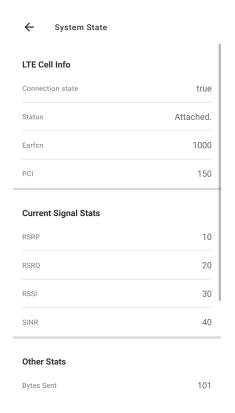
Figure 47 System state screen example for a Nokia FastMile 4G Receiver managed by an ACS through TR-069



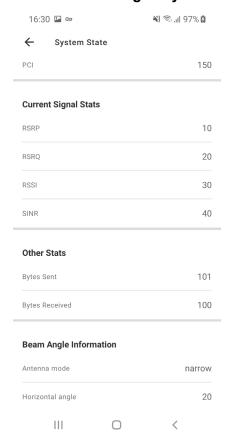


Note — The Nokia Wireless app will display a value of "N/A" for parameters that are not supported by the installed Home 4G Receiver Software version.

The following additional Beam Angle information is displayed only for an ABA version as shown in Figure 48:

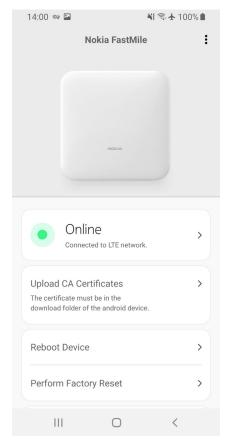
- Antenna mode: wide or narrow
- Horizontal angle: the horizontal angle is expressed as a degree if the Antenna mode is narrow or as N/A if the antenna mode is wide

Figure 48 System state screen with Beam Angle information for a Nokia FastMile 4G Receiver managed by an ACS through TR-069



- You can upload updated certificates (stored under downloads in the mobile phone's directory) to the Nokia FastMile 4G Receiver.
 - i Tap on the "Upload CA certificates" option, as shown in Figure 49.

Figure 49 Screen that has the "Upload CA certificates" option for a Nokia FastMile 4G Receiver managed by an ACS through TR-069



ii Tap on "Upload" on the Upload CA Certificates screen, as shown in Figure 50.

Figure 50 Upload CA Certificates screen for a Nokia FastMile 4G Receiver managed by an ACS through TR-069





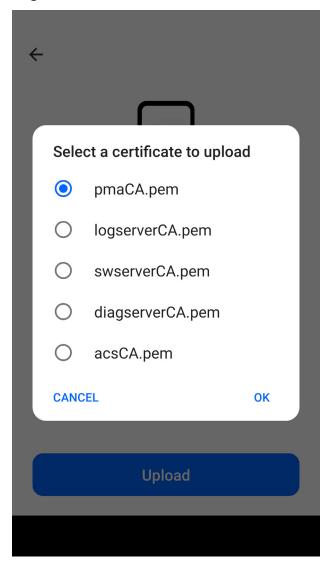
Upload CA Certificates

The certificate must be in the download folder of the android device.



A list of CA certificates appears, as shown in Figure 51.

Figure 51 List of CA certificates displayed on the Upload CA Certificates screen for a Nokia FastMile 4G Receiver managed by an ACS through TR-069

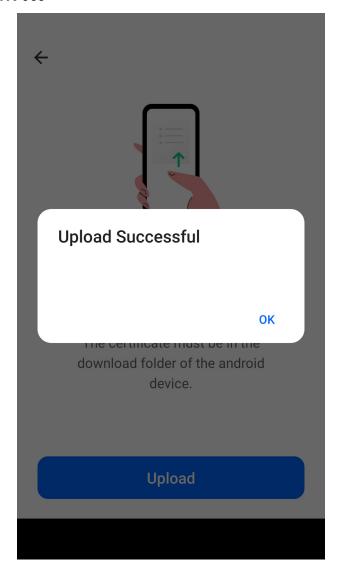


iii Select the required CA certificates and tap on "Ok". Note that the certificates must be in the download folder of the mobile phone before you can upload them to the Nokia FastMile 4G Receiver.

The following CA certificates are supported for a Nokia FastMile 4G Receiver Nokia FastMile 4G Receiver managed by an ACS:

- pmaCA.pem (used for authenticating the Nokia Altiplano FastMile Controller)
- logserverCA.pem (used for authenticating the log server)
- swserverCA.pem (used for authenticating the software upgrade server)
- diagserverCA.pem (used for authenticating the optional diagnostics server)
- acsCA.pem (used for authenticating the ACS)
- iv The screen indicates when uploading of the CA certificates was successful, as shown in Figure 52.

Figure 52 Screen showing that upload of CA certificates was successful for a Nokia FastMile 4G Receiver managed by an ACS through TR-069



Tap on "Ok" to clear the message.

Figure 53 shows the "Reboot Device" option.

¹⁰ You can reboot a Nokia FastMile 4G Receiver managed by an ACS through TR-069 by tapping on the "Reboot Device" option.

Nokia FastMile

Nokia FastMile

Online
Connected to LTE network.

Upload CA Certificates
The certificate must be in the download folder of the android device.

Reboot Device

Perform Factory Reset

>

Figure 53 Screen showing the "Reboot Device" option for a Nokia FastMile 4G Receiver managed by an ACS through TR-069

When you reboot the Nokia FastMile 4G Receiver, the screen shows the reboot message indicating that the Bluetooth connection will be interrupted and that you will be disconnected.

Press the Reboot option if you want to proceed with the reboot, or press the Cancel option.

If you pressed the Reboot option, press OK.

11 You can change the configuration settings for a Nokia FastMile 4G Receiver managed by an ACS through TR-069 to the default factory load settings by tapping on the "Perform Factory Reset" option.

Figure 54 shows the "Perform Factory Reset" option.

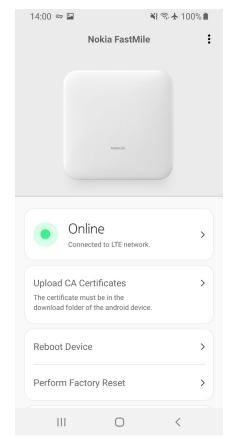


Figure 54 Screen showing the "Perform Factory Reset" option for a Nokia FastMile 4G Receiver managed by ACS through TR-069

The screen shows the factory reset message indicating that the factory reset will reset the device back to factory settings and that all changes will be lost and that you will be disconnected.

Figure 55 shows the screen that has the factory reset message.

Nokia FastMile

Perform factory reset

This will reset the device back to factory settings. All changes that have been made will be lost and you will be disconnected from the device.

CANCEL RESET

Upload CA Certificates
The certificate must be in the download folder of the android device.

Reboot Device

Figure 55 Screen showing the factory reset message for a Nokia FastMile 4G Receiver managed by ACS through TR-069

Press the Reset option if you want to proceed with the reset to factory settings, or press the Cancel option.

0

If you pressed the Reset option, press OK.

14 Management using the Web UI

- 14.1 Using the Web UI to manage the Nokia FastMile 4G Receiver
- 14.2 Using the Web UI status screen
- 14.3 Using the Web UI network screen
- 14.4 Using the Web UI CBRS screen
- 14.5 Using the Web UI system screen

14.1 Using the Web UI to manage the Nokia FastMile 4G Receiver

After the Nokia FastMile 4G Receiver has been installed, you can use the Web UI to perform some management-type activities on a Nokia FastMile 4G Receiver that is managed by an ACS through TR-069. See section 6.1.2 for more information about the Web UI.

The Web UI provides the following screens to provide support for management of the Nokia FastMile 4G Receiver:

- Status screen: allows viewing of FastMile 4G Receiver status parameter values, see section 14.2
- Network screen: allows configuration of specific FastMile 4G Receiver parameters (login is required), see section 14.3
- CBRS screen: offers the possibility to display CBSD parameters of the FastMile 4G Receiver, as well as to input registration information for CPI's usage (login is required), see section 14.4
- System screen: allows performing of advanced system actions (login is required), see section 14.5

14.2 Using the Web UI status screen

The Web UI status screen allows you to view FastMile 4G Receiver status parameters. No login is required.

The following parameters are shown:

- The Cell ID for primary attached cell
- The primary attached cell physical cell ID (PCI), eNodeB ID (eNBID), DL EARFCN and the Band

- The secondary attached cells physical cell ID (PCI) and DL EARFCN
- Secondary Component Carrier Band (Downlink)
- Secondary Component Carrier Band (Uplink)
- The Signal Strength of the attached cell: this animated model shows the RSRP (Reference Signals Received Power) of the attached cell
- The RSRP (Reference Signals Received Power) of the attached primary and secondary cells
- The RSRQ (Reference Signal Received Quality) of the attached primary and secondary cells
- The RSSI (Received Signal Strength Indication) of the attached primary and secondary cells
- The CINR (Carrier to Interference plus Noise Ratio) of the attached primary and secondary cells
- The SINR (Signal to Interference and Noise Ratio) of the attached primary cell
- Total number of MB sent on the LTE interface since last FastMile 4G Receiver restart
- Total number of MB received on the LTE interface since last FastMile 4G Receiver restart
- Total number of MB sent on the Ethernet interface since last FastMile 4G Receiver restart
- Total number of MB received on the Ethernet interface since last FastMile 4G Receiver restart
- Data Model (TR-069)
- Software Version
- Name and corresponding IP address of the configured Access Points
- Device Info table with information regarding the IMSI, IMEI, Ethernet MAC Address, Serial Number and the Model Name

You can display available cell information by triggering measurements using the "Trigger measurement" button on the Web UI status screen. Available cell information includes: physical cell ID, DL EARFCN, SINR, RSRP, RSRQ, RSSI. Note the following

- up to 12 available cells are shown, ranked from strongest to weakest by RSRP
- After approximately five seconds from triggering of measurements, the FastMile
 4G Receiver will detach from the carrier's network. Push the measurements
 status refresh button while the FastMile 4G Receiver is detached to see the
 grayed-out Web UI status screen. Reattachment of the FastMile 4G Receiver may
 take from several seconds to up to five minutes. You will need to refresh the
 browser for updated Web UI status screen contents after reattachment of the
 FastMile 4G Receiver.
- available cell information will not be visible after rebooting the FastMile 4G Receiver

Figure 56 shows an example of the top part of the Status screen when the FastMile 4G Receiver is not connected to a cell.

Figure 56 Example of the top part of the Status screen when the FastMile 4G Receiver is not connected to a cell



Figure 57 shows the lower part after scrolling down of an example of the Status screen without available cells when the FastMile 4G Receiver is not connected to a cell.

Figure 57 Example of the lower part of the Status screen without available cells when the FastMile 4G Receiver is not connected to a cell

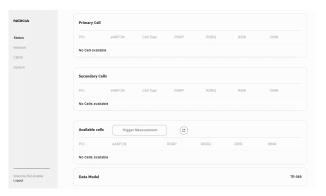


Figure 58 shows the lower part after scrolling down of an example of the Status screen with available cells when the FastMile 4G Receiver is not connected to a cell.

Figure 58 Example of the lower part of the Status screen with available cells when the FastMile 4G Receiver is not connected to a cell

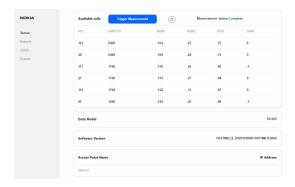


Figure 59 shows the top part of an example of the Status screen when the FastMile 4G Receiver is connected to a cell.

Figure 59 Example of the top part of the Status screen when the FastMile 4G Receiver is connected to a cell

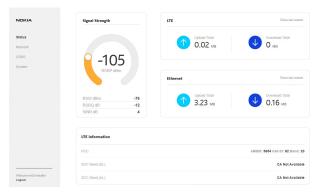
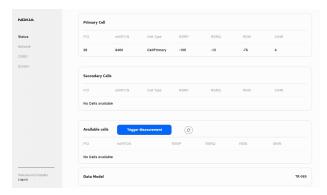


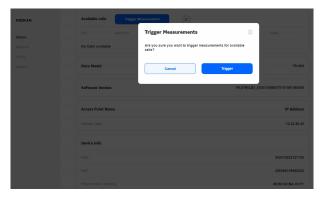
Figure 60 shows a lower part after scrolling down of an example of the Status screen when the FastMile 4G Receiver is connected to a cell. The figure shows the trigger measurement button that can be used to display information about available cells.

Figure 60 Example of a lower part of the Status screen when the FastMile 4G Receiver is connected to a cell



To display available cell information, select the trigger measurement button on the Status screen. Figure 61 shows the pop up window that appears when the trigger measurement button is selected.

Figure 61 Example of the Trigger Measurement pop up window



You can proceed or cancel the trigger measurement action.



Note — After approximately five seconds from triggering of measurements, the FastMile 4G Receiver will detach from the carrier's network. Push the measurements status refresh button while the FastMile 4G Receiver is detached to see the grayed-out Web UI status screen. Reattachment of the FastMile 4G Receiver may take from several seconds to up to five minutes. You will need to refresh the browser for updated Web UI status screen contents after reattachment of the FastMile 4G Receiver.

The following figures show examples of screens involved in the trigger measurement action:

- Figure 62 shows trigger measurement that is ongoing
- Figure 63 shows trigger measurement that has completed with a list of available cells and the FastMile 4G Receiver is detached from the carrier's network
- Figure 64 shows trigger measurement that has completed and the FastMile 4G Receiver is reattached to the carrier's network

Figure 62 Example of ongoing Trigger Measurement



Figure 63 Example of Trigger Measurement completed and FastMile 4G Receiver is detached

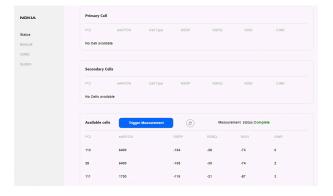


Figure 64 Example of Trigger Measurement completed and FastMile 4G Receiver is reattached

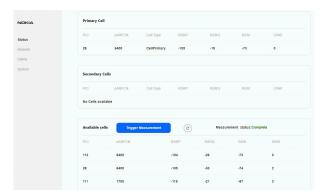


Figure 65 shows the lowest part after scrolling down of an example of the Status screen when the FastMile 4G Receiver is connected to a cell.

Figure 65 Example of the lowest part of the Status screen when the FastMile 4G Receiver is connected to a cell



14.3 Using the Web UI network screen

The Web UI network screen allows you to perform FastMile4G Receiver configuration actions. Login is required. For details on the Web UI login, please refer to the Customer Release Notes.

The following configuration capabilities are supported:

- Configuration of ACS URL
- Configuration of ACS username
- Configuration of ACS password
- Configuration of Connection Request Port
- Configuration of Connection Request Username

- Configuration of Connection Request Password
- Configuration of Periodic Inform Interval
- Configuration of Periodic Inform Request
- Setting of location; that is, geocoordinates (latitude and longitude)
- Configuration of Access Points (up to one default AP in router mode and up to four APs in bridge mode; a total of five APs can be configured). AP configuration includes configuration of:
 - AP name
 - forwarding mode (router or bridge)
 - Username
 - Password
 - Authentication mode
 - VLAN
 - MTU size
 - subnet mask
 - Note that the default AP cannot be deleted
- Configuration of cell list (up to nine cells can be configured)
- Configuration of the DHCP server for router mode
- · Uploading of CA certificates



Note — CA certificates must be pre-downloaded to the laptop so that they can be browsed and found via the 'Upload Certificate' action. The CA Certificates must comply to the naming rules required by the FastMile4G Receiver.

The following CA certificates are supported:

- logserverCA.pem (used for authenticating the log server)
- swserverCA.pem (used for authenticating the software upgrade server)
- diagserverCA.pem (used for authenticating the optional diagnostics server)
- acsCA.pem (used for authenticating the ACS)

Figure 66 shows an example of the Login screen.

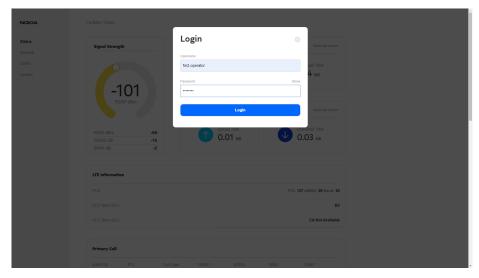


Figure 66 Example of the Login screen

Figure 67 shows an example of the Network screen.

NOKIA FastMile / Network Controller Configuration http://192.168.0.10:7547/ Edit **Connection Request** Edit System Location Latitude: -90 Longitude: -180 Edit DHCP 192.168.0.10 (j) **Upload Certificate** Upload Certificate **Access Points** RouterMode VLAN MTU size 1500

Figure 67 Example of the Network screen

Figure 68 shows an example of scroll down for the Network screen.



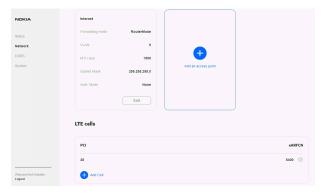


Figure 69 shows an example of the Add Access Point window.

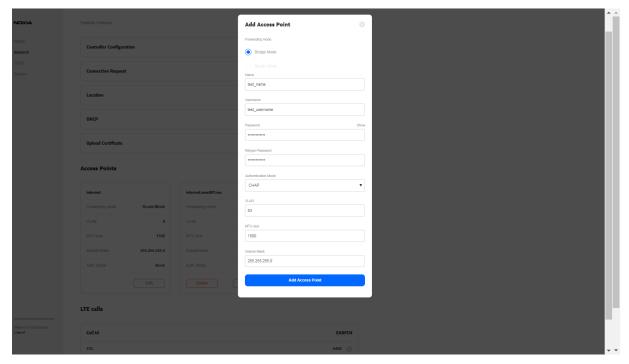


Figure 69 Example of the Add Access Point window

Figure 70 shows an example of the Delete Access Point window

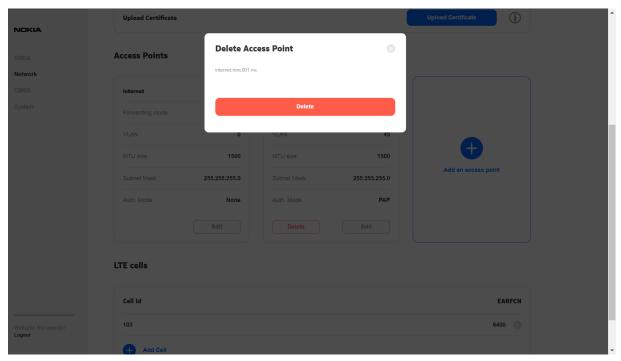


Figure 70 Example of the Delete Access Point window

Figure 71 shows an example of the Edit Location window.

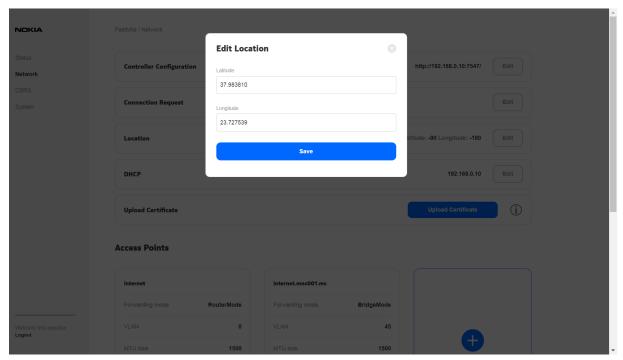


Figure 71 Example of the Edit Location window

Figure 72 shows an example of the Edit Controller window.

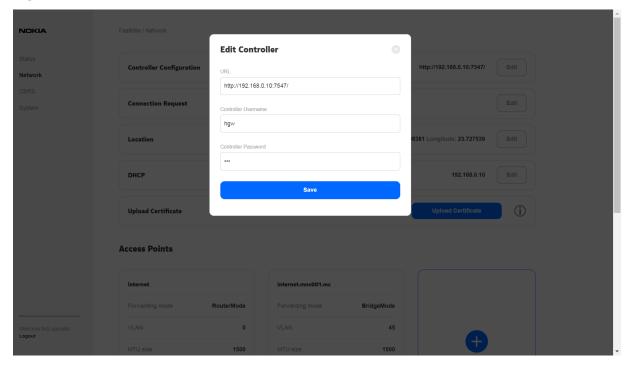


Figure 72 Example of the Edit Controller window

Figure 73 shows an example of the Edit Connection Request window.

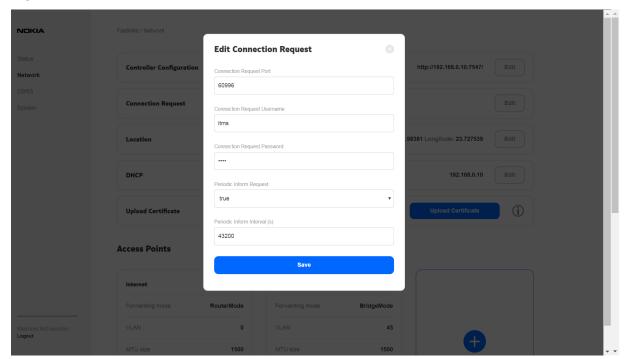


Figure 73 Example of the Edit Connection Request window

Figure 74 shows an example of the Edit DHCP window.

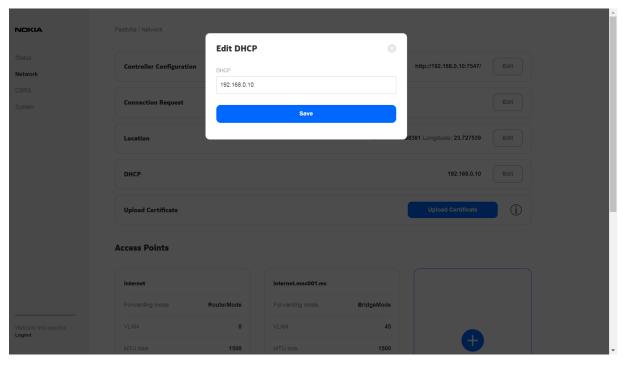


Figure 74 Example of the Edit DHCP window

Figure 75 shows an example of the Certificates information window that opens when you click on Upload Certificate.

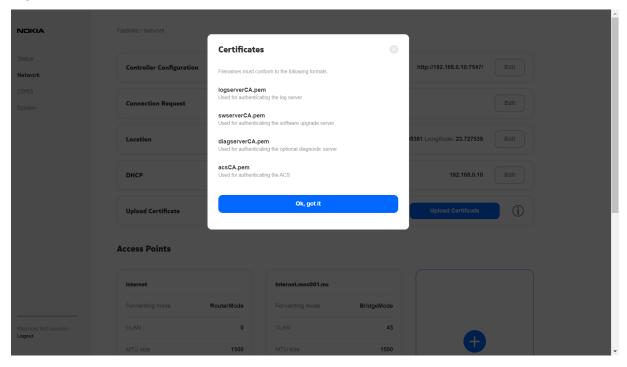
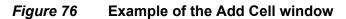


Figure 75 Example of the Certificates information window

Figure 76 shows an example of the Add Cell window.



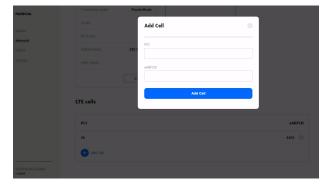


Figure 77 shows an example of the Delete Cell window.

NOTICIA

Permenting motion

Noticeta

VAJAN

Delete Call

PO

States

Noticeta

LTE cells

PCI

Auto Malain

Auto Call

A

Figure 77 Example of the Delete Cell window

14.4 Using the Web UI CBRS screen

The Web UI CBRS (Citizens Broadband Radio Service) screen is intended for the US market and offers the possibility to display CBSD (Citizens Broadband Radio Service Device) parameters of the FastMile 4G Receiver, as well as to input registration information for CPI's (Certified Professional Installer) usage. Login is required. For details on the Web UI login, please refer to the *Customer Release Notes*.

The Web UI CBRS screen allows you to view the following FastMile 4G Receiver CBSD parameters:

- FCC (Federal Communications Commission) ID
- CBSD (Citizens Broadband Radio Service Device) Category
- Air interface
- Measurement Capability

Additionally, the Web UI CBRS screen allows you to input the following parameters:

- User ID
- CRL (Certificate Revocation List) file
- CRL (Certificate Revocation List) URL
- SAS Server URL

Figure 78 shows an example of the Web UI CBRS screen.

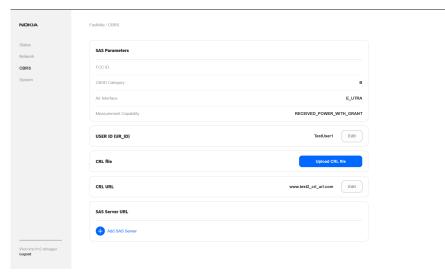


Figure 78 Example of the Web UI CBRS screen

14.5 Using the Web UI system screen

The Web UI system screen allows you to perform advanced system actions on the FastMile 4G Receiver. Login is required. For details on the Web UI login, please refer to the *Customer Release Notes*.

The following advanced system capabilities are supported:

- Restart device: the FastMile 4G Receiver configuration remains intact
- Restore factory settings: factory configuration of the FastMile 4G Receiver is used; subsequent configuration is lost
- · Update firmware:
 - before doing any firmware update action, make sure that the update path from the existing firmware to new firmware is supported by the FastMile 4G Receiver
 - new image is installed in the FastMile 4G Receiver; the FastMile 4G Receiver configuration remains intact
- Enable/disable LAN SSH access (by default LAN SSH access is enabled)
- Enable/disable WAN SSH access (by default WAN SSH access is disabled)

Figure 79 shows an example of the System screen.

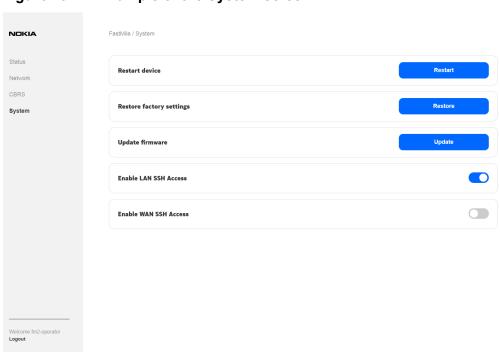


Figure 79 Example of the System screen

Figure 80 shows an example of the Restart Device confirmation window.

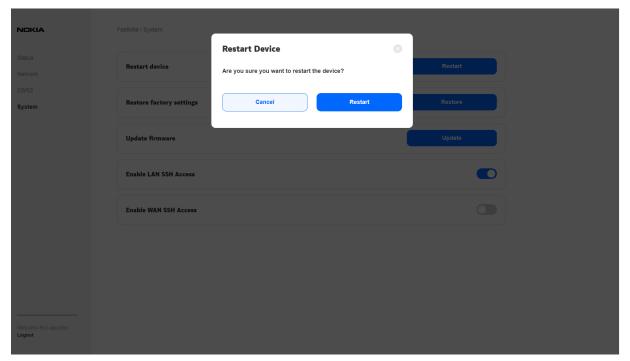


Figure 80 Example of the Restart Device confirmation window

Figure 81 shows an example of the Restore Device confirmation window used to restore the device to factory settings.

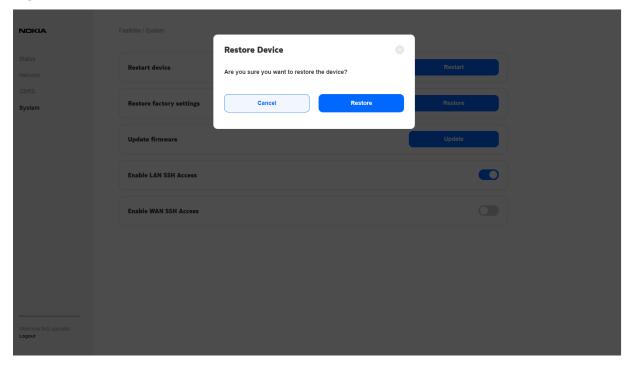


Figure 81 Example of the Restore Device confirmation window

Figure 82 shows an example of the screen that displays while firmware is being uploaded.

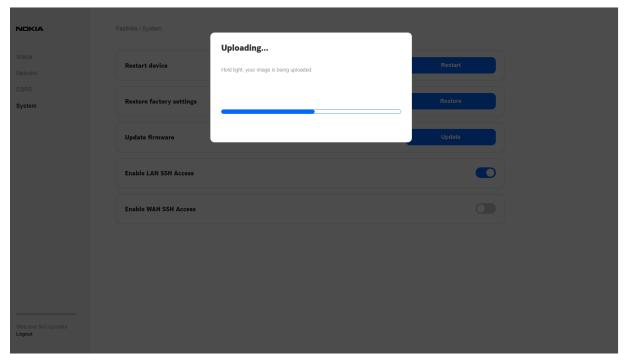


Figure 82 Example of the screen that displays while firmware is being uploaded

Figure 83 shows an example of the screen that displays while firmware is being upgraded.

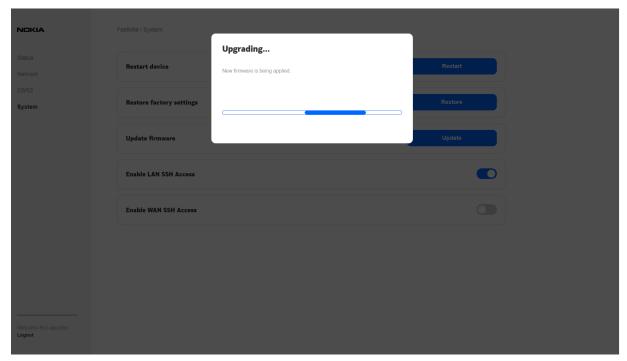


Figure 83 Example of the screen that displays while firmware is being upgraded

Figure 84 shows an example of the screen that displays while the system is being rebooted.

Status
Network
CDRS
System

Restart device
Females updated System needs to reboot. This could take up to 2 minutes.

Restart

Update firmware

Update

Enable LAN SSH Access

Enable WAN SSH Access

Figure 84 Example of the screen that displays while the system is being rebooted

15 Standards certification

- 15.1 Standards certification for Compact mono-band and ABA models
- 15.2 Standards certification for the Compact multi-band models

15.1 Standards certification for Compact mono-band and ABA models

Table 24 provides standards certification information for the Compact mono-band and ABA models of the Nokia FastMile 4G Receiver.

Table 24 Standards certifications for the Nokia FastMile 4G Receiver Compact mono-band and ABA models

Category	Certifications
RF	EN 301 908-13 for Band 3, 7, 38, 40, 42, 43 of the Compact mono-band models and Band 42, 43 of the ABA model
	FCC 47 Parts 27 for Band 7 and 41 of the Compact mono-band models
	ISED for Band 42 and 43 of the ABA model
EMC	ETSI EN 301 489-1 and -52 for Band 3, 7, 38, 40, 42, 43 of the Compact mono-band models and Band 42, 43 of the ABA model
	FCC 47 part 2/15 for Band 7 and 41 of the Compact mono-band models
	ISED for Band 42 and 43 of the ABA model
RoHS	Directive 2011/65/EU
Safety	EN/IEC 60950-1; 60950-22
	UL 62368-1, UL 60950-22,UL 50E, EN/IEC 60529 (IP66)

The CE mark is valid for Band 3, 7, 38, 40, 42, 43 of the Compact mono-band models and Band 42, 43 of the ABA models.

The FCC ID is valid for Band 7 and 41 of the Compact mono-band models. See section 18.1 for the FCC ID for each model.

The ISED ID is valid for Band 42 and 43 of the ABA model.

See chapter 18 for FCC statements and label instructions.

15.2 Standards certification for the Compact multi-band models

<< are changes need in the table or the in text below the table for RCR ALU02675463 (Fastmile 4G - 4G06-A with pre-installed CBSD certificate) and/or RCR ALU02675458 (Fastmile 4G - 4G01-A with 20m pigtail and pre-installed CBSD certificate)? >>

Table 25 provides standards certification information for the Compact multi-band models of the Nokia FastMile 4G Receiver.

Table 25 Standards certifications for the Nokia FastMile 4G Receiver Compact multi-band models

Category	Certifications
RF	 EN 301 908-13 for the following: Band 1, 3, 7, 20, 28, 38, and 40 of the Compact multi-band 4G05-A and 4G05-B models Band 3, 7, 20, and 32 of the Compact multi-band 4G04-A model Band 1, 3, 7, 20, and 32 of the Compact multi-band 4G17-A model Band 7, 28, 42, and 43 of the Compact multi-band 4G06-A model FCC 47 Part 27 for Band 41 of the Compact multi-band 4G05-A and 4G05-B models and Band 2, 25,4, 66, and 7 of the Compact multi-band 4G06-A model
EMC	 ETSI EN 301 489-1 and -52 for the following: Band 1, 3, 7, 20, 28, 38, and 40 of the Compact multi-band 4G05-A and 4G05-B models Band 3, 7, 20, and 32 of the Compact multi-band 4G04-A model Band 1, 3, 7, 20, and 32 of the Compact multi-band 4G17-A model Band 7, 28, 42, 43 of the Compact multi-band 4G06-A model FCC 47 part 2/15 for Band 41 of the Compact multi-band 4G05-A and 4G05-B models and Band 2, 25, 4, 66, 7 of the Compact multi-band 4G06-A model
RoHS	Directive 2011/65/EU
Safety	EN/IEC 60950-1; 60950-22 UL 62368-1, UL 60950-22,UL 50E, EN/IEC 60529 (IP66)

The CE mark is valid for Band 1, 3, 7, 20, 28, 38, 40 of the Compact multi-band 4G05-A and 4G05-B models and Band 3, 7, 20, and 32 of the Compact multi-band 4G04-A model and Band 1, 3, 7, 20, and 32 of the Compact multi-band 4G17-A model and Band B7,28,42,43 of the Compact multi-band 4G06-A model.

The FCC ID is valid for Band 41 of the Compact multi-band 4G05-A and 4G05-B models and Band 2, 25,4, 66, and 7 of the Compact multi-band 4G06-A model.

See section 18.1 for the FCC ID for each model.

See chapter 18 for FCC statements and label instructions.

16 Appendix A: Specifications

16.1 Specifications

16.1 Specifications

Table 26 provides some specifications for the Nokia FastMile 4G Receiver.

Table 26 Specifications for the Nokia FastMile 4G Receiver

Item	Description	
Dimensions	Compact multi-band models: 22.7 cm by 22.7 cm by 6.4 cm (8.94 in by 8.94 in by 2.52 in)	
	Compact mono-band models: 23.5 cm by 23.5 cm by 5.2 cm (9.3 in by 9.3 in by 2 in)	
	ABA models: 31.8 cm by 31.8 cm by 5.6 cm (12.5 in by 12.5 in by 2.2 in)	
Weight	Compact multi-band models: 0.88 kg (1.9 lb)	
	Compact mono-band models: 1.3 kg (2.9 lb)	
	ABA models: 2 kg (4.4. lb)	
Power consumption	Idle: 1.6 W	
	Maximum: 12 W	
Operating altitude	Maximum operating altitude is 3048 m (10 000 ft) above mean sea level	
Non-operating altitude	Maximum non-operating altitude is 12 192 m (40 000 ft) above mean sea level	
Operating temperature	Compact mono-band and ABA models:	
	• -30°C to 65°C (-22°F to 149°F)	
	Compact multi-band models:	
	 Model 4G05-B: -40°C to 55°C (-40°F to 131°F) 	
	 models other than Model 4G05-B: –30°C to 55°C (–22°F to 131°F) 	
Storage temperature	-40°C to 85°C (-85°F to 185°F)	
Humidity	5% to 95% non condensing	
IP rating	IP66 TYPE3	

17 Appendix B: RF exposure

17.1 RF exposure

17.1 RF exposure

<< are changes need in the table for RCR ALU02675463 (Fastmile 4G - 4G06-A with pre-installed CBSD certificate) and/or RCR ALU02675458 (Fastmile 4G - 4G01-A with 20m pigtail and pre-installed CBSD cerfiticate)? >>

The international standards used for the assessment of this device provide simple conformity assessment methods for low power electronic and electrical equipment to an exposure limit relevant to electromagnetic fields (EMF).

Table 27 indicates RF exposure distances for each model for:

- CE based on the compliance criteria for maximum permissible exposure as in CE Council Recommendation Directive 2014/53/EU
- FCC based on the compliance criteria for maximum permissible exposure as in FCC 47

Table 27 RF exposure distances

Model	RF exposure distance	
	CE	FCC
4G01-A	50 cm (19.69 in)	20 cm (7.87 in)
4G01-B	50 cm (19.69 in)	50 cm (19.69 in)
4G02-A	50 cm (19.69 in)	N/A
4G03-A	50 cm (19.69 in)	50 cm (19.69 in)
4G04-A	20 cm (7.87 in)	20 cm (7.87 in)
4G05-A	20 cm (7.87 in)	N/A
4G05-B	20 cm (7.87 in)	N/A
4G06-A	20 cm (7.87 in)	23 cm (9.06 in)
4G17-A	20 cm (7.87 in)	N/A

18 Appendix C: FCC statements and label instructions

- 18.1 FCC compliance statement
- 18.2 FCC radiation exposure statement
- 18.3 FCC label instructions

18.1 FCC compliance statement

<< are changes need in the table for RCR ALU02675463 (Fastmile 4G - 4G06-A with pre-installed CBSD certificate) and/or RCR ALU02675458 (Fastmile 4G - 4G01-A with 20m pigtail and pre-installed CBSD cerfiticate)? >>

Table 28 provides the FCC ID for the Nokia FastMile 4G Receiver.

Table 28 FCC ID for Nokia FastMile 4G Receiver

Model	FCC ID
4G01-A	2ADZR34003800FM20
4G01-B	2ADZR34003800FM201
4G02-A	Not applicable
4G03-A	2ADZR23002690FM20
4G05-A	2ADZR4G05A
4G05-B	Not applicable
4G06-A	2ADZR4G06A
4G17-A	Not applicable

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- 1) This device may not cause harmful interference, and
- 2) This device must accept any interference received, including Interference that may cause undesired operation.

18.2 FCC radiation exposure statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distances indicated in chapter 17 between the radiator and your body.

18.3 FCC label instructions

The outside of final products that contains this module device must display a label referring to the enclosed module. This exterior label can use wording such as: "Contains Transmitter Module FCC ID: 2ADZR4G04A and 2ADZR4G05A". Any similar wording that expresses the same meaning may be used.

19 Glossary

This glossary provides the expansions and optional descriptions of most acronyms and initialisms that appear in this document.

3GPP 3rd Generation Partnership Project

ABA Automated Beam Alignment

ACS Auto Configuration Server

ANSI American National Standards Institute

AP Access Point

APN Access Point Name

CA Certificate Authority or Carrier Aggregation

CBRS Citizens Band Radio Service

CRoHS China Restriction of Hazardous Substances

DL Downlink

DSCP Differentiated Services Code Point

DUID Device Unique Identifier

EARFCN E-UTRA Absolute Radio Frequency Channel Number

ECI External Call Interface

EPC Evolved Packet Core

E-UTRA Evolved Universal Terrestrial Radio Access

EIP Electronic Information Products

EMC Electromagnetic Compatibility

EMI Electromagnetic Interference

EPC Evolved Packet Core

ESD Electrostatic Discharge

ETL Electrotechnical Laboratory

ETSI European Telecommunications Standards Institute

FCC Federal Communications Commission

FDD Frequency Division Duplex

FM FastMile

HSS Home Subscriber Server

IEEE Institute of Electrical and Electronics Engineers

IP International Protection or Internet Protocol

IPTV Internet Protocol over Television

LAN Local Area Network

LED Light Emitting Diode

LTE Long-Term Evolution

MAC Media Access Control

MCV Maximum Concentration Value or Minimum Concentration Value

MIMO Multiple-Input Multiple-Output

MME Mobility Management Entity

NAC Network Access Control
NEC National Electrical Code

OAM Operations and Maintenance

PCI Physical Cell Identifier

PCRF Policy and Charging Rules Function

PDF Portable Document Format

PIN Personal Identification Number

PoE Power over Ethernet

QCI QoS Class Identifier

QoS Quality of Service

QR Quick Response
RF Radio Frequency

RoHS Restriction of Hazardous Substances

RSRP Reference Signal Received Power
RSRQ Reference Signal Received Quality

RSSI Received Signal Strength Indicator

SIM Subscriber Identify Module

SINR Signal-to-Interference-plus-Noise Ratio

TCP Transmission Control Protocol

TDD Time Division Duplex

UDP User Datagram Protocol

UL Underwriters' Laboratories

Uplink

URL Uniform Resource Locater

VDC Volts Direct Current

VoIP Voice over Internet Protocol

VPN Virtual Private Network

WiFi Wireless Fidelity

ZIP Compressed File

Customer document and product support



Customer documentation

<u>Customer Documentation Welcome Page</u>



Technical Support

Customer Documentation Technical Support



Documentation feedback

Customer Documentation Feedback