

Nokia WiFi Beacon G6

Beacon Gateway for the intelligent mesh network

The Nokia WiFi Beacon G6 extends the whole home Wi-Fi experience for broadband subscribers. This premium class Beacon Gateway supports Wi-Fi 6 and Wi-Fi EasyMesh™, to create a whole home coverage mesh network backhauled by wired Ethernet or Wi-Fi. This coverage can be expanded at any time by installing additional Nokia WiFi Beacon 2 units to ensure seamless roaming throughout the home. The Beacon G6 includes the Nokia WiFi Mesh Middleware which ensures the best possible Wi-Fi performance. The end-user experience with the intelligent self-organizing mesh system is enhanced by the service provider's Wi-Fi management capabilities in the cloud and intuitive home user support using the Nokia WiFi mobile app.

The Nokia WiFi Beacon G6 is a dual-band Wi-Fi 6 mesh system with Wi-Fi Alliance (WFA) certified Wi-Fi EasyMesh, enhanced by Nokia value added features. The Nokia WiFi Mesh Middleware creates a self-healing, self-optimizing network. It includes intelligent channel selection, band steering, client steering and backhaul management to provide the best Wi-Fi performance. The Nokia WiFi Beacon G6 will take the role of wireless router with access to the broadband network and the wireless mesh network can be extended further with Nokia WiFi Beacon 2 units.

Optionally, the Nokia WiFi Beacon G6 can be managed by the Nokia WiFi Cloud Controller. The associated Home Console presents the help desk agents with a holistic view of the in-home network to assist them with easy identification and instantaneous resolution of issues as well as offering recommendations for operator upsell opportunities.



Nokia WiFi Beacon G6 (front view)



Nokia WiFi Beacon G6 (rear view)

The Network Console improves network operations with WiFi optimization and monitoring through high granularity of RRM algorithms capabilities and reporting.

The Nokia WiFi mobile app provides home users with an intuitive and simplified interface for trouble-free management of their home network and Wi-Fi. It also provides advanced functions such as guest Wi-Fi management and parental controls.

Features

- Dual-band concurrent Wi-Fi 6: (AX6000), compatible with all earlier generations of Wi-Fi
- One 10/100/1000/2.5G Base-T WAN interface with RJ45 connector
- One 10/100/1000/2.5G Base-T LAN interface with RJ45 connector
- Two 10/100/1000 Base-T LAN interfaces with RJ45 connector
- EasyMesh enhanced by Nokia value added features
- Optimized for multicast video streaming
- TR-069 Remote Management

Benefits

- Latest Wi-Fi 6 technology which is developed for faster, more reliable connections, smoother streaming and 4-times the device connection capacity of previous Wi-Fi standards.
- 4 antennas on 2.4GHz providing a maximum Wi-Fi throughput up to 1200Mbps and 4 antennas on 5GHz providing a maximum Wi-Fi throughput up to 4800Mbps
- Can form a mesh network with Nokia WiFi Beacon 2 with wired or wireless mesh backhauling
- Self-healing, self-optimizing mesh network
- Seamless roaming for IEEE 802.11k/v capable and legacy clients
- Client steering, channel optimization, that can be configured and finetuned for different environments in combination with the Nokia WiFi Cloud Controller

- High quality of service (QoS) video over Wi-Fi
- Ease of setup and user intuitive information

Technical specifications

Physical

- Height: 255 mm (10.0 in)
- Width: 160 mm (6.3 in)
- Depth: 85 mm (3.3 in)
- Weight: 1.16 kg (2.56 lb)

Installation

- Desktop mounting

Operating environment

- Temperature: -5°C to 45°C (23°F to 113°F)
- Relative humidity: 5% to 95%, non-condensing

Power requirements

- Local powering with 12 V DC input (external AC/DC adapter)
- Power consumption: minimum 9 W; maximum 24 W

Ethernet interfaces

- One 10/100/1000/2.5G Base-T interface with RJ-45 connector for WAN
- One 10/100/1000/2.5G Base-T interface with RJ-45 connector for LAN side
- Two 10/100/1000 Base-T interfaces with RJ-45 connectors for LAN side

WLAN interfaces

- Supports 4x4 802.11b/g/n/ax 2.4 GHz wireless LAN (WLAN) interface with support for a channel bandwidth of 20 and 40MHz
- Supports 4x4 802.11 a/n/ac/ax 5 GHz WLAN interface with support for a channel bandwidth of 20, 40, 80 and 160MHz
- Support Multi-User Multiple Input, Multiple Output (MU-MIMO)
- Support Multi-User Orthogonal Frequency Division Multiple Access (MU-OFDMA)



- Maximum effective isotropic radiated power (EIRP) on 2.4 GHz up to 2000 mW, on 5 GHz up to 2000 mW
- Wi-Fi Protected Access (WPA) support including Pre-Shared Key (WPA-PSK), WPA2 and WPA3
- Media access control (MAC) filters

Router mode

- IPv4 and IPv6 connectivity: Dual stack, stateless and stateful auto-configuration, DHCPv6 prefix delegation
- Point-to-Point Protocol over Ethernet (PPPoE) and IP over Ethernet (IPoE)
- Network Address Translation (NAT), port forwarding, demilitarized zone (DMZ) and firewall
- Dynamic Host Configuration Protocol (DHCP), domain name system (DNS) proxy and dynamic domain name system (DDNS)
- Internet Group Management Protocol (IGMP) v2/v3 proxy
- Virtual private network (VPN) pass-through for Point-to-Point Tunneling Protocol (PPTP), Layer 2 Tunneling Protocol (L2TP) and IPsec
- Flexible video delivery options over Ethernet or wireless
- TR-069 for remote management with support for TR-098 and TR-181 datamodel
- TR-369/USP support for remote management

LED

- Power
- WAN
- Internet
- WPS
- WLAN

Buttons

- Power on/off
- Wi-Fi Protected Setup (WPS)
- Device reset

Safety and electromagnetic interference (EMI)

- Protection of over voltage/current

Regulatory compliances

- UL 62368-1
- IEC 62368-1
- CSA C22.2 No. 62368-1
- FCC
- CE
- RCM
- Wi-Fi Alliance certified

About Nokia

We create technology that helps the world act together.

As a trusted partner for critical networks, we are committed to innovation and technology leadership across mobile, fixed and cloud networks. We create value with intellectual property and long-term research, led by the award-winning Nokia Bell Labs.

Adhering to the highest standards of integrity and security, we help build the capabilities needed for a more productive, sustainable and inclusive world.

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Nokia Oyj
Karakaari 7
02610 Espoo
Finland
Tel. +358 (0) 10 44 88 000

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