



Quick Installation Guide for XGSPON Optical Network Router




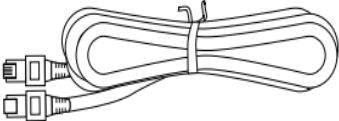
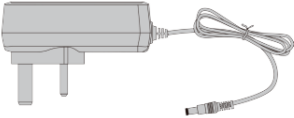
Technical Specifications

- Power supply: 12 V DC, 2 A
- Power adapter input: 100 - 240 V AC, 50 - 60 Hz
- System power supply: See the nameplate on the device
- Ambient temperature: 0°C to +40°C
- Ambient humidity: 5% - 95% RH (non-condensing)
- Weight: < 800 g
- System power consumption: ≤ 14.8 W

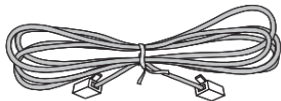
Product Overview

Product	Feature
XGSPON Optical Network Router (ONR)	■ 3 10/100/1000M auto negotiating Ethernet ports
	■ 1 100M/1G/2.5G/5G/10G auto negotiating Ethernet port
	■ 2 POTS ports

1. What's in the box?

Name	How it looks like
XGSPON ONR	
Cat6A cable	
Power Adapter	

Phone cable



Quick
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2. Suggested Placement of ONR



Caution

Do not install XGSPON ONR outdoors or in cabinets which may be exposed to sun and rain.

XGSPON ONR should be placed at an open area, such as on your work desk. Ports at the back of XGSPON ONR should be unobstructed.



3. Connecting Cables and Devices to XGSPON ONR



Port / Switch description:

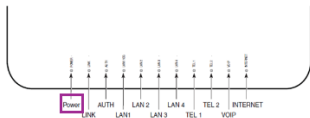
1. Power port
2. Two telephone ports
3. Three ethernet ports
4. Fiber port
5. Power switch
6. Reset button
7. 10G ethernet port
8. LED test button

Installation Guide:

• Powering up the ONR:

Step 1: Connect the power adapter to the ONR's Power port and your home electrical outlet. Power-on the ONR.

The Power indicator on the ONR should be green.



Nokia Internal use

LED Indicator	Status	LED Description
Power	Green	Power on. The power LED first displays amber and then turns green. Power on (Power LED can be set green solid dim by LED indicator button when running properly)
	Green flashing	ONR is booting up
	Amber flashing	New firmware downloading
	Red Solid	Failed on startup (for example corrupt flash), or self test failed on startup, or self test failed during regular operation or when executed over OMCI
	Off	ONR is powered off

Installation Guide: Powering up the ONR:



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In the event of "ONR start up failure", please try to power-off and power-on the ONR again.

If the issue still persists, please try to do a factory reset by pressing the "Reset" button and holding for more than 10 seconds. If the LED indicator turns off and on, your ONR has been successfully restored to factory default.

If this does not resolve the issue, please get a replacement ONR and send this ONR back to Nokia for analysis & repair.

Nokia Internal use

Installation Guide:

Accessing the ONR:

Step 1: Connect the power adapter to the ONR's Power port and your home electrical outlet. The Power indicator on the ONR should be green.

Step 2: Connect your PC to the ONR through the Ethernet port.

Step 3: Enter *http://192.168.1.254* in the address bar of your Internet Browser and press Enter. In the web login window, enter username and password



10G PON Home Gateway

Username

Password

Login Reset

Normal user: admin
Password: As per label

Step 4: Click Login.

Internal use

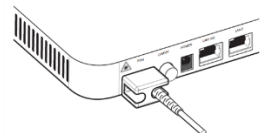


Installation Guide:

Connecting the fiber:

Step 1: Connect one end of the fiber patch cord to the fiber port on the back of the ONR, and secure the optical fiber by fitting it on the holders (SC/UPC).

Follow the arrows in the diagram for the positions of the holders.



Step 2: Connect the other end of the patch cord to the fiber termination point (FTP).



**** As the fiber optic cables are made of glass, please do not bend sharply and ensure the bending diameter is larger than 30mm.**

Internal use

Installation Guide:

Connecting the fiber:

If the ONR has been provisioned on the OLT, once the fiber is connected and if the FTTH ID has been correctly configured, then the PON & AUTH LED should eventually be steady GREEN.



LED Indicator	Status	LED Description
PON	Green	ONR has ranged successfully
	Green flashing	ONR is ranging
	Off	No light source is detected
AUTH	Green	ONR is authorized / authenticated
	Green flashing	ONR is ranging or synchronizing
	Off	ONR is not authorized / authenticated

Internal use

Installation Guide: Connecting the fiber:

If the PON LED is OFF or keeps flashing, please check your fiber connection and FTTH ID configuration.

You can check the Rx optical signal by using an optical power meter or you can log in to the ONR and verify the optical Rx signal by navigating to Status → Optical Module Status.

LED Indicator	Status	LED Description
PON	Green	ONR has ranged successfully
	Green flashing	ONR is ranging
	Off	No light source is detected

The screenshot shows the Singtel 100 PON Home Gateway web interface. The 'Status' page is selected, and the 'Optical Module Status' section is expanded. The table below shows the status of various optical modules.

Item	Value
Serial Number	ALC17C2NF193
Laser Bias Current (ONT ANA ONT Side Optical Measurements)	0.148
Optical Module Voltage (ONT ANA ONT Side Optical Measurements)	338000 µV
Optical Module Temperature (ONT ANA ONT Side Optical Measurements)	24.00 °C
Rx Optical Signal Level at 1557 nm (ONT ANA ONT Side Optical Measurements)	No signal
Tx Optical Signal Level at 1577 nm (ONT ANA ONT Side Optical Measurements)	No signal
Laser (ONT ANA ONT Side Optical Measurements-Optical Threshold)	29.00 dBm
Upper (ONT ANA ONT Side Optical Measurements-Optical Threshold)	-8.00 dBm

Internal use

Installation Guide: Connecting the fiber:

If the AUTH LED is OFF or keeps flashing, please recheck if the FTTH ID has been correctly configured.

Alternatively you can also cross-check with the backend provisioning team to see if the ONR has also been correctly configured on the OLT.

You can also navigate to Status → Device Information to verify if the ONR is on the correct software
3TN00284HJLI94

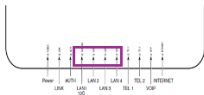
LED Indicator	Status	LED Description
AUTH	Green	ONR is authorized / authenticated
	Green flashing	ONR is ranging or synchronizing
	Off	ONR is not authorized / authenticated

The screenshot shows the Singtel 100 PON Home Gateway web interface. The 'Status' page is selected, and the 'Device Information' section is expanded. The table below shows the device details.

Item	Value
Device Name	100-0000-A
Model	None
Serial Number	ALC17C2NF193
Hardware Version	3760000284
Boot Version	Bootloader 1.1-2018-0303-1120-42
Software Version	3760000400001-2014-100
Display	0707501
Device Running Time	0 hours 5 mins and 01 seconds

Internal use

ONR Services Validation: LAN Port Status:



If a device is connected but the LAN Port LED is OFF, please navigate to **Status** → **LAN Status** to check the port status.

You can also navigate to **Status** → **Home Networking** to verify the details of the connected devices.

LED Indicator	Status	LED Description
LAN Port 1 ~ 4	Green	Ethernet connected/powering device connected to LAN port
	Green flashing	Data activity present (traffic in either direction)
	Off	Power off or Ethernet not connected

Singtel 100 PON Home Gateway Logout

Home > LAN Status

Ethernet Information

Ethernet Status	Up
LAN Status IPv4	192.168.1.214
Ethernet Status IPv6	2001:0:0:0:0:0:0:0
Ethernet MAC Address	98:50:1A:00:00:00
Ethernet IPv6 Prefix	2001:0:0:0:0:0:0:0
Ethernet IPv6 Prefix	2001:0:0:0:0:0:0:0
Ethernet IPv6 Prefix	2001:0:0:0:0:0:0:0

Information	LAN1	LAN2	LAN3	LAN4
Media	10	10	10	10
Speed (kbps)	1000000	1000000	1000000	1000000
Max. MTU (B)	1500	1500	1500	1500
Bytes Received	0	0	0	0
Bytes Sent	0	0	0	0
Packets Received	0	0	0	0
Packets Sent	0	0	0	0
Bytes Error	0	0	0	0

Internal use