

First Commercial 802.11ah (HaLow) Wireless Access Point AP-100AH

Easily Deploy your First 802.11ah Infrastructure Network



AP-100AH is the first commercially available access point supporting IEEE's 802.11ah wireless standard which is a long-range technology where a single access point can give you range up to 3 kilometers supporting up to 675 clients. The AP-100AH is all that you need to incorporate 802.11ah into your existing or new infrastructure.

Features:

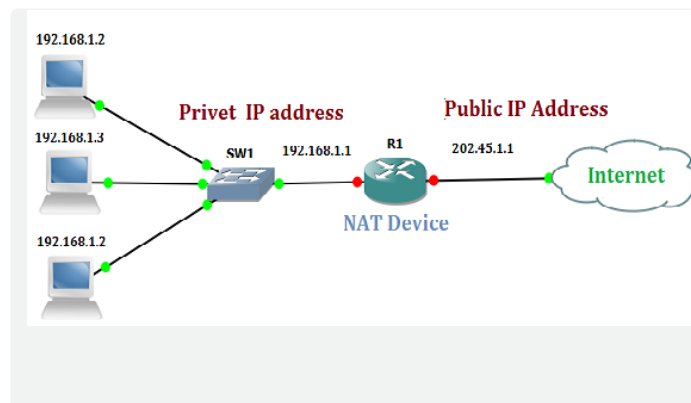
1 Access Point Coverage

A benefit of 802.11ah is extended range, making it useful for rural communications and offloading cell phone tower traffic. Among other benefits, AP-100AH is a revolutionary access point combining performance with unequivocal scalability and range (675 simultaneous connections and up to 3 km range).



1 NAT Support

The AP-100AH supports Network Address Translation (NAT) which permits the access point to behave as an agent between the Internet and the private network. It signifies that a unique IP address can be used to symbolize the overall class of network devices like PCs. Thus NAT tends the double feature of address translation and security for networking systems.



1 Seamlessly Connect to an Existing Network

The AP-100AH combines all the good parts of Sub-GHz technology and blends it with the familiarity, strength, and technological power of the W-Fi standard. What this means is that you can simply add this to your existing Wi-Fi 802.11a/b/g/n network and add 802.11ah and leverage the benefits of long range and scalability that this new technology offers.

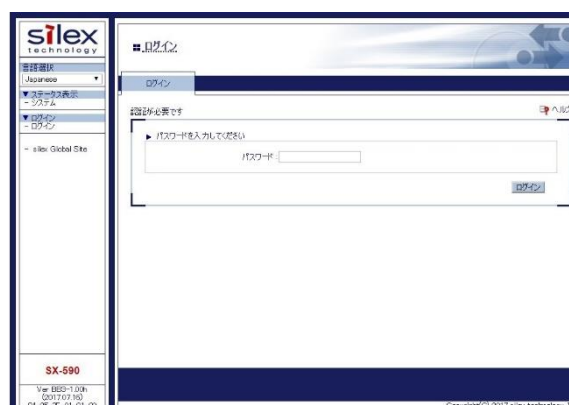
1 Wi-Fi Certified WPA3™

WPA3™ is the next generation of Wi-Fi security and provides cutting-edge security protocols to the market. Building on the widespread success and adoption of Wi-Fi CERTIFIED WPA2™, WPA3 adds new features to simplify Wi-Fi security, enable more robust authentication, deliver increased cryptographic strength for highly sensitive data markets, and maintain resiliency of mission critical networks.



1 Embedded Web Server

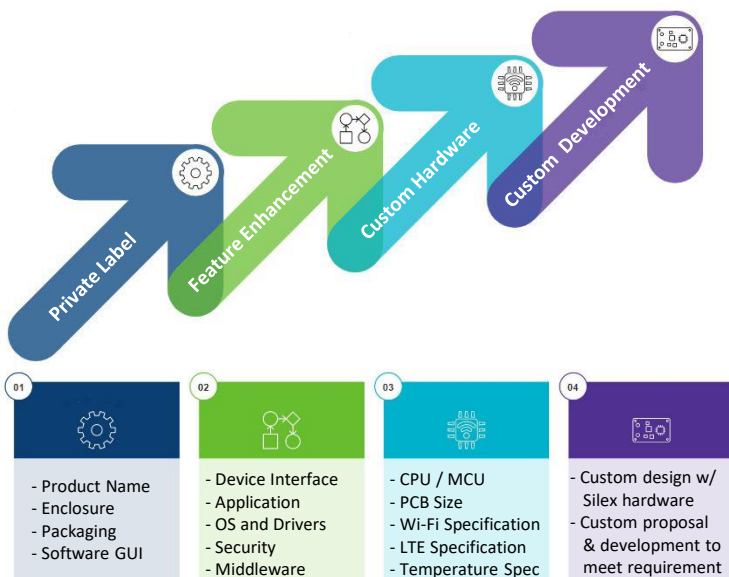
The AP-100AH has an inbuilt webserver and a configuration page that can be used to configure the access point. It supports both http and https protocol with TLS security.



1 OEM Customization

Even though we incorporate our proprietary technologies and "know-how" in our standard products which we often refer as showcase products, our real value to our customers is our ability to customize our showcase products for hardware, software, technologies and features to meet your unique requirements.

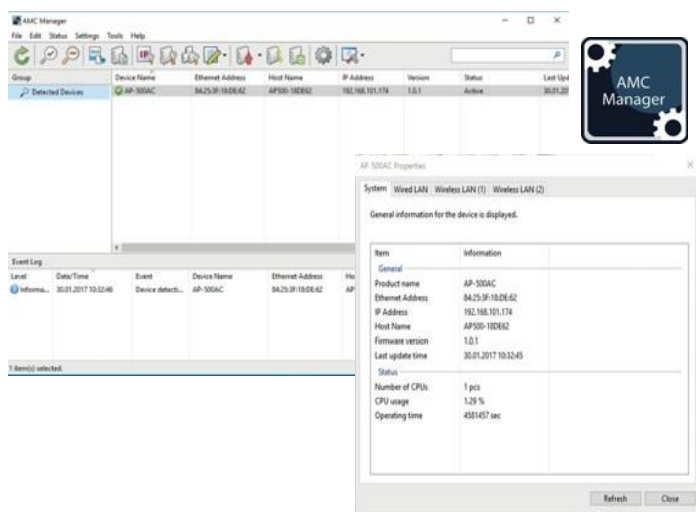
At Silex, we offer our customers the opportunity to customize products. As an OEM, this gives you the ability to specify what the product looks like and you choose what goes into the product.



AMC Manager Support

The AP-100AH access point and BR-100AH wireless bridge is compatible with the optional device management software "AMC Manager".

With this software, network administrators can execute the functions required for device management of Silex networking products from one point, for example monitor device status, configuration settings, update firmware, automatically record device operating logs and restart the devices.



Product Specifications

Wired LAN

Interface

Ethernet:

RJ-45 Connector x 1
Serial (Option to add):
RS232C x 1
RS422 x 1

Specification

10Base-T / 100Base-TX

Wireless LAN

Specification

802.11ah (1x1)

Channels

1 MHz, 2 MHz & 4 MHz

Operating Frequency

BW1MHz:

903.5, 904.5, 905.5, 906.5, 907.5, 908.5, 909.5, 910.5, 911.5, 912.5, 913.5, 914.5, 915.5, 916.5, 917.5, 918.5, 919.5, 920.5, 921.5, 922.5, 923.5, 924.5, 925.5, 926.5

BW2MHz:

905, 907, 909, 911, 913, 915, 917, 919, 921, 923, 925

BW4MHz:

910, 914, 918, 922

Security

Open, Enhanced Open, WPA3-Personal
Encryption: AES-CCMP

Data Rate

MCS 0, 1, 2, 3, 4, 5, 6, 7, 10

Range

3km

Modulation

OFDM

Maximum Number of Clients

Access Point

AP-100AH: 675 stations simultaneously

Environmental Specifications

Storage

-20°C ~ 80°C / 20%RH ~ 90%RH

Operating

0°C ~ 40°C / 20%RH ~ 90%RH

Other Specifications

Device Configuration

AMC Manager

Power

5.0V ± 5% DC Jack (EIAJ Class 2)
DSUB 9Pin (option) or 24V (option)

Dimensions

126mm x 75mm x 24mm

EMC Standards

FCC Part 15 SubPart B Class B
ICES-003 Class B
EU's RoHS directive (2015/863)
China RoHS directive

Warranty

5 years

Embedded Module Option

SX-NEWAH 802.11ah W-Fi Module

SX-NEWAH is industry's first IEEE 802.11ah Wi-Fi module that operates in the Sub 1GHz license-exempt band. It provides a much greater range over 2.4GHz and 5GHz Wi-Fi technologies and a much higher data rate than proprietary Low-Power Wide-Area (LPWA) technologies such as LoRa and Sigfox.



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