

Nokia WiFi Beacon 2

Wi-Fi 6 Beacon for the intelligent mesh network

The Nokia WiFi Beacon 2 extends the whole home Wi-Fi experience for broadband subscribers. This premium class Beacon 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 Wi-Fi EasyMesh-capable beacons to ensure flawless roaming throughout the home. The Beacon 2 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 mobile app.

The Nokia WiFi Beacon 2 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. As it is EasyMesh™ compliant, it provides interoperability and avoids vendor lock-in. When no dedicated gateway is in the network, the Nokia WiFi Beacon 2 will take the role of wireless router with access to the broadband network.

Optionally, the Nokia WiFi Beacon 2 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 2 (front view)



Nokia WiFi Beacon 2 (back view)

The Network Console provides an end-to-end Wi-Fi network view and allows management of groups of Wi-Fi networks.

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 parental controls.

Features

- Functions in either routed mode or bridged mode
- Dual-band concurrent Wi-Fi 6 (AX1800), compatible with all earlier generations of Wi-Fi
- Two 10/100/1000Base-T interfaces with RJ-45 connectors
- EasyMesh enhanced by Nokia value added features
- Optimized for multicast video stream
- 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.
- Self-healing, self-optimizing mesh network
- Seamless roaming for IEEE 802.11k/v capable and legacy clients
- Client steering, channel optimization
- High quality of service (QoS) video over Wi-Fi
- Ease of setup and user intuitive information

Technical specifications

Physical

- Height: 168 mm (6.6 in)
- Width: 96 mm (3.8 in)
- Depth: 96 mm (3.8 in)
- Weight: 0.45 kg (1.0 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: <13 W

Ethernet interfaces

- One 10/100/1000Base-T interface with RJ-45 connector for WAN/LAN
- One 10/100/1000Base-T interface with RJ-45 connector for LAN side

WLAN interfaces

- Supports 2x2 802.11b/g/n/ax 2.4 GHz wireless LAN (WLAN) interface
- Supports 2x2 802.11 a/n/ac/ax 5 GHz WLAN interface
- 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 500 mW, 5 GHz up to 1000 mW

- 64-bit and 128-bit Wired Equivalent Privacy (WEP) support
- 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

Extender mode

- Forwarding IPv4 and IPv6 traffic
- VPN pass-through for PPTP, L2TP and IPSec
- IGMP v2/v3 snooping
- Flexible video delivery options over Ethernet or wireless
- TR-069 for remote management with Extensible Messaging and Presence Protocol (XMPP) support for management behind a NAT router

LED

- Simple and intuitive status indication by single, colored LED on the front side

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
- FCC
- CE
- RCM
- Wi-Fi Alliance certified

About Nokia

We create the technology to connect the world. Only Nokia offers a comprehensive portfolio of network equipment, software, services and licensing opportunities across the globe. With our commitment to innovation, driven by the award-winning Nokia Bell Labs, we are a leader in the development and deployment of 5G networks.

Our communications service provider customers support more than 6.4 billion subscriptions with our radio networks, and our enterprise customers have deployed over 1,300 industrial networks worldwide. Adhering to the highest ethical standards, we transform how people live, work and communicate. For our latest updates, please visit us online www.nokia.com and follow us on Twitter @nokia.

Nokia operates a policy of ongoing development and has made all reasonable efforts to ensure that the content of this document is adequate and free of material errors and omissions. Nokia assumes no responsibility for any inaccuracies in this document and reserves the right to change, modify, transfer, or otherwise revise this publication without notice.

Nokia is a registered trademark of Nokia Corporation. Other product and company names mentioned herein may be trademarks or trade names of their respective owners.

© 2020 Nokia

Nokia Oyj
Karaportti 3
FI-02610 Espoo, Finland
Tel. +358 (0) 10 44 88 000

CID210103 (October)