Highlights

- 3000 Mbps WiFi
    - 2.4 GHz / 5 GHz 802.11ax Dual-Band
- Gigabit PoE
    - 10x the speed of 10/100 Fast Ethernet
- Up to 220m WiFi Range
    - Long-Range Omni-Directional Antennas
- Cloud Management
    - Remotely configure, check status, Web/APP & more

Overview

The neolink neo-U6-LR delivers the latest WiFi 6 802.11ax with MU-MIMO at a wireless range up to 200 metres.

Backwards compatible to older WiFi standards, WiFi 6 allows devices to send more data in one transmission, resulting in a 20% improvement in speed through higher order modulation (1024-QAM). This higher order modulation increases the efficiency and speed of data transmission in the network, providing a 25% improvement in speed and performance.

160MHz bandwidth on 5 GHz with zero wait DFS is supported (depending on local regulations). This increases the number of WiFi channels and reduces channel interference. It also increases the throughput to the connected device.

OFDMA (Orthogonal Frequency-Division Multiple Access) increases efficiency and lowers latency for high demand environments. Together with 2 MHz narrowband transmission, packet loss and interference is significantly reduced.

TWT (Target Wake Time) improves battery life and reduces power consumption in WiFi devices, including IoT (Internet of Things) devices.

Basic Service Set Colouring (BSS Colouring) enables the WiFi network to more effectively and concurrently transmit data to multiple devices in congested areas which reduces waiting time and lessens contention.

Security is further improved with next-generation WPA3 encryption protocol.

Remotely manage, configure and control the device remotely from anywhere in the world via the Neolink app (available on iOS and Android) as well as from https://myneocloud.com.

In a multiple Access Point environment, seamless roaming (802.11k and 802.11v) provides instant switching to the access point with optimal signal when moving between Access Points.

	neo-AC-LR	neo-U6-LR
WiFi Standards	802.11 ac/v/r/k/n/g/b/a WiFi 5	802.11 ax/ac/v/r/k/n/g/b/a WiFi 6
Frequency	2.4 GHz and 5 GHz concurrent	2.4 GHz and 5 GHz concurrent
Multi-User MIMO (MU-MIMO)	2x2	2x2
Maximum Theoretical Throughput	1.2 Gbps AC1200	3.0 Gps AX3000
2.4 GHz Throughput	300 Mbps	574 Mbps
5 GHz Throughput	867 Mbps	2402 Mbps
Antenna	2 x 4 dBi	4 x 4 dBi
2.4 GHz Maximum TX Power	26 +/- 1.5 dBm	29 +/- 1.5 dBm
5 GHz Maximum TX Power	26 +/- 1.5 dBm	29 +/- 1.5 dBm
Ethernet Port	1 x Gigabit PoE Input	1 x Gigabit PoE Input 1 x Gigabit LAN Output
PoE Standards	IEEE 802.3at	IEEE 802.3at
Zero Wait DFS	No	Yes
160 MHz Bandwidth	No	Yes
Wireless Security	WPA-PSK, WPA-Enterprise (WPA/WPA2)	WPA-PSK, WPA-Enterprise (WPA/WPA2/WPA3)
Maximum SSID	2.4 GHz: 8, 5 GHz: 4	2.4 GHz: 7, 5 GHz: 4
Beamforming	Yes	Yes
OFDM/OFDMA	No	Yes
TWT	No	Yes
BSS Colouring	No	Yes
1024 QAM	No	Yes
Maximum Concurrent Clients	256	256
VLAN	802.1Q & SSID to VLAN mapping	
WMM	Voice, Video, Best Effort, and Background	
Seamless Roaming	Yes	Yes
Software Watchdog	Yes	Yes
Power Save Mode	Yes	Yes
Guest Traffic Isolation	Yes	Yes
Mounting	Wall/Ceiling (included)	Wall/Ceiling (included)

Reset Button	Yes	Yes
LED	Power (can disable)	Power (can disable)
Management	Neolink (iOS, Android), https://myneocloud.com, Web Interface	
Protection	Lightning ≥6kV, ESD, Air discharge: ±8kV, Contact discharge: ±4kV	
Operating Temperature	-10°C ~ 45°C (14F ~ 113F)	-10°C ~ 45°C (14F ~ 113F)
Power method	802.3at PoE or 24V Passive PoE	802.3at PoE
Power supply	24V Passive PoE Gigabit Injector (included)	51V PoE Gigabit Injector (included)
Power consumption	<11.5W	<15.7W
Dimensions (W x D x H)	176 x 43.5 mm	251 x 55 mm