

# SILVERNET



## Intelligent Wi-Fi Solutions

SilverNets innovative series of Wi-Fi products offers remarkable performance and features to suit all sizes of networks & budgets.

All configuration and management is centrally controlled for speed and efficiency for all available Wi-Fi devices. This allows for easier monitoring of multi-site, large coverage and enterprise networks.

**SILVERNET**

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# SILVERNET

## Integrated FIT AP + Controller Architecture

The powerful central controller is designed to work with all SilverNet network enterprise class AP equipment. A single controller can supervise and manage Wi-Fi networks with multiple, distributed APs, allowing for a far more efficient network.

## Easy to use Interface

No special training is required to operate the controller system. The interface allows for single or multi WLAN networks on the dashboard. Whilst our simple yet innovative design also allows for real-time status monitoring and customised configuration.

## One minute network configuration

Centralised management between the controller & APs quickly synchronises the wireless configuration with each AP to complete a unified Wi-Fi network construction.

## Ultra Fast and powerful APs that deliver

SilverNet's AP's offer wireless speeds from 300Mbps to 1667Mbps depending on the user requirements. The installation methods of AP's can be varied, so auto adaption to different environments by diversity on TX power and antenna gain mean a far more stable and reliable signal.

## Remarkable Performance

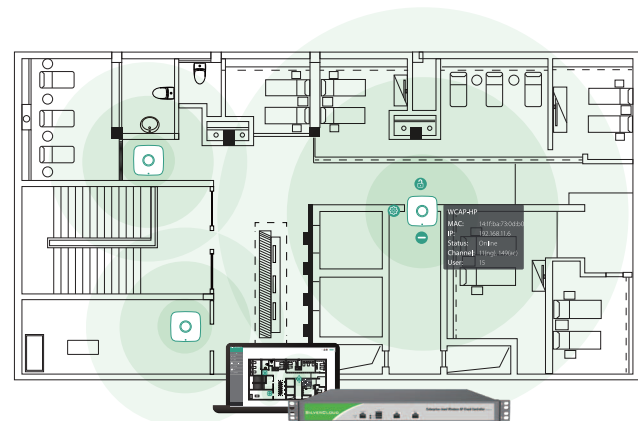
SilverNet AP's possess enterprise class features & outstanding characteristics when compared to other AP'S on the market, yet remain very competitively priced.

## On-site & Cloud Management

The controller hardware can be installed either in an on site central control room or in the cloud for local or remote management via public IP address.

## Unlimited AP numbers

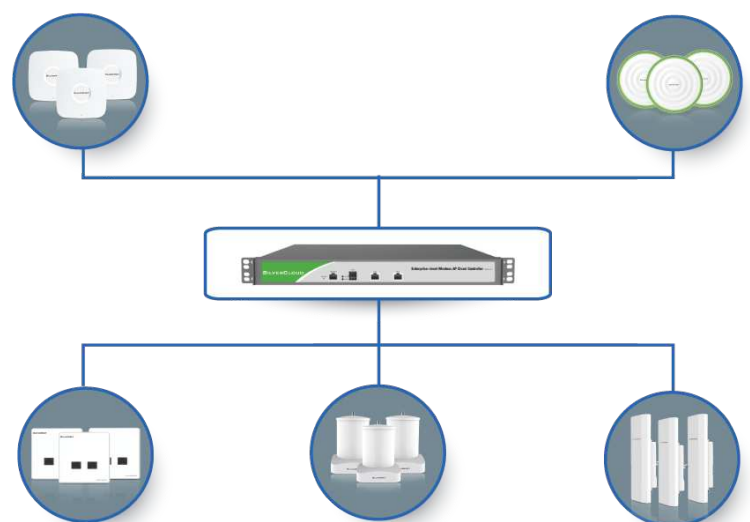
Unlimited AP's can be controlled by the SilverCloud controller. Providing the best solutions for customers to plan and expand their WLAN networks as their needs might change at a later date.



SilverCloud Controller  
Integrated FIT AP + Controller Architecture



Easy-to-use interface



One controller supports multiple AP's

# SILVERNET AP Features

## Enterprise Level Radio Chipset

The high speed 720MHz Atheros CPU and 128MB DDR makes SilverNet access points significantly more powerful, providing stable connectivity and reliability in multi-functional wireless networks.

## Supports FAT AP & FIT AP Mode

SilverNet's FIT AP has "zero-configuration" with all wireless network settings stored in the controller and pushed to each AP.

The FIT AP is great for enterprise/ISP level wireless networks & larger deployments.

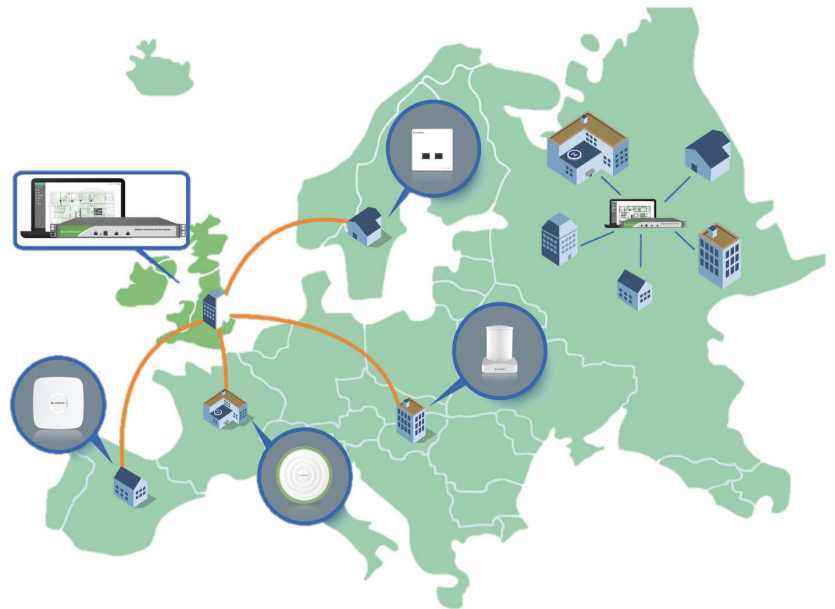
Whilst the FAT AP is perfect for small site users who own a few APs, working on a standalone system, SilverNet AP's support both options.

## Easy Installation

With our mounting kits, customers can easily install our equipment to suit the many different indoor or outdoor environments. Mounting the AP on the ceiling or on a wall will help avoid noise and extend your Wi-Fi Coverage.

## Support for standard PoE

SilverNet access points are powered by PoE. Making for a more flexible installation.



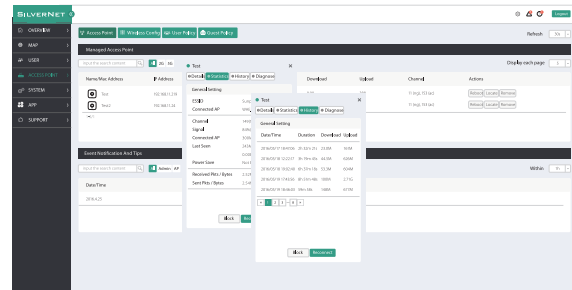
|                             | SIL-WCAP-AC-W  | SIL-WCAP-AC    | SIL-WCAP-AC-PRO | SIL-WCAP-AC-EXT                                             | SIL-WCAP-AC-OS                                              |
|-----------------------------|----------------|----------------|-----------------|-------------------------------------------------------------|-------------------------------------------------------------|
| <b>Frequency</b>            | 2.4GHz & 5GHz  | 2.4GHz & 5GHz  | 2.4GHz & 5GHz   | 2.4GHz & 5GHz                                               | 2.4GHz & 5GHz                                               |
| <b>2.4GHz speed</b>         | 300Mbps        | 300Mbps        | 450Mbps         | 300Mbps                                                     | 300Mbps                                                     |
| <b>2.4GHz MIMO</b>          | 2*2            | 2*2            | 3*3             | 2*2                                                         | 2*2                                                         |
| <b>5GHz speed</b>           | 433Mbps        | 867Mbps        | 1200Mbps        | 867Mbps                                                     | 867Mbps                                                     |
| <b>5GHz MIMO</b>            | 1*1            | 2*2            | 3*3             | 2*2                                                         | 2*2                                                         |
| <b>PoE</b>                  | 802.3af(48VDC) | 802.3af(48VDC) | 802.3af(48VDC)  | 802.3af(48VDC)                                              | 802.3af(48VDC)                                              |
| <b>Pole Mount</b>           | -              | √              | √               | √                                                           | √                                                           |
| <b>Wall Mount</b>           | √              | √              | √               | -                                                           | √                                                           |
| <b>Tx power</b>             | 17dbm          | 23dbm          | 27dbm           | 30dBm                                                       | 30dBm                                                       |
| <b>Distance</b>             | 50m            | 150m           | 200m            | 250m                                                        | 400m                                                        |
| <b>Antenna Gain</b>         |                |                |                 | 6dBi                                                        | 13dBi                                                       |
| <b>Enclosure</b>            |                |                |                 | UV Outdoor Plastic                                          | Die-cast Aluminum                                           |
| <b>ESD Protection</b>       |                |                |                 | 16kV                                                        | 16kV                                                        |
| <b>Lightning Protection</b> |                |                |                 | 2kV                                                         | 8kV                                                         |
| <b>LAN Ports</b>            |                |                |                 | 1*10/100/1000 Base-T Ethernet (Gigabit LAN with Active PoE) | 1*10/100/1000 Base-T Ethernet (Gigabit LAN with Active PoE) |

# SILVERCLOUD Controller

The SilverCloud Controller is a carrier grade Wireless Network Management System, which supports the full range of SilverNet APs. This allows the network to be managed centrally by a Network Administrator. Using integrated powerful features to control multiple and distributed APs in a highly effective approach.

## Real Time Status

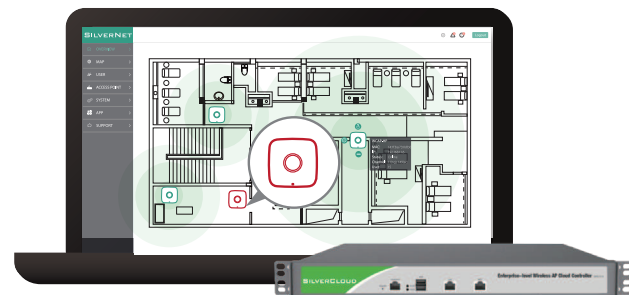
Real time statistics allows monitoring for the networks online AP's and allows for network history traffic to be traced from 24hrs to 30 days.



Real-Time Statistics

## L2/L3 Auto Discovery

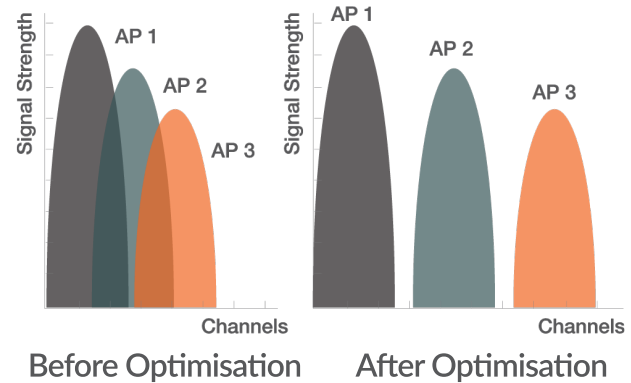
AP's can be auto detected by the controller in the same WLAN network. All AP devices are discoverable by the controller and configured in just a few minutes.



Simplify Troubleshooting

## Wireless Map

Uploading and scaling your own site plan makes the wireless map function even easier to monitor the status of each AP in the network. Monitor the number of users connected to ensure coverage and quality of your system.

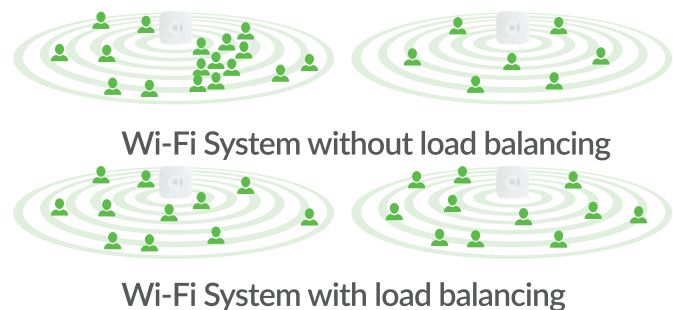


## Channel Optimisation

Intelligent Channel utilisation makes it possible to continually process the wireless network to ensure it is stable and reliable for the users by avoiding potential self made noise congestion.

## Load Balancing

SilverNet systems are equipped with intelligent user load balancing, making the product suitable for sparsely populated rural conditions or hi-density population areas.



# Specifications

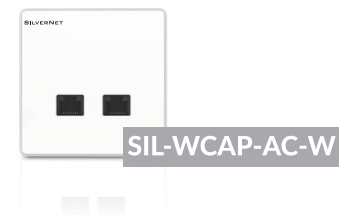
## SilverCloud Controller



| Physical Characteristics            |                                                                   |
|-------------------------------------|-------------------------------------------------------------------|
| Processor                           | Dual-Core 1.8GHz CPU                                              |
| Memory                              | 2GB DDR RAM                                                       |
| Hardisk                             | 8G SSD                                                            |
| Ethernet                            | 1*10/100/1000Mbps Data Port, 1*10/100/1000Mbps Management Port    |
| LED                                 | Power& SSD Indicator                                              |
| Other Interface                     | 2*USB2.0, 1 Console RJ-45 port                                    |
| Power                               | Input: 110 – 240V AC, Output: 12VDC/5A                            |
| Weight                              | 2.2 kg                                                            |
| Temperature                         | Working Temperature: 10°C ~60°C, Storage Temperature: -20°C ~70°C |
| Relative Humidity                   | 5%-95%, no-condensing                                             |
| Installation                        | Desk-top & Rack-mount                                             |
| Dimension                           | 430mm*250mm*46mm (19 inches, 1U)                                  |
| Management                          |                                                                   |
| Configuration                       | Web GUI, CLI                                                      |
| AP Provisioning                     | L2 or L3 auto-discovery, Auto online software upgrade             |
| Traffic History                     | Supported                                                         |
| Capacity                            |                                                                   |
| Managed APs                         | Unlimited                                                         |
| Concurrent Users                    | Unlimited                                                         |
| Network Architecture                |                                                                   |
| IP                                  | IPv4 / IPv6                                                       |
| VLANs                               | 802.1Q (8 BSSID per radio)                                        |
| Redundancy                          | 1+1 with auto-synchronization                                     |
| Wireless                            |                                                                   |
| Wireless Security                   | WEP, WPA-PSK, WPA-Enterprise (WPA/WPA2, TKIP/AES)                 |
| Access Control                      | L2 (MAC address-based), L2 client isolation                       |
| Wireless Intrusion Detection (WIDS) | Rogue AP detection                                                |
| 802.11e/WMM                         | Supported                                                         |
| Rate Limiting                       | Supported                                                         |
| Wlan Group                          | Supported                                                         |
| RF Management                       | Automatic channel and power optimization                          |
| Client Load Balancing               | Automatic                                                         |
| Guest Access                        | Supported                                                         |
| Captive Portal                      | Supported                                                         |
| Mesh(Wireless Uplink)               | Supported                                                         |

# Specifications

## 802.11ac Dual-Band In Wall Access Point



| Physical Characteristics |                                                   |
|--------------------------|---------------------------------------------------|
| Processor                | Atheros SoC 560MHz                                |
| Flash / Memory           | 128MB DDR, 16MB Flash                             |
| LAN Port                 | 1*10/100M Base-T PoE, 2*10/100M Base-T            |
| Button                   | Reset                                             |
| Power                    | 48VDC/0.32A 802.3af                               |
| Max Power Consumption    | 6W                                                |
| Working Temperature      | -10°C ~60°C                                       |
| Working Humidity         | 0%~95% non-condensing                             |
| Dimension                | 86*86*30mm                                        |
| Mounting                 | Wall Mount                                        |
| Certification            | CE/RoHS                                           |
| Wireless Characteristics |                                                   |
| Wi-Fi Standard           | 802.11ac/n/a/g/b                                  |
| Frequency                | 2.4GHz&5GHz                                       |
| Speed                    | 733Mbps                                           |
| Max Tx Power             | 17dBm                                             |
| Antenna                  | 2dBi Dual-Band Omni                               |
| Multi-SSID               | up to 8 SSID Per Radio                            |
| Wireless Security        | WEP, WPA-PSK, WPA-Enterprise (WPA/WPA2, TKIP/AES) |
| Concurrent Clients       | 100+                                              |
| Coverage Range           | 50m                                               |
| Advanced Characteristics |                                                   |
| Mode                     | Fat AP/Fit AP                                     |
| VLAN                     | 802.1q                                            |
| Guest Policy             | Web Portal/Password                               |
| MAC Filter               | Blacklist                                         |
| User QoS                 | Speed Limit by User Group                         |
| Traffic History          | Duration/Download/Upload                          |
| Load Balance             | Online User / Bandwidth                           |
| Wireless Uplink          | Supported                                         |

# Specifications

## 802.11ac Dual-Band Access Point



| Physical Characteristics |                                                   |
|--------------------------|---------------------------------------------------|
| Processor                | Atheros SoC 720MHz                                |
| Flash / Memory           | 128MB DDR, 16MB Flash                             |
| LAN Port                 | 1*10/100/1000M Gigabit                            |
| Button                   | Reset                                             |
| Power                    | 48VDC/0.32A 802.3af                               |
| Max Power Consumption    | 12W                                               |
| Working Temperature      | -10°C ~60°C                                       |
| Working Humidity         | 0%~95% non-condensing                             |
| Dimension                | 168*168*30mm                                      |
| Mounting                 | Ceiling Mount/Wall Mount                          |
| Certification            | CE/RoHS                                           |
| Wireless Characteristics |                                                   |
| Wi-Fi Standard           | 802.11ac/n/a/g/b                                  |
| Frequency                | 2.4GHz&5GHz                                       |
| Speed                    | 1167Mbps                                          |
| Max Tx Power             | 23dBm                                             |
| Antenna                  | 3dBi Dual-Pola Omni                               |
| Multi-SSID               | up to 8 SSID Per Radio                            |
| Wireless Security        | WEP, WPA-PSK, WPA-Enterprise (WPA/WPA2, TKIP/AES) |
| Concurrent Clients       | 150+                                              |
| Coverage Range           | 150m                                              |
| Advanced Characteristics |                                                   |
| Mode                     | Fat AP/Fit AP                                     |
| VLAN                     | 802.1q                                            |
| Guest Policy             | Web Portal/Password                               |
| MAC Filter               | Blacklist                                         |
| User QoS                 | Speed Limit by User Group                         |
| Traffic History          | Duration/Download/Upload                          |
| Load Balance             | Online User / Bandwidth                           |
| Wireless Uplink          | Supported                                         |



# Specifications

## 802.11ac 3\*3 Dual-Band Access Point



SIL-WCAP-PRO

| Physical Characteristics |                                                   |
|--------------------------|---------------------------------------------------|
| Processor                | Atheros SoC 720MHz                                |
| Flash / Memory           | 128MB DDR, 16MB Flash                             |
| LAN Port                 | 1*10/100/1000M Gigabit                            |
| Button                   | Reset                                             |
| Power                    | 48VDC/0.32A 802.3af                               |
| Max Power Consumption    | 15W                                               |
| Working Temperature      | -10°C ~60°C                                       |
| Working Humidity         | 0%~95% non-condensing                             |
| Dimension                | φ 180*56mm                                        |
| Mounting                 | Ceiling Mount/Wall Mount                          |
| Certification            | CE/RoHS                                           |
| Wireless Characteristics |                                                   |
| Wi-Fi Standard           | 802.11ac/n/a/g/b                                  |
| Frequency                | 2.4GHz&5GHz                                       |
| Speed                    | 1750Mbps                                          |
| Max Tx Power             | 27dBm                                             |
| Antenna                  | 3dBi Dual-Pola Omni                               |
| Multi-SSID               | up to 8 SSID Per Radio                            |
| Wireless Security        | WEP, WPA-PSK, WPA-Enterprise (WPA/WPA2, TKIP/AES) |
| Concurrent Clients       | 150+                                              |
| Coverage Range           | 200m                                              |
| Advanced Characteristics |                                                   |
| Mode                     | Fat AP/Fit AP                                     |
| VLAN                     | 802.1q                                            |
| Guest Policy             | Web Portal/Password                               |
| MAC Filter               | Blacklist                                         |
| User QoS                 | Speed Limit by User Group                         |
| Traffic History          | Duration/Download/Upload                          |
| Load Balance             | Online User / Bandwidth                           |
| Wireless Uplink          | Supported                                         |



# Specifications

## 802.11ac Dual-Band Outdoor Access Point with Omni Antenna



| Physical Characteristics |                                                   |
|--------------------------|---------------------------------------------------|
| Processor                | Atheros SoC 720MHz                                |
| Flash / Memory           | 128MB DDR, 16MB Flash                             |
| LAN Port                 | 1*10/100/1000M Gigabit                            |
| Button                   | Reset                                             |
| Power                    | 48VDC/0.32A 802.3at                               |
| Max Power Consumption    | 15W                                               |
| Working Temperature      | -40°C~70°C                                        |
| Working Humidity         | 10%~95% non-condensing                            |
| Dimension                | 178×178×238mm                                     |
| Mounting                 | Pole Mount                                        |
| Certification            | CE/RoHS                                           |
| Wireless Characteristics |                                                   |
| Wi-Fi Standard           | 802.11ac/n/a/g/b                                  |
| Frequency                | 2.4GHz&5GHz                                       |
| Speed                    | 1167Mbps                                          |
| Max Tx Power             | 30dBm                                             |
| Antenna                  | 6dBi Dual-band Omni                               |
| Multi-SSID               | up to 8 SSID Per Radio                            |
| Wireless Security        | WEP, WPA-PSK, WPA-Enterprise (WPA/WPA2, TKIP/AES) |
| Concurrent Clients       | 150+                                              |
| Coverage Range           | 250m                                              |
| Advanced Characteristics |                                                   |
| Mode                     | Fat AP/Fit AP                                     |
| VLAN                     | 802.1q                                            |
| Guest Policy             | Web Portal/Password                               |
| MAC Filter               | Blacklist                                         |
| User QoS                 | Speed Limit by User Group                         |
| Traffic History          | Duration/Download/Upload                          |
| Load Balance             | Online User / Bandwidth                           |
| Wireless Uplink          | Supported                                         |

# Specifications

## 802.11ac Dual-Band Outdoor Access Point with Sector Antenna



| Physical Characteristics |                                                   |
|--------------------------|---------------------------------------------------|
| Processor                | Atheros SoC 720MHz                                |
| Flash / Memory           | 128MB DDR, 16MB Flash                             |
| LAN Port                 | 1*10/100/1000M Gigabit                            |
| Button                   | Reset                                             |
| Power                    | 48VDC/0.32A 802.3af                               |
| Max Power Consumption    | 15W                                               |
| Working Temperature      | -40°C~70°C                                        |
| Working Humidity         | 10%~95% non-condensing                            |
| Dimension                | 450*650*87.5mm                                    |
| Mounting                 | Pole/Wall Mount                                   |
| Certification            | CE/RoHS                                           |
| Wireless Characteristics |                                                   |
| Wi-Fi Standard           | 802.11ac/n/a/g/b                                  |
| Frequency                | 2.4GHz&5GHz                                       |
| Speed                    | 1167Mbps                                          |
| Max Tx Power             | 30dBm                                             |
| Antenna                  | 13dBi Dual-Pola 90° Sector                        |
| Multi-SSID               | up to 8 SSID Per Radio                            |
| Wireless Security        | WEP, WPA-PSK, WPA-Enterprise (WPA/WPA2, TKIP/AES) |
| Concurrent Clients       | 150+                                              |
| Coverage Range           | 400m                                              |
| Advanced Characteristics |                                                   |
| Mode                     | Fat AP/Fit AP                                     |
| VLAN                     | 802.1q                                            |
| Guest Policy             | Web Portal/Password                               |
| MAC Filter               | Blacklist                                         |
| User QoS                 | Speed Limit by User Group                         |
| Traffic History          | Duration/Download/Upload                          |
| Load Balance             | Online User / Bandwidth                           |
| Wireless Uplink          | Supported                                         |