

# What is 802.11ac and what's the advantage compared with 11n?

It is suitable for: All TOTOLINK adapters.

### **Application introduction:**

IEEE 802.11ac is a wireless computer networking standard in the 802.11 family, developed in the IEEE Standards Association process, providing high-throughput wireless local area networks (WLANs) on the 5 GHz band.



# **Comparison of Wireless-AC and Wireless-N technologies:**

## 1. Throughput

The 802.11n Wi-Fi connections max out at around 150Mbps with one antenna, 300Mbps with two and 450Mbps with three antennas. 802.11ac connections will be roughly three times faster- so that's 450Mbps, 900Mbps and 1.3Gbps respectively.

#### 2. Channel Bandwidth

Mandatory 80 MHz channel bandwidth for stations, 160 MHz available optionally 40 MHz maximum in 802.11n

#### 3. Modulation

256-QAM, rate 3/4 and 5/6, added as optional modes in 802.11ac 64-QAM, rate 5/6 maximum in 802.11n

## 4. MIMO spatial streams

Up to eight spatial streams in 802.11ac (vs. four in 802.11n)