Nokia WiFi Beacon 1.1

Beacon for the intelligent mesh network

The Nokia WiFi Beacon 1.1 extends the whole home Wi-Fi experience for broadband subscribers. The Nokia WiFi Beacon 1.1 operates seamlessly together with selected Nokia residential gateways and/or other Nokia beacons, to create a whole home coverage mesh network backhauled by wired Ethernet or Wi-Fi. The Beacon 1.1 includes the Nokia WiFi Mesh Middleware which ensures the best possible Wi-Fi performance. The Mesh Middleware is EasyMesh™ compliant and allows the Wi-Fi network to seamlessly grow by adding Nokia WiFi Beacons. The end-user experience with the intelligent self-organizing mesh system is enhanced by a service provider's Wi-Fi care capabilities in the cloud and intuitive home user support using the Nokia mobile app.

The Nokia WiFi Beacon 1.1 provides concurrent dual-band Wi-Fi and enables triple play services with voice, video and data. When no dedicated gateway is in the network, the Nokia WiFi Beacon 1.1 will take the role of wireless router with access to the broadband network.

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. The Nokia WiFi Beacon 1.1 is managed by the Nokia WiFi Cloud Controller. The Cloud Controller's Home Console presents help desk agents with a real-time, holistic view on the in-home network to allow fast resolution of any issue. The Cloud Controller's Network Console allows the network operations team to fully optimize a complete network of access points and to generate network-wide performance reports.

Front


Back

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.

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Features

- Functions either as wireless router or beacon in a mesh network
- Dual-band concurrent IEEE 802.11b/g/n 2x2 2.4 GHz and 802.11n/ac 2x2 5 GHz
- Three 10/100/1000Base-T interfaces with RJ-45 connectors
- Nokia WiFi Mesh Middleware for local Wi-Fi optimization
- Embedded analytics optimize network performance in real time

Benefits

- PHY rate up to 300 Mb/s for 2.4 GHz and 867 Mb/s for 5 GHz
- Self-healing, self-optimizing network
- Mesh topology and intelligent mesh routing
- Seamless roaming for IEEE 802.11k/v capable and legacy clients
- Band 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: 115 mm (4.5 in)
- Depth: 42 mm (1.6 in)
- Weight: 0.41 kg (0.90 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: <11.5 W

Ethernet interfaces

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

WLAN interfaces

- Supports 2x2 MIMO 802.11b/g/n 2.4 GHz wireless LAN (WLAN) interface
- Supports 2x2 MU-MIMO 802.11n/ac 5 GHz WLAN
- Maximum effective isotropic radiated power (EIRP) on 2.4 GHz up to 500 mW and 5 GHz up to 1 W
- 64-bit and 128-bit Wired Equivalent Privacy (WEP) support
- Wi-Fi Protected Access (WPA) support including Pre-Shared Key (WPA-PSK) and WPA2
- Media access control (MAC) filters

Router mode

- IPv4 and IPv6 connectivity: Dual stack and DS Lite, 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

Beacon 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 indicator

Buttons

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

Safety and electromagnetic interference (EMI)

- Protection for 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.

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