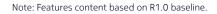**NOKIA**

Nokia FastMile 5G Gateway

The Nokia FastMile 5G Gateway is designed to help operators capitalize on the growing 5G market. The solution delivers a single indoor device that is easy to deploy and connects wirelessly to the mobile network. With carrier aggregation, the gateway improves performance and reliability by using the best available 4G and 5G signals.

The plug-and-play solution is simple to install and uses a visual guide to assist customers in identifying the right location in the home that will achieve the best performance. Compatibility with the Nokia in-home Wi-Fi solution ensures that a seamless ultra-broadband experience is achieved in every corner of the home.

The Nokia FastMile 5G Gateway maximizes spectral assets and uses the industry's highest gain (11 dBi) antenna to deliver up to twice the indoor coverage, three times the downlink capacity and five times the uplink capacity compared to traditional designs.

Features

- Fully self-contained, full featured indoor residential gateway

- 5G New Radio (NR) WAN connection with 11 dBi high gain antenna

- 4G WAN

- Carrier aggregation across supported 4G/5G bands

- 2.5 Gigabit Ethernet (GigE) WAN

- 3 GigE LAN

- Wi-Fi (3x3 802.11b/g/n, 4x4 802.11ac MU-MIMO) LAN

- Visual cues guide the consumer to the optimal location for 5G performance in the home

Note: Features content based on R1.0 baseline.

5G Gateway

Benefits

- Delivers gigabit home services with 5G NR

- Automatic 5G antenna alignment ensures maximum signal and minimal noise

- High gain antenna maximizes performance and conserves spectral assets

- Reduced deployment costs with subscriber self-installation

- Extends 5G speeds throughout the home with Nokia WiFi beacons

- Part of Nokia end-to-end 5G solution

Technical specifications

Physical

- Height: 240 mm (9.4 in)

- Width: 140 mm (5.5 in)

- Weight: 2.2 kg (4.9 lb)

Operating environment

- Temperature: 0°C to 45°C (32°F to 113°F)

Power requirements

- 12 V DC

- Consumption: 41 W maximum DC power supply

Network terminations

- Cellular WAN

    - 5G NR (3GPP)

    - 4G/Long Term Evolution (LTE)

    - SIM slot (size: 4FF/nano)

- 2.5 GigE WAN

Connectivity interfaces

- Wi-Fi (802.11b/g/n, 802.11ac)

- Three RJ-45 GigE LAN ports

- USB 3.0 Type A port

Main functions

- 5G high gain antenna, automated antenna alignment, gain in n78: 11 dBi maximum

- Multiband omni antenna for LTE

- Integrated residential gateway

- Central point of mesh network with Nokia WiFi Beacon 3s

Radio – cellular

- 3GPP, release December 15 – 5G NR Non-Standalone (NSA) option 3a, 3x

- 5G NR interface band n78 TD 3500 MHz (3300 MHz – 3800 MHz)

- Dual connectivity (EN-DC)

    - 1 LTE + DC 5G (1+n78, 3+n78, 7+n78, 28+n78)

    - 2 LTE + DC 5G (1+3+n78, 1+7+n78, 3+7+n78)

    - 3 LTE + DC 5G (1+3+7+n78)

- Downlink (DL) 4x4 multiple input, multiple output (MIMO) and 256 QAM

- Uplink (UL) 1x1 single input, single output (SISO) and 64 QAM

- Supported carrier bandwidths

    - 5G: 20 MHz, 40 MHz, 60 MHz, 80 MHz, 100 MHz

    - 4G/LTE: 5 MHz, 10 MHz, 15 MHz, 20 MHz

- FDD B1 (2100 MHz), B3 (1800 MHz), B7 (2600 MHz), B28 (700 MHz), TDD B40 (2300 MHz)

- Extensive carrier aggregation between supported bands

Radio – Wi-Fi

- Dual-band concurrent IEEE 802.11b/g/n 3x3 2.4 GHz and 802.11ac 4x4 5 GHz

- Mesh topology with Nokia WiFi Beacon 3s

- Seamless roaming (IEEE 802.11k, 802.11v)

NOKIA

Security

- Adheres to strict Nokia security standards
- Wi-Fi Protected Access (WPA) support, including WPA Pre-Shared Key (PSK) and WPA2

Management

- Multicolor LEDs for status view
- Web user interface (WUI) for local configurations
- TR-69 auto-configuration server (ACS) access for remote device management

Buttons

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

Regulatory compliance

- CE and RCM