

Aero Range - Wi-Fi 6 Outdoor AP

SIL WCAP-AX-EXT+



SIL WCAP-AX-EXT+
1800Mbps 802.11AX
Industrial Dual Band Wireless Ceiling AP

All New Robust Performance,
Wireless Outdoor Access Point

OVERVIEW

The SIL WCAP-AX-EXT+ is a superior wireless access point that provides Power Over Ethernet.

As part of the new Intelligent Wi-Fi 6 "Aero" range by SilverNet, the cloud-managed WCAP-AX-EXT+ is designed to build high performance enterprise Wi-Fi networks, and make enterprise management simple.

Offering superior outdoor Wi-Fi range with a TX-Power up to 23dBm, plus a Wireless cover distance up to 200 metres, it's ideal for numerous uses, particularly commercial and hospitality applications. From providing hotspot functionality, to supporting various hotspot authentication methods such as vouchers, local accounts or, for example ,Facebook it provides strong support across shopping centres, schools, hotels and more.

With options to manage the AP locally or via the cloud, the flexibility of this equipment allows you to offer a full, end-to-end managed Wi-Fi service to meet your client’s needs. It is also efficient when used as a standalone AP.

Keep things running smoothly for both you and your customer. You'll stay informed about your customer’s Wi-Fi client signal health and internet quality, putting an end to common, unnecessary support calls. Time consuming tasks like RF troubleshooting and bulk software upgrades are a breeze, and installation is a simple, speedy job.

Its strong outer shell helps protect the equipment and components, whether from external signals or extreme weather conditions, and with a 1 year warranty as standard you'll have nothing to worry about.

Features

- Wi-Fi 6, 802.11ax chipset, 1800Mbps
 - Coverage Range: 200m
 - WAN – 10/100/1000-BASE-T
 - PoE 802.af
 - Channel optimisation
 - Automatic interference avoidance
 - Up to 8 SSID (4 on 2.4GHz, 4 on 5.8GHz)
 - IP67 Rated Outdoor Enclosure
- Client Load Balancing
 - AES Encryption
 - VLANS
 - PING Watchdog
 - MAC Access control
 - Easy to install
 - Local or Cloud Management
 - 1 Year warranty

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Distributed By:

Superior Performance Features

Full Body Aluminium IP67 Waterproof Enclosure

The protective shell of the WCAP-AX-EXT+ is an incredible shield to both environmental factors and signal interference.

Made with innovative new generation aluminium alloy materials it can effectively shield the interference of external signals to the host. It's also adaptive and waterproof; through heat dissipation it can adapt to harsh environments like storms.

Seamless Roaming

Roaming has never been smoother.

802.11k and 802.11v Seamless Roaming provides smooth, unnoticeable switching to whichever access point has the most optimal signal when moving between APs.

Intelligent Spectrum Management

Success in the 2.4GHz and 5GHz spectrum requires an intelligent management system to remain interference free. The WCAP-AX-EXT+ has you covered.

It automatically selects the best channel on start-up, and uses an ongoing auto channel algorithm to alert and change channels if performance suffers due to interference.

Increased Efficiency with OFDMA

Reduced latency and efficient channel usage are the benefits of using OFDMA

Picture your Wi-Fi connection as a series of delivery vans, delivering data packets to your users. With 802.11ax, a "van" can deliver multiple packets to multiple users simultaneously, by splitting the bandwidth into individual "delivery" slots.

This results in a vast improvement in efficiency, working for both uploads and downloads.



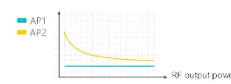
RF power can be adjusted according to the actual use environment

Reduce mutual interference between APs and improve wireless stability

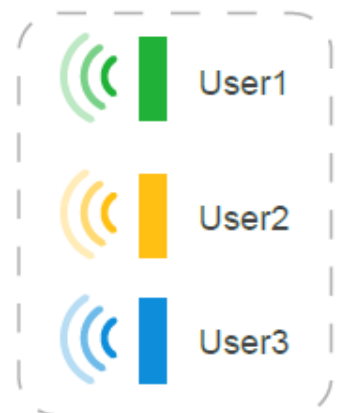
Before adjusting the wireless transmission power



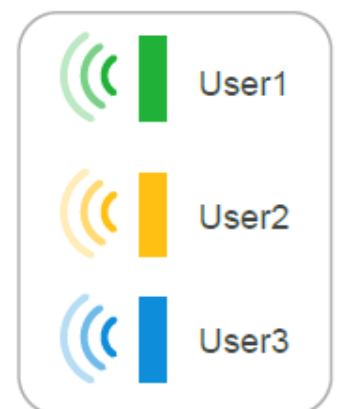
After reducing the wireless transmission power



OFDM



OFDMA



Technical Specifications

Part No.	SIL WCAP-AX-EXT+
Performance	
Max Throughput	1800Mbps
Client Capacity	100
Wireless Protocols	802.11ax/ac/a/n/g/b
Flash	SPI NOR 8MB + 128MB
Memory	512MB
Modes	WISP Wireless Range extender (Repeater) Wired Wi-Fi extension (AP Mode)
Power Consumption	24W
Radio	
MIMO & Modulation	2x2:2 MIMO OFDMA Up to 256-QAM
Bandwidth	20/40/80/160 MHz Channels
Frequency Range	2400 – 2484MHz; 5150 – 5850MHz
Max Output Power	23dBm
Antenna	
Type	External
Pattern	4dBi Omni
Interface	
WAN	1x 10/100/1000 RJ45 WAN Port
Antenna	4x N-Type Female Antenna Connector
Reset Button	1x Reset Button (Press & Hold for 10 seconds to revert to factory default)
Physical	
Dimensions (mm)	231W x 80H x 295L
Enclosure	Aluminum Metal Shell
Environment	
Operating Temperature	-30°C to +70°C
Operating Humidity	5% to 95% Non-Condensing
Storage Temperature	-40°C to +70°C
Standards	
Approvals	IEC62368-1:2014+A11:2017 EN IEC 62311:2020 ETSI EN 301 489-1 ETSI EN 301 489-3 ETSI EN 301 489-17 ETSI EN 300 328 ETSI EN 300 440 ETSI EN 300 893
Safety	IEC/EN
RoHS Compliance	Yes
Wi-Fi Certified	Yes

Part Numbers & Accessories

802.11ax Access Points

Part Code	Description
SIL WCAP-AX	Wi-Fi standard 802.11ax/ac/n/a/g/b, Operating on 2.4GHz & 5GHz, Speeds up to 1800Mbps, 18dBm, 4dBi MIMO antenna, Multi-SSID Up to 8 SSID Per radio, wireless security: WPA2-PSK, WPA-Enterprise (WPA/WPA1,TKIP/AES) Concurrent Clients 120+ Range 150m.
SIL WCAP-AX-EXT	Wi-Fi Standard 802.11ax/ac/n/a/g/b. Frequency 2.4GHz & 5GHz, Speeds up to 1800Mbps, Max TX Power 23dBm, 3dBi @ 2.4GHz; 6dBi @ 5.8GHz Integrated Omni Antenna, Up to 8 SSID Per Radio, Wireless Security WEP,WPA-PSK,WPA Enterprise, (WPA/WPA2,TKIP/AES) Concurrent clients 160+.
SIL WCAP-AX-W	Wi-Fi standard 802.11ax/ac/n/a/g/b, Operating on 2.4GHz and 5GHz, at a speeds up to 1800Mbps, 2dBi 2.4GHz / 5dBi 5GHz Dual Band Omni with up to 8 SSID Per radio, range up to 50m with 120+ concurrent clients.

AP Controller

Part Code	Description
SIL WAC-AX	Dual-Core 1.8GHz CPU, 2GB DDR RAM, 32G SSD, Ethernet 5*10/100/1000Mbps LAN / WAN port, 1 x 10/100/1000Mbps WAN Port, 2x USB 1.1 Port, 1 x RJ45 Console Port, Power & SSID Indicator, Desk-top and Mount Rack.