

GW16167 802.11AH HaLow M.2 Wi-Fi 900MHz Radio

The GW16167 is a low-power, long-range, 900MHz 802.11ah, M.2 2230 E-Key Wi-Fi radio designed to provide Wi-Fi HaLow wireless communication utilizing Gateworks Single Board Computers. The 802.11ah radio is targeted towards Internet of Things (IoT) applications. The GW16167 features a Morse Micro MM8108 802.11ah module with up to 26dBm transmit power. The radio operates in the 900MHz license-exempt band which allows it to penetrate buildings, walls and foliage much better than standard 2.4G/5G Wi-Fi radios. Additionally, 802.11ah provides a much greater range (1km+) and higher bandwidth (up to 43Mbps) over other Sub 1GHz protocols like LoRa and Sigfox. Other advantages include a higher client count (100+) and lower power. Standard Wi-Fi IP connectivity software, including Linux tools, commands and interfaces are also supported allowing for quick application integration. The radio is a global radio targeted for US and EU operation. The Gateworks Single Board Computer communicates to the module using USB signaling which is supported on M.2 E-Key connector interfaces. Compatible with the Gateworks Venice & VeniceFLEX SBC family and other Gateworks SBCs. A robust MMCX antenna connector allows for a variety of external antenna choices. Antenna and cables are sold separately.

FEATURES

- 802.11ah M.2 2230 E-Key Wi-Fi Radio
- Morse Micro MM8108 802.11ah Module
 - Based on Morse Micro MM8108 System-on-Chip
 - IEEE 802.11ah Wi-Fi HaLow
 - Up to 43.3Mbps data rate
 - Supports 1/2/4/8 MHz bandwidth
 - Access point and station mode
 - Security: OPEN, WPA2-PSK(AES), WPA3-OWE, WPA3-SAE
 - 850 ~ 950 MHz Frequency
 - Up to +26dBm Transmit Power
 - MMCX Antenna port
 - Uses standard Linux IP framework
 - FCC Certified
 - Global radio for US & EU operation
- USB Communication (SDIO and SPI Optional)
- M.2 2230 E-Key Form Factor with USB Signaling
- Compatible with Venice, VeniceFLEX and other Gateworks SBCs
- -40°C to +85°C Operating Temperature
- Made in USA
- 1 Year Warranty



SPECIFICATIONS

Electrical

Input Voltage

- 3.3V From M.2 Edge Connector

Typical Operating Current

- 75mA @ 3.3V

Mechanical

Dimensions

- 22.0x30x3.5mm

Weight

- 0.22 oz (6.2g)

Environmental

Operating Parameters

- Temperature: -40°C to +85°C
- Humidity (non-condensing): 20% to 90%

Storage Parameters

- Temperature: -40°C to +85°C
- Humidity (non-condensing): 5% to 95%