in the AP sensor.

Key Detection / Blocking Functions

- Detection / blocking of rogue APs
- Detection / blocking of ad-hoc devices
- Detection of RF interference sources
- Detection / blocking of smartphone tethering
- Detection of MAC spoofing APs / Stations
- Detection of DoS attacks
- Detection of threats from AirAttack tools

Quick Responses to Demands

- Provide a variety of user information (Device type, model name, user name, personnel Information, etc.)
- Security policy period setting function
- Block message distinguishing function (Distinguishes whether the block has occurred by WIPS blocking or by the user.)

SCM (Samsung Communication Manager)

The Samsung Communication Manager (SCM) is a platform that seamlessly provides various smartphone-based communication services. When the SCM is deployed in conjunction with Samsung's WLAN solution, it allows users to receive consistent level of services regardless of the network type they access. In addition, the SCM provides employees with the ability to use their smartphones as in-office telephones, which allows them to enjoy the advantages of true enterprise mobility.

Major Functions and Benefits

- Provides support for Samsung WE VoIP, designed for corporate users to turn mobile devices into a full-featured Samsung IP phones.
- It also supports later / hold, conference call, and call back/later functions over corporate Wi-Fi networks.
- Provides the ability to use your work phone number on your mobile.
- Provides security to all users linked with SCM.
- Reduction in communication costs through the smart routing technology.

Specifications

	SCM
WE VoIP (Incoming)	Single number reach (Uses a single number), Call receiving with the company number (Caller ID), Later / Hold
WE VoIP (Outgoing)	Call making through either the 3G or the company telephone, Callback
WE VoIP (When the Line is Busy)	Speakerphone, Call transfer / Hold, Dial (DTMF), Conference, Call waiting
When Linked with a Landline Telephone (FMC)	Call Move : Provides seamless telephone communications with the IP phone, Simultaneous wire and wireless call receiving (Multi-ring) Wi-Fi / 3G roaming
Wi-Fi / 3G Roaming	Manual handover Unregistered FWD to allow receiving company-phone-bound calls even outside the office, Dialing with the company phone number even outside the office (Remote dialing)
Smart Routing	Routing the call to the extension number when making a call with a mobile phone if the receiving end is on a extension line

Wireless Deskphone

SMT-i5343

The wireless deskphone SMT-i5343 is an IP phone that can be connected to a landline and wirelessly. With the perfect combination of power and style, the Samsung SMT-i5343 takes IP connectivity to a whole new level by transforming business desk phones, IP deployments and users' experience. The SMT-i5343 is easy to use and comes with the Samsung Deskphone Manager (SDM) software, which allows you to share your contacts, program keys and control settings between smart devices and your desk phone.

Major Functions and Benefits

- Supports the dual band (2.4GHz / 5GHz).
- Full duplex HD speakerphone.
- Call switching between SMT-i5343 and smartphone by using the "Switch Call" button.
- "Smart AOM" function enables you to use a smartphone or tablet as an AOM (supported mobile devices : Galaxy S2/S3/S4, Note1, Note2, and Note10.1).
- Automatic connection via Bluetooth when using the NFC tag attached to SMT-i5343 in a smartphone.

Specifications

|	SMT-i5343
LCD	109.22 mm TFT color LCD (480 x 272)
Interface	2개 10/100/1000 Mbps ethernet
	Support Wi-Fi (802.11a/b/g/n), NFC / Support Bluetooth
PoE	802.3af
BLF	10
Camera	Only USB camera (Option)
Audio Codec	G.711, G.729a/b, G.722, AMR-WB
Security	sRTP, TLS, ARIA, IPSec, 802.1x security / authentication

Easy-to-Use FMC Client

WE VoIP (FMC Client)

Major Functions and Benefits

- The Samsung WE VoIP is a company phone application for smartphones that is used in an in-office WLAN environment.
- A FMC client optimizes Samsung smart devices that have the highest market share in the global smartphone market. It provides much clearer call quality in 3G networks by utilizing Samsung's own exclusive HD voice technology.
- The SCM directly links to the WE VoIP to enable various telephone services which are based on employee information. It includes features which are useful in the office, such as organization chart view, group conference call, and even a premium CID that displays the department / position / name / photo of the caller.
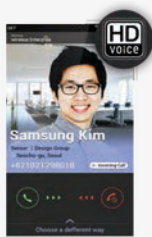
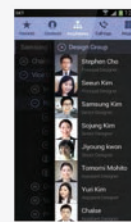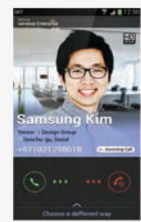| HD Voice	Handover Between Heterogeneous Networks	Organization Chart FMC	Premium CID
Equipped with the Samsung Voice engine optimized for smartphones. Wideband codec (G.722) and super Wideband codec (SILK) applied. Supports seamless handover during calls by switching between AP cells.	Automatic handover to a mobile network when the user goes outside the office during a call over Wi-Fi : no interruption of calls	The user can search for organization charts and can even check the status of the other party through their smartphone	Displays the department, position, name, photo, and location of the caller

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B U S I N E S S

Samsung
Wireless Enterprise™