Nokia WiFi Beacon 3

Beacon for the intelligent mesh network – HA-030W-B

The Nokia WiFi Beacon 3 extends the whole home Wi-Fi experience for broadband subscribers. This premium class Nokia WiFi beacon 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. This coverage can be expanded at any time by installing additional Wi-Fi beacons to ensure flawless roaming for mobile users. 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 3 has Nokia state-of-the-art intelligent self-organizing mesh and built-in edge analytics over concurrent dual-band Wi-Fi that delivers a whole home optimal link to the connected equipment. This device can provide triple play services with voice, video and data, while its unique spectrum monitoring and interference detection ensure an overall top quality experience. When no dedicated gateway is in the network, the Nokia WiFi Beacon 3 will take the role of wireless router with access to the broadband network.

The Nokia WiFi Beacon 3 is managed by the Nokia WiFi home portal and 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.

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.

NOKIA

Features

- Functions either as wireless router or beacon in a mesh network
- Dual-band concurrent IEEE 802.11b/g/n 3x3 2.4 GHz and 802.11ac 4x4 5 GHz
- Four 10/100/1000Base-T interfaces with RJ-45 connectors
- Nokia intelligent mesh
- Embedded analytics optimize network performance in real time
- Real-time wireless spectrum analysis

Benefits

- PHY rate up to 750 Mb/s for 2.4 GHz and 2170 Mb/s for 5 GHz (with 1024 QAM capable clients)
- 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
- Embedded range boost technology helps to significantly extend absolute range
- Real-time wireless spectrum scan and analysis
- High quality of service (QoS) video over Wi-Fi
- Ease of setup and user intuitive information

Technical specifications

Physical

- Height: 160 mm (6.3 in)
- Diameter: 94 mm (3.7 in)
- Weight: 0.65 kg (1.4 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: <19.1 W

Ethernet interfaces

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

WLAN interfaces

- Supports 3x3 802.11b/g/n 2.4 GHz wireless LAN (WLAN) interface
- Supports 4x4 802.11ac 5 GHz WLAN interface with multi-user multiple input, multiple output (MU-MIMO)
- 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/Multicast Listener Discovery (MLD) 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/MLD 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 colored light on top of device

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
- CCC
- RCM
- Wi-Fi Alliance certified

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

Document code: SR1802022283EN (April)