



Wi-Fi HaLow

IEEE 802.11ah

Reach farther than ever before...

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 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.



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



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