

# Wi-Fi HaLow

## IEEE 802.11ah

Reach farther than ever before...

Quick access to Wi-Fi HaLow:



 SCAN ME

## Why Wi-Fi HaLow?



10x more range coverage than the legacy Wi-Fi



Over 1Mbps data throughput, significantly faster than legacy LPWA



Cost-effective long-range high-data throughput technology compared with cellular



Seamless integration into IP-based applications



### GEOSPATIAL EQUIPMENT

Transfer Geodata and other scanned data over long-range Wi-Fi.



### CONSTRUCTION SITE/PLANT

Build long-range LAN for equipment management and safety monitoring in construction sites or plants.



### FARM

Transfer information from geospatial tools for farmers over longer ranges.



### Stay in the Loop!

Visit [silextechnology.com](http://silextechnology.com) and subscribe to our mailing list to be the first to know about our upcoming Wi-Fi HaLow products to extend your legacy Wi-Fi communications even further!

# The Silex Difference

Silex provides a full range of Wi-Fi HaLow solutions. This includes embedded wireless modules that can be integrated into OEM products, as well as access points and Ethernet bridges.

Our experience in the wireless industry with unrivaled quality for mission-critical applications is combined with local, expert engineering support to ensure that our customers are successful, from pre-sales consultation to integration and post-sales support.

## 802.11ah Wi-Fi HaLow Products

### **SX-SDMAH**

SX-SDMAH (US) is an 802.11ah Wi-Fi HaLow SDIO/SPI module enabled by Morse Micro's MM6108. It features a host SDIO or SPI interface to operate with a processor or a microcontroller. It supports up to 8MHz channel bandwidth to improve the maximum data throughput in the countries allowing 8MHz usage. Its small footprint design with the integrated antenna connector saves the PCB space and allows a more flexible embedded system design. The SX-SDMAH also features high-transmission power to gain more distance and coverage.



<b>Model #</b>	SX-SDMAH (US)
<b>Chipset</b>	MM6108
<b>Host Interface</b>	SDIO/SPI for Linux SPI for FreeRTOS
<b>Wi-Fi Standard</b>	802.11ah Wi-Fi HaLow
<b>Antenna Connector</b>	MHF1
<b>Operating Voltage</b>	VDD: 3.3V VDDIO: 3.3V VDDFEM: 3.3V or 5V (US)
<b>Operating Environment</b>	Temperature: -40 - 85°C Humidity: 15% - 95% w/o condensation
<b>Storage Environment</b>	Temperature: -40 - 85°C Humidity: 15% - 95% w/o condensation
<b>Size</b>	17mm x 18mm x 2.65mm
<b>Weight</b>	1.6 grams
<b>Package Type</b>	60-pin LGA
<b>Modular Certification</b>	US, Canada

### **AP-100AH & BR-100AH**

The Wi-Fi HaLow access point and wireless bridge enables the quickest deployment into your existing network. You can seamlessly integrate AP-100AH into your Ethernet switch to build a Wi-Fi HaLow wireless LAN.

The BR-100AH converts your Ethernet devices to Wi-Fi HaLow clients so they can join the Wi-Fi HaLow wireless LAN.



<b>Wired Interface</b>	10BASE-T / 100BASE-TX
<b>Wireless Interface</b>	IEEE 802.11ah 903 – 927MHz (US), 921 – 927MHz (JP) Channel bandwidth: 1MHz/2MHz/4MHz
<b>Switch</b>	Push switch: x1
<b>LED</b>	RJ-45: LED x2 Top: LED x3
<b>Operating Environment</b>	Temperature: 0°C ~ 40°C Humidity: 20%RH ~ 90%RH
<b>Storage Environment</b>	Temperature: -20°C ~ 80°C Humidity: 20%RH ~ 90%RH
<b>Wi-Fi Security</b>	Open Enhanced Open (OWE) WPA3-Personal (SAE) WPA3-Enterprise (128bit mode)
<b>Data Encryption</b>	AES (128bit) / AES-CCMP (128bit)
<b>No. of Clients</b>	Up to 675 Wi-Fi HaLow client / Up to 16 Ethernet devices
<b>Size/Weight</b>	126 x 75 x 24mm (±2mm), about 230g
<b>Accessories</b>	Body • Antenna • AC adapter • setup guide • Ethernet cable