SAMSUNG

WEA463e Series - Outdoor Mesh 802.11ac Wi-Fi Access Points

Aesthetic Compact and Simple

OVERVIEW

The Samsung WEA463e is the industry's most compact and fastest 802.11ac outdoor access point with wireless mesh capability. The WEA463e enables wireless connections in outdoor environments , while also eliminating the physical restrictions of wired backhaul and reducing the overall cost of deployment without compromising the security and reliability of a wired network. With an environmental protection rating of IP67, the Samsung outdoor mesh access point is protected from dust and debris and can be submerged in water up to one meter for up to 30 minutes. At 2.8kg, and only 58mm thick, the product can be easily transported and installed.

Whether a sports venue is looking to engage fans at its tailgate party, a resort wants to provide the ultimate connected experience to its guests, or an assisted living facility needs to assure the safety of senior residents by tracking their location anywhere on the premise– the Samsung WEA463e access point provides high performance wireless connectivity.. With several mounting options available using vertical installation, the WEA 463e access point can be deployed in diverse outdoor environments such as outdoor parking lots, parks, large scale outdoor public events, university campuses, and outdoor transportation hubs such as shipyards and harbors.

The strengths of WEA 463e access point lies in its wireless mesh routing capability that assures minimum latency and high reliability by selecting an optimized path based on link quality and number of hops; and assures automatic recovery by routing around link failures or link degradations caused by RF interference. With a combination of smart routing and Samsung's innovative smart antenna solution, patented traffic schedule technology, and strong mobile network expertise, the Samsung WEA 463e access point provides enterprises secure and seamless connectivity, greater performance, and richer communication experience to a large number of devices in the toughest outdoor environments.

Key features

- Compact making it easy to mount in challenging outdoor deployments. Lightweight and easy to install on a variety of mount options. Simplifies assessment of backhaul link quality using Received Signal-Strength Indicator (RSSI) LED

- Strong security with encrypted connection between clients and APs and access point authorization via RADIUS server

- High redundancy with multi-root mesh access points

- Air Time based link metric to select appropriate node with increased accuracy

- Configurable client access on backhaul radio

- Provision of mesh service regardless of network topology (controller based or local switching)

- Efficient wireless LAN resource usage through the local bridging

Contact us
Email: we.info@samsung.com
Web: www.samsung.com/wlan

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Simplified Management

WEA 463e access points can be managed either via a Command Line Interface (CLI) or can be centrally managed via a web interface by using high performance controllers optimally designed to support both small and mid-scale enterprise deployment (WEC 8050) as well as large scale deployments (WEC 8500).

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

KEY ENABLING TECHNOLOGIES

INTELLIGENT BEAM SELECTABLE ANTENNA (IBSA)™

Expands service coverage and increases receiving sensitivity to assure higher performance
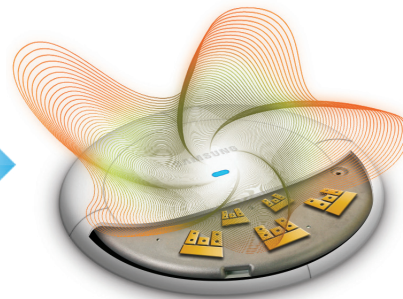
AIRMOVE[1]

Enables cellular LTE style seamless mobility and provides an always-connected experience when the user/ device moves from one access point to another
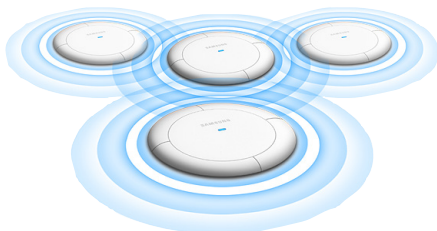
AIREQUALIZER

Guarantees airtime fairness to every device in crowded environments

SELF-ORGANIZING NETWORK (SON)

Self-optimizes Wi-Fi connectivity and cell configurations to adapt to network conditions and manage overburdened networks

VOICE AWARE TRAFFIC SCHEDULING (VaTS)[2]

Assures optimized routing and QoS of real time communication traffic; assures crystal clear real time voice and video collaboration over Wi-Fi

[1.] Available with access points deployments with controller only

[2.] Availability depends on smartphone model

SPECIFICATIONS

Specifications	WEA 463e
Deployment Type	Outdoor Mesh IP67 certified, which authenticates that the device is dustproof and can withstand water immersion up to one meter for 30 minutes.
Physical Rate	IEEE 802.11b : 1, 2, 5.5 and 11 Mbps IEEE 802.11a/g : 6, 9, 12, 18, 24, 36, 48, and 54 Mbps IEEE 802.11n : MCS 0 to MCS 23 (6.5Mbps ~ 450 Mbps) IEEE 802.11ac : MCS 0 to MCS 9 (6.5Mbps ~ 1.3 Gbps, NSS 1 to 3)
Antennas	Internal type
Ideal For	High density environments such as such as parking lots, smart cities, open public venues, and university campuses.

Features		
Wireless Specifications	Standard	802.11a/b/g/n/ac
	Mesh	Yes
	# of radio (Radio Technology)	Dual Concurrent Radio (DSSS/ OFDM)
	Frequency Band	IEEE 802.11b/g/n : 2.412GHz ~2.472GHz 13CH IEEE 802.11a/n/ac : 5.180GHz~5.825GHz 24CH * Available channel is compliant with local domain
	5 GHz Client Access	Yes
	Channel Bandwidth	20/40/80 MHz BW
	External Antennas	Sold Separately
	RF Connectors	6
	MIMO	3 x 3 MIMO, 3 spatial streams
	Network Topology	Hierarchy Structure (Tree, Dynamic)
	Path Selection	Mesh routing with path selection based on link quality (SNR) and number of hops
	Redundancy	Multiple Root AP, path optimization and auto restoring
	Maximum Number of hops	8
	Maximum Child AP per Mesh Node	6
	Maximum Mesh AP per Root AP	19
	WLAN Bridging	Tunnel, Local Bridging (Point to Point, Point to Multi-Point)
	Link Metric	Based on Air Time (More Accuracy)
	Auto Fault Recovery	Yes
	Auto Network Optimization	Yes
H/W	Interfaces	Two 10/100/1000BASE-T Ethernet Autosensing (RJ-45) One Management Console Port(RJ-45)
	Input Power Requirements	IEEE 802.3at PoE: 50 to 57 VDC
	Power Draw	< 25.5W
	Powering Options (Sold Separately)	Local Power Supply: AC/DC power adapter (AC 100 ~ 240V, 1A, 50/60Hz, Output 48V) Power
	RF Output Power	750mW (250mW/path)
	Tx Power/ Path	24 dBm
	Max Tx Power	29 dBm
	Indicators	1 LED indicates AP status(booting, provisioning, service, upgrade, fault) 1 LED indicates RSSI level of backhaul frequency

SPECIFICATIONS

Environment	Environment Class	Outdoor, IP66, IP67
	Storage Temperature	(-) 40 ~ 70°C
	Operating Temperature	(-) 40 ~ 55°C
	Operating Humidity	5~100% (Non Condensing)
	Cooling	Natural Convection
Dimension	Width/ Length/ Height	267 mm / 184 mm / 57.5 mm
	Weight/ Volume	2,800 g/ 2.8L
Security	Standard	802.11i, WPA/WPA2
	Encryption	DTLS
	Authentication	EAP-TLS, EAP-TTLS/MSCHAPv2, PEAPv0/EAP-MSCHAPv2, PEAPv1/EAP-GTC,EAP-SIM, EAP-AKA, EAP-AKA Prime, EAP-FAST
	AP Authorization	RADIUS
	Rogue AP Detection	Yes
Multimedia	QoS	802.11e
	WMM	Yes
	WMM Power Save	Yes
Management	Operation Mode	Controlled mode, Stand-alone mode, Mesh mode
	Supported WLAN Controller	WEC 8500 Series WEC 8050 Series
	Management Server	WEM
Certification	WiFi Certified	WPA/WPA2, WMM, WMM-PS
	Safety Compliance	IEC 60950-1 EN 60950-1 UL 60950-1 CAN/CSA-C22.2 No. 60950-1
	Radio Approvals	FCC Part 15.247, 15.407 FCC Part 15.107 and 15.109 RSS-210 ICES-003 EN 300 328, EN 301 893 EN 301 489-1 and -17 KN 301 489-1/KN 301 489-17 (Korea) Radio Equipment Specifications (Korea) EMI and susceptibility (Class B)
Part Numbers		WDS-A463E/XAR (US & CANADA)

SAMSUNG ELECTRONICS AMERICA
Wireless Enterprise

1301 E. Lookout Drive, Richardson, TX 75082
E-mail: we.info@samsung.com

Web: www.samsung.com/wlan

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