AP1200 Range with MESH

SIL AP1200
SIL AP1200-90
SIL AP1200-360

2.4GHz & 5.8GHz
Dual Band Access Points

SIL AP1200
Dual band AP with external antennas

SIL AP1200-90
Dual band AP with integrated 90° antenna

SIL AP1200-360
Dual band AP with integrated 360° antenna

OVERVIEW

The AP1200 is a highly secure dual frequency Wi-Fi solution. Enhanced features including MIMO spatial multiplexing and ultrafast radio speeds make the AP1200 range ideally suited for networks where stable long range Wi-Fi is required.

The AP1200 range has capabilities of up to 240Mbps Duplex on 802.11n 2.4GHz and up to 500Mbps Duplex on 802.11ac 5GHz (1200Mbps real throughput) frequencies simultaneously.

Features

- Up to **1.2Gbps** data rates
- Built in 360° Omni or 90° Sector
- External Omni or Sector Antenna
- Rugged case design for outdoor applications
- AES Encryption up to 256bit
- MIMO with Spatial Multiplexing
- DFS (Dynamic Frequency Selection)
- TPC (Transmit Power Control)
- PoE 802.3af
- SNMP
- WEB Management
- Surge protected radio and PSU
- Rugged mounting brackets
- SilverView Network Management Software
- 2 Year warranty

CE ⓘ

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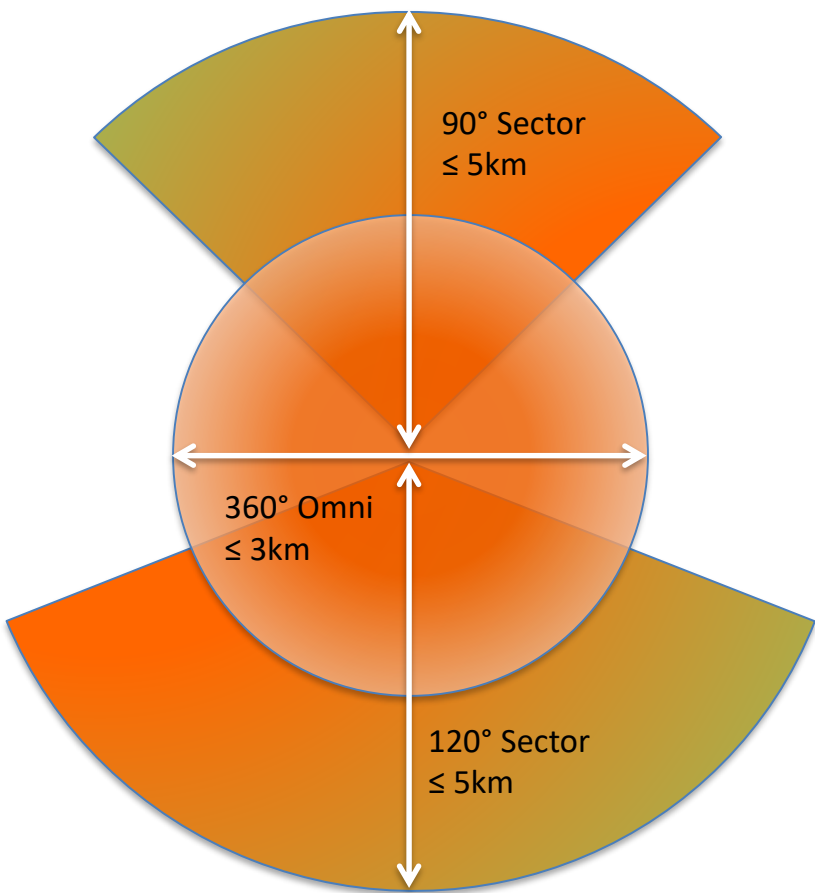
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Technical Specifications

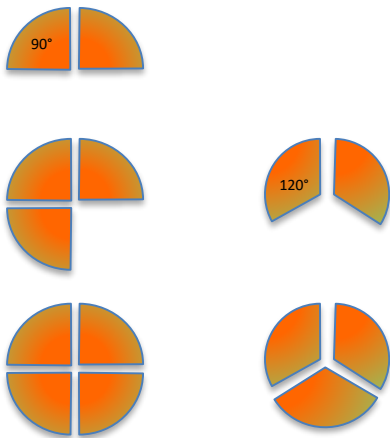| AP1200 Range	SIL AP1200-360 (Outdoor Radio with Built in 360° Omni Antenna)	SIL AP1200-90 (Outdoor Radio Built in 90° Sector Antenna)	SIL AP1200 (Multipoint Single Radio)
Radio Specification			
Transmission rate	11ac: Up to 867Mbps, 11n: Up to 300Mbps, 11a/b/g Backwards Compatible		
MIMO	2x2 Spatial Multiplexed Streams		
Modulation	HT-OFDM with BPSK,QPSK, 16QAM, 64QAM, 256QAM		
Standards	IEEE802.11ac, IEEE802.11n, IEEE802.11a		
Channel Size	5MHz, 10MHz, 20MHz, 20/40/80MHz		
Channel (Country Dependent)	USA (FCC): 5.15GHz - 5.825GHz Europe (ETSI): 5.47GHz - 5.850GHz USA (FCC): 2.412GHz – 2.462GHz Europe (ETSI): 2.412GHz - 2.472GHz UK Band B: 5.47GHz - 5.725GHz UK Band C: 5.725GHz – 5.850GHz		
Operating frequency	2.412GHz – 2.472GHz 5.1GHz - 5.8GHz		
RF output power	Up to 26dBm from ports		
Sensitivity	-82dBm@54Mbps, -74dBm@300Mbps, -72dBm@867Mbps, -68dBm@1.3Gbps		
Operating Mode	AP, Station, Mesh and Bridge		
Antenna	4 x 360° x 45° Omni Antennas (Built in)	2 x 90° x 15° Sector Antennas (Built in)	4 x Ntype female Sockets (H+V) Optional – 120/90 Sector antenna or 12dBi Dual polarised Omni
Security - Network			
802.1x, Radius, QoS, Vlan	Supports 802.1x Client and Server and Supports Radius Client, 802.11i, Asymmetric Bandwidth Control, 802.1Q: Management, trunk, access and transparent mode		
Electrical – Interface			
LAN/WAN	10/100/1000BASE-T(RJ-45) LAN Port (with Auto MDI/MDIX)		
Power	6 watts (typical), 16 watts (max) DC 24~48 (48~56) Volt or POE (included in kit 100-240vac)		
Surge Protection	15KV		
Management			
Remote Connection	Web, Telnet, ssh, SilverView Monitoring		
SNMP	SNMP V2		
Firmware	Upgradeable via web		
Physical			
Dimensions and Weight	Unpacked radio 18 x 18 x 25 (cm) 2Kg	Unpacked radio 45 x 17 x 6.5 (cm) 2.3Kg	Unpacked radio 22 x 22 x 7.5 (cm) 1.6Kg
Dust and Waterproof	IP66 Certified	IP67 Certified	
Mounting Bracket	Steel Bracket (included in kit) 3 Axis Magnesium alloy, wall or pole mount (optional)	3 Axis Magnesium alloy, wall or pole mount (included in kit)	
Environment			
Operating Temperature	-20~70℃ (Storage -40~90℃)		
Humidity	0~95 % (non-condensing)		
Other			
Warranty	2 Year Parts and labour (extendable to 5 Years)		
MTBF	60000 Hrs		
Pack Contents	1x Radios, 1 x POE injector, 1 x Basic Mounting bracket set	1x Radio, 1 x POE injector, 1 x Mounting bracket set	1x Radio, 1 x POE injector, 1 x Mounting bracket set

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Antenna Examples

Point to Multipoint

Beam Patterns

90° Sector
≤ 5km

360° Omni
≤ 3km

120° Sector
≤ 5km

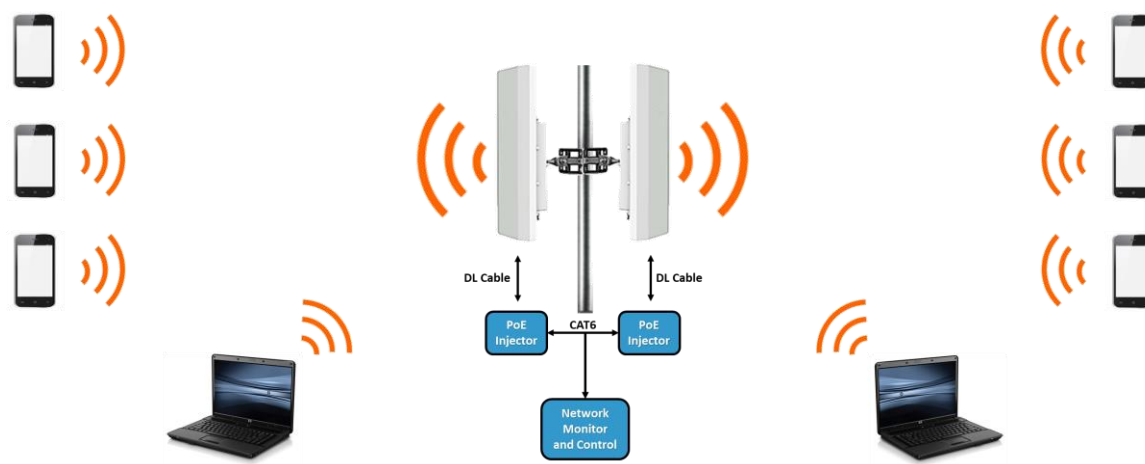### Antenna System Options

90°

120°

NOTES:
The **AP 1200** can be fitted with either;
- External 12dBi Omni Antenna (≤3km)
- External 16/20dBi 90°/120° Sector Antenna (≤5km)

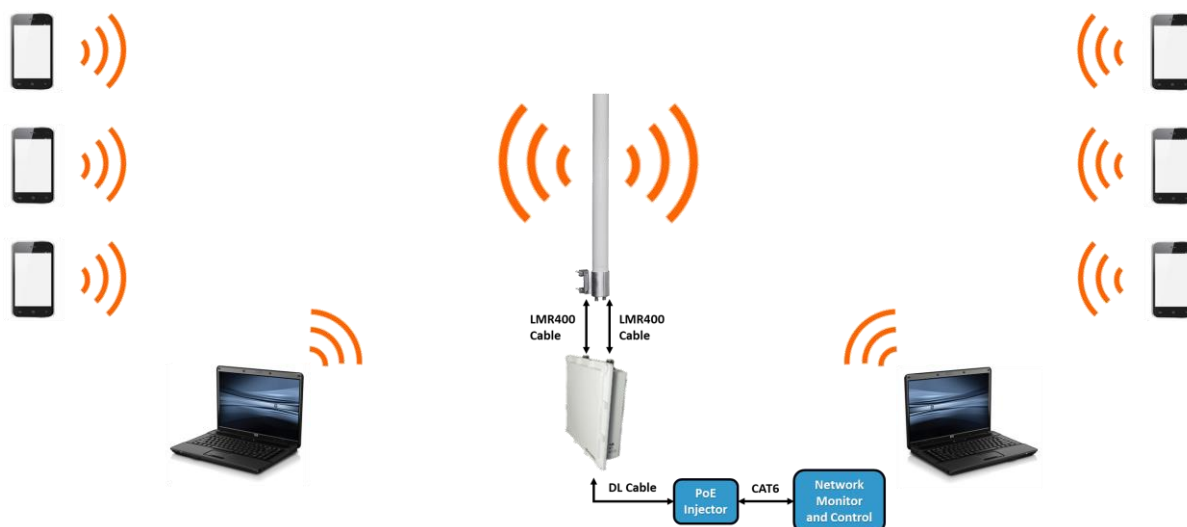The **AP 1200-90** has a built in 90° Sector Antenna (≤5km)

The **AP 1200-360** has built in 360° 5/7dBi Omni antennas (≤500m)

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Wi-Fi

AP1200-90 with multiple devices connected

DL Cable | DL Cable

PoE Injector | CAT6 | PoE Injector

Network Monitor and Control

AP1200 and external omni with multiple devices connected

LMR400 Cable | LMR400 Cable

DL Cable | PoE Injector | CAT6 | Network Monitor and Control
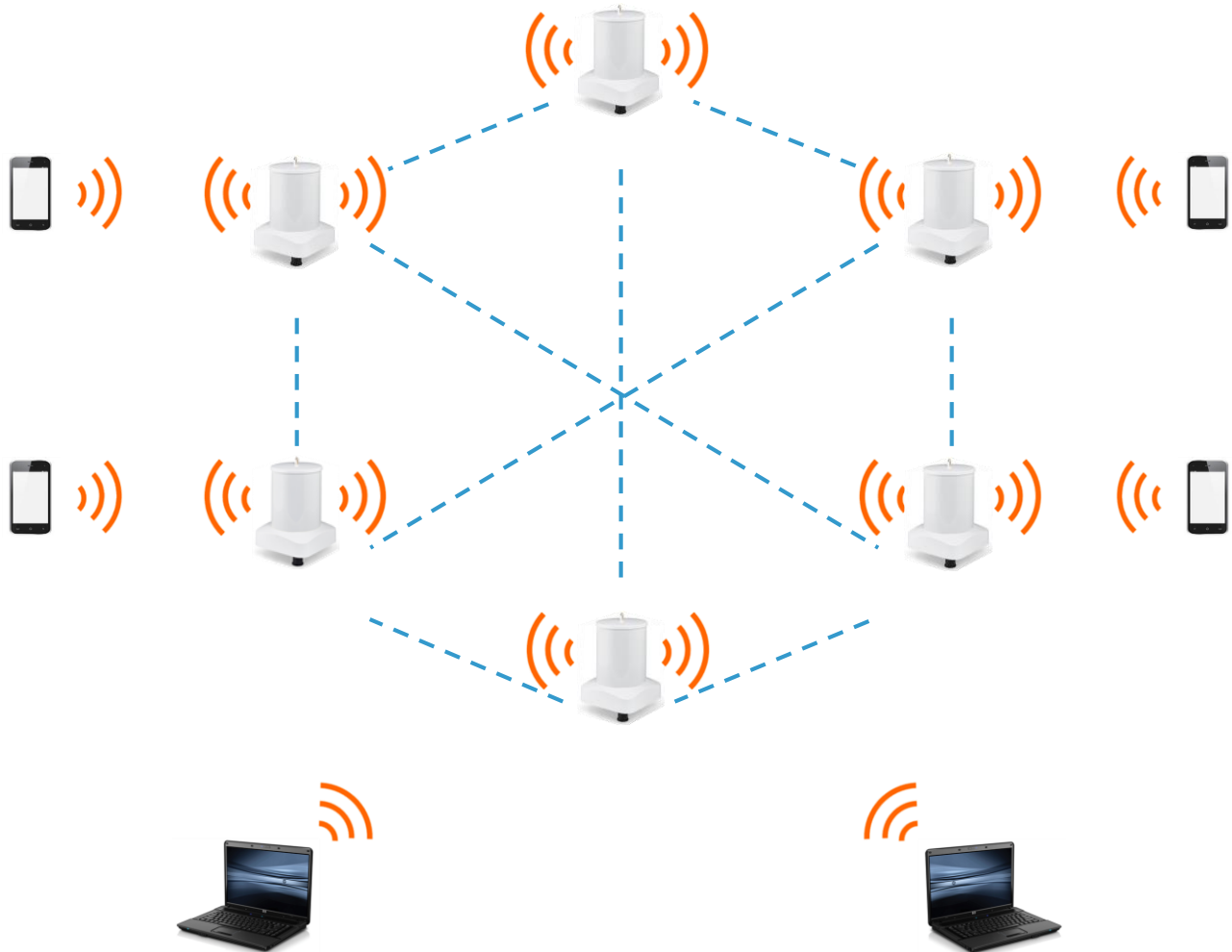
AP1200

Part Code	Description
SIL AP1200	Dual band Access Point, up to 500Mbps on 5GHz and 240Mbps on 2.4GHz, with 4 x Ntype connectors for external antenna.
SIL AP1200-90	Dual band Access Point, up to 500Mbps on 5GHz and 240Mbps on 2.4GHz, with built in dual polarised 90° sector antenna.

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Wi-Fi with MESH

AP1200-360 in MESH mode

AP1200

Part Code	Description
SIL AP1200-360	Dual band Access Point, up to 500Mbps on 5GHz and 240Mbps on 2.4GHz, with built in dual polarised 360° Omni antenna.

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Pro Range Antennas

	5GHz			2.4GHz		
	SAN5819-120	SAN5820-90	OAN5812	SAN2415-120	SAN2417-90	OAN2412
Frequency	4.9-6.0GHz	4.9-6.0GHz	4.9-6.0GHz	2.3-2.7GHz	2.3-2.7GHz	2.3-2.7GHz
Gain	19dBi	20dBi	12dBi	15dBi	17dBi	12dBi
Horizontal Beamwidth	120°(6dB)	90°(6dB)	360°	120°(6dB)	90°(6dB)	360°
Vertical Beamwidth	4°	4°	7°	8°	8°	7°
Max VSWR	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5
F/B Ratio	>25dB	>25dB	N/A	>25dB	>25dB	N/A
Wind Loading	150 mph	150 mph	150 mph	150 mph	150 mph	150 mph
Polarisation	Dual Polarisation	Dual Polarisation	Dual Polarisation	Dual Polarisation	Dual Polarisation	Dual Polarisation
Connectors	2*N-type Female	2*N-type Female	2*N-type Female	2*N-type Female	2*N-type Female	2*N-type Female
Dimensions (mm)	700*133*57	700*133*57	590*110*73	700*133*57	700*133*57	1200*110*73
Weight (kg)	2.1	2.1	1.8	2.1	2.1	3.6
Certification	CE, RoHS	CE, RoHS	CE, RoHS	CE, RoHS	CE, RoHS	CE, RoHS