At CES 2016 the Wifi Alliance unveils a next generation wifi standard-- HaLow (aka 802.11ah), a standard operating on the 900Mhz designed for the low power needs of sensors and wearables.



HaLow is best described as broad yet shallow, since it offers double the range of the current 2.4GHz standard with better wall penetration and lower power consumption while providing less bandwidth. As such it is ideal for the small data payloads and low-power devices making the Internet of Things (IoT).

The standard should "broadly adopt existing wifi protocols," providing it with regular IP-based connectivity, wifi-grade security and interoperability. HaLow devices will also support 2.4GHz and 5GHz connectivity, allowing connection with the broader wifi ecosystem.

“Wifi HaLow is well suited to meet the unique needs of the smart home, smart city and industrial markets because of its ability to operate using very low power, penetrate through walls, and operate at significantly longer ranges than wifi today,” the alliance says. “Wifi HaLow expands the unmatched versatility of wifi to enable applications from small, battery-operated wearable devices to large-scale industrial facility deployments-- and everything in between.”

Go Wifi Alliances Introduces Low Power, Long Range Wifi HaLow