FCC Regulations:
This mobile router 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 mobile router 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.

FCC Note
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 meets the government's requirements for exposure to radio waves.
This device is designed and manufactured not to exceed the emission limits for exposure to radio frequency (RF) energy set by the Federal Communications Commission of the U.S. Government. 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 20 cm during normal operation.

ISED Notice
This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes: (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en

CAN ICES-003 (B)/NMB-003(B)
This Class B digital apparatus complies with Canadian ICES-003.
Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

ISED RF Exposure Statement
This device complies with ISED RSS-102 RF exposure limits set forth for an uncontrolled environment. In order to avoid the possibility of exceeding the IC RSS-102 RF exposure limits, human proximity to the antenna shall not be less than 20 cm during normal operation.
Cet appareil est conforme aux limites d'exposition aux rayonnements de la CNR-102 définies pour un environnement non contrôlé. Afin d'éviter la possibilité de dépasser les limites d'exposition aux fréquences radio de la CNR-102, la proximité humaine à l'antenne ne doit pas être inférieure à 20 cm pendant le fonctionnement normal.

The device is restricted to indoor use only when operating in the 5150 to 5250 MHz frequency range.
L'appareil est réservé à l'intérieur seulement lorsqu'il fonctionne dans la gamme de fréquences 5150 à 5250 MHz

V 2.0

Quick Installation Guide

2428GN

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1. Caution

Please follow the instructions below to avoid physical injury:
You should not install the unit during a storm. Likewise you should not connect or disconnect any line to avoid the risk of electric shock.

Caution & Warning

- *This unit is indoor use and all the communication wirings are limited to inside of the building.*
- *DO NOT plug in, turn on or attempt to operate an obviously damaged unit.*
- *DO NOT use near water.*
- *DO NOT place near high temperature source.*
- *DO NOT disassemble the unit.*
- *DO NOT operate the unit in a location where the maximum ambient temperature exceeds 40°C.*
- *Open optical connections must use a protective cap under all circumstances to protect against physical damage and dirt.*
- *Before making connections, use isopropyl alcohol and non-fibrous cellulose to clean the faces of the connectors.*
- *Avoid impact stresses when handling connectors. Physical damage to the faces of optical connections impairs transmission quality (higher attenuation).*
- *Avoid a bend radius in excess of 30 mm for fiber optic links.*
- *Check the available voltage supply.*
- *Only use the unit in dry rooms.*
- *Set up the unit away from direct sunlight or other electrical equipment.*
- *Only connect approved accessories.*
- *It may only be repaired by authorized service personnel.*
- *This equipment is not suitable for use in locations where children are likely to be present.*

FDA Warning

- *This product emits INVISIBLE LASER RADIATION. 1310nm wavelength, 3.5mW max. power.*
- *Do NOT stare at the laser directly.*
- *Deviation from the operation procedures specified herein may result in hazardous radiation exposure.*

Limited Warranty

- *Not covered under this warranty is defect and damage resulting from product disassembly by yourself. And also, such behavior may amount to intellectual property infringement.*

2. Introduction

2.1 Package Contents

- 2428GN
- QIG (Quick Installation Guide)

2.2 Specification

Item	Specification
Uplink Interface	1 GPON port (SC/APC)
Service Interface	4 10/100/1000Base-T ports (RJ45)
Wi-Fi	Wi-Fi6 Internal antenna
VoIP Interface	2 FXS ports (RJ11)
Power Adapter	Output: 12VDC/2.5A
Operating Temp.	0 to 40°C (32 to 104°F)
Operating Humidity	5 to 95% (non-condensing)
Dimensions	182 x 263 x 75 mm (W x H x D)

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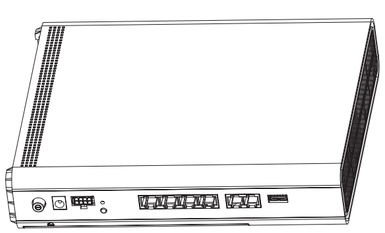
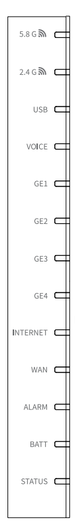
2.3 Interface



Item	Description
① LEDs	Operating status LEDs.
② USB	Connect an external 3.0 USB drive.
③ POTS 1-2	Connect to VoIP phone.
④ GE 1-4	Connect to PC or LAN. (10/100/1000Base-T interfaces)
⑤ WPS button	Press to initiate WPS connection process
⑥ Reset button	Reboot the unit or reset to factory defaults Press and hold for 10 seconds to reset factory defaults.
⑦ UPS	Power connector and UPS backup power
⑧ Power port	Connect an external power supply.
⑨ On/Off button	Turn on/off the unit
⑩ Fiber Connector	Connect optical network.

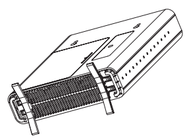
2.4 LED



Label	Light	Status	Definition
5.8G	Green	ON	5GHz Wi-Fi service is enabled on ONT.
		Slow Blink (1/sec)	5GHz Wi-Fi data passing between ONT and connected devices.
		OFF	5GHz Wi-Fi service is disabled on ONT.
2.4G	Green	ON	2.4GHz Wi-Fi service is enabled on ONT.
		Slow Blink (1/sec)	2.4GHz Wi-Fi data passing between ONT and connected devices.
		OFF	2.4GHz Wi-Fi service is disabled on ONT.
USB	Green	ON	USB is connected.
		OFF	USB is not connected.
VOICE	Green	ON	Registered successfully
		Slow Blink (1/sec)	Off hook
		OFF	Registration failed or telephone service is not provisioned.
GE1-4	Green	ON	Ethernet interface linked
		Flash	Data transmitting
		OFF	Ethernet interface not linked
INTERNET	Green	ON	Internet service is available.
		OFF	Internet service is unavailable. (no response from DNS server)
WAN	Green	ON	Ranged successfully
		Flash	Ranging in progress
		OFF	Not ready for ranging or not provisioned
ALARM	Red	OFF	No major alarms
		ON	Major Alarm (including operating in battery power)
		Slow Blink (2/sec)	SW or Config update in progress
BATT	Yellow	OFF	Normal operation on AC source
		ON	Operating on Battery Power
		Slow Blink (2/sec)	Battery Alarm (Low Battery, Missing or Replace)
STATUS	Blue	ON	Normal Operation
		Rapid Blink (10/sec)	Unit has been reset to factory defaults /is unconfigured.
		Slow Blink	Boot-up / Initialization / provisioning in progress
		OFF	Power off

3. Installation

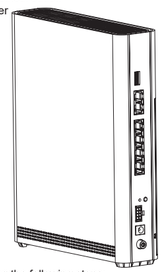
① Remove fiber service cover to expose GPON port.
② Connect fiber optic cable with SC/APC termination to the GPON port.
③ Re-attach the fiber service cover onto the 2428GN.
④ Attach the 2428GN to the desktop stand in the direction of the marked arrow.



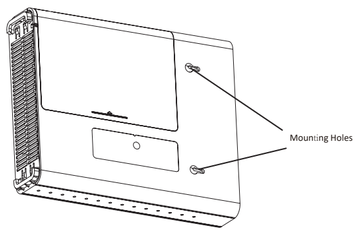
⑤ Connect the telco cable from POTS port to home phone lines.
⑥ Connect the Ethernet cable from GE port to PC.
⑦ Connect the power cable from power port to an electrical outlet.
⑧ (OPTIONAL) Connect the Battery Backup Unit power and telemetry to the UPS port.

UPS Connector Pinouts

Pin	Signal	Comments
1	+VDC	Power in from UPS
2	-VDC	Power return to UPS
3	On Battery	Open signal when on battery power
4	Signal Return	Connected to Signal GND on ONT
5	Missing Battery	Open signal when battery not detected
6	Replace Battery	Open signal when battery should be replaced *
7	GND	Connected to Signal GND on ONT
8	Low Battery	Open signal when battery is low



4. Web Access

You can access the unit through a web browser by using the following steps:
① Connect an Ethernet cable from your computer to GE1 on the 2428GN.
② Launch a browser or telnet session and point it to **192.168.1.1**.
③ Enter the username and password.
The default username/password is **admin/dzsi**.
For security the password should be changed.

Mounting on a Wall
If necessary, you may have your ONT mounted on a wall using mounting holes.