Smart Node

B2/B14 or B66
(SN4IBN)

Quick Start Guide

NOKIA

Table of Contents:

Welcome

The Smart Node 4G provides enhanced mobile voice and data service within buildings. It delivers high quality voice calls and faster, more reliable mobile data service.

The Smart Node connects to your broadband Internet service to deliver an extended indoor mobile network coverage. The in-building mobile phone connectivity, signal quality, and data bandwidth will greatly improve, especially if the building is in a remote area or out of adequate mobile phone tower range.

Inside this packaging you will find the Smart Node and its accessories necessary for the installation. The Smart Node has zero touch set-up process. Just install as detailed in this guide and it connects to your mobile phone automatically whenever your phone is within range.

Before you begin you need to make sure you have the following:

- High speed internet service and an available Ethernet LAN port on your router.
- An available power socket or electrical outlet.
- A LTE phone registered for LTE service with your service provider.

Box Content

Quick Start Guide

(This document)

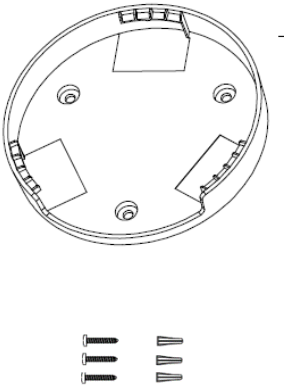
Smart Node 4G Module

Back Haul Module

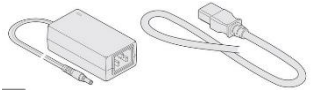
(assembled with the 4G Module

Wall Mounting Kit

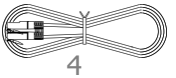
(1 Bracket, 3 Screws, and 3 Wall Anchors)



AC Power Adaptor



Ethernet Cable



GPS Antenna

Connection Overview

All Smart Node Variants

Power
Power on when AC Adaptor is plugged in.

Yellow WAN Port
Connect to internet router.

Grey LAN Port
Connect to other devices, like PC, if needed.

GPS Port
Connect the external GPS antenna if needed.

Reset
1. Press and hold for 5 seconds for reboot.
2. Press and hold for 20 seconds for factory setting reset and software update.

Quick Setup

1 Connect your Smart Node to the Internet

Connect the Ethernet cable from the yellow "WAN" port on your Smart Node to an available Ethernet port on your internet router.

2 Connect GPS antenna to Smart Node

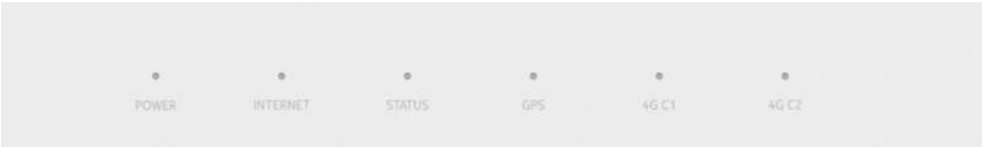
Connect the GPS antenna cable to the GPS port. Position the antenna out side the home where sky visibility is there or place it as close to a window as possible.

3 Power on your Smart Node

Plug in your AC power adaptor into the power outlet and connect the power cable to the Smart Node power port.

❸ Let your Smart Node

After you power on your Smart Node, it will go through self- installation. It can take up to 45 minutes to complete the device setup. Your Smart Node may download updates and restart during this time.



- **Power (Solid White)**

  Power on. Device self-testing and update complete.

- **Internet (Solid White)**

  Successful internet connection.

- **Status (Solid White)**

  Successful connection established with mobile operator network.

- **GPS (Solid White)**

  Successful connection established with the Global Satellite System

- **4G C1 (Solid White)**

  Device is ready to provide 4G service for Carrier 1.

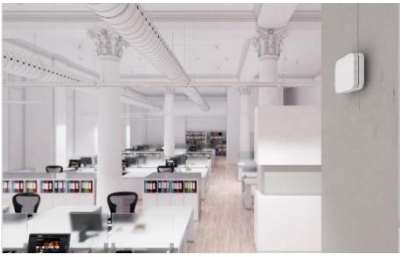
- **4G C2 (Solid White)**

  Device is ready to provide 4G service for Carrier 2.

- **4G C2 is off/unlit in case only one LTE cell is enabled.**

Device is ready to provide 4G service for Carrier 2.

❹ Flexible mount options are available for the Smart Node



• **Wall mounting (accessories included in the box)**

• **Ceiling mounting (accessories included in the box)**

• **Desk stand (not included in the box, Optional accessory)**

Mount the Smart Unit as needed.

Congratulations! Your Smart Node setup is complete.

You should see improved signal strength from your device. Make your first call to enjoy more dependable voice calls and more reliable high- speed data connection.

Common Troubleshooting Procedures

Issue Description and Resolution	Power	Internet	Status	GPS	4G CH1	4G CH2
Device has a hardware issue.	Solid Orange	Solid Orange	Solid Orange	Solid Orange	Solid Orange	Solid Orange/Off
Tamper Detected Product has a temper alarm. Radio and all other components have been turn off	Solid Orange	Solid Orange	Solid Orange	Flashing Orange	Flashing Orange	Flashing Orange/off
Network Attach failure Device could not access local network (Ethernet or DHCP failure, could not reach SeGW).	Solid White	Solid orange	Off	Any	Off	Off
Failed to contact SeGW Unit completed DHCP but could not contact the SeGW.	Solid White	Flashing Orange	Off	Any	Off	Off
SeGW authentication failure. Unit contacted SeGW but failed.	Solid White	Solid White	Solid Orange	Any	Off	Off
4G FGW Connection failure Failed to connect to the 4G Femto Gateway.	Solid White	Solid White	Flashing Orange	Any	Off	Off
LTE at full capacity LTE cell has reached configured maximum number of UEs.	Any	Any	Flashing White	Any	Flashing White	Off
No GPS Signal Device is not able to capture GPS signal.	Any	Any	Any	Solid Orange	Any	Off
Searching for satellites	Any	Any	Any	Flashing white	Any	Off
Environment failure The device is overheated. Move device to a cooler location.	Flashing Orange	Flashing Orange	Flashing Orange	Flashing Orange	Flashing Orange	Flashing Orange/off

FAQs

How do I know that I am using my Smart Node service?

Your mobile phone display will automatically indicate if you are within small cell signal range. If registered and configured properly, your mobile phone should display a small cell service message and an associated signal indicator.

Will my call drop if I leave the building in the middle of a call?

If you move out of range of the Smart Node, your call will be automatically transferred to the next available network service offered by your mobile service provider, without disconnecting your call. If no other mobile network is available your call will be disconnected.

What happens if my broadband connection fails?

If you lose your broadband connection in cases of IP connectivity set up failure, the Internet light will light solid orange and your Smart Node coverage will stop. The Smart Node service will return when the broadband connection is recovered.

What happens if my Smart Node stops operating – can I still place a call?

If your Smart Node stops operating (e.g. if you have lost your broadband connection) then you will no longer be able to place calls through the Smart Node. However, if you have coverage from the mobile network of your mobile service provider you can still place calls normally.

FCC Regulations:

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.

This device has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiated radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

-Reorient or relocate the receiving antenna.
-Increase the separation between the equipment and receiver.
-Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
-Consult the dealer or an experienced radio/TV technician for help.
Caution: Changes or modifications not expressly approved by the party responsible for compliance could void the user‘s authority to operate the equipment.

RF Exposure Information

This device complies with FCC radiation exposure limits set forth for an uncontrolled environment. In order to avoid the possibility of exceeding the FCC radio frequency exposure limits, human proximity to the antenna shall not be less than 20cm (8 inches) during normal operation.

20210607