Adtran
Quick Start Guide

ADTRAN

SDG-8733/SDG-8733v/SDG-8734/SDG-8734v Service Delivery Gateways

Wi-Fi 7 10G Router

P/N:17600074, 17600076, 17600075, 17600077

Overview

⚠	**WARNING!**
	Read all warning, cautions, notes and installation instructions before installing or servicing this equipment.

The SDG-8733/SDG-8733v/SDG-8734/SDG-8734v are carrier-class, tri-band Wi-Fi 7 10G Routers designed to deliver top-end Wi-Fi 7 performance, multi-gigabit throughput, and advanced service delivery capabilities.
This quick start guide describes how to install SDG-8733/SDG-8733v/SDG-8734/SDG-8734v Service Delivery Gateways.

Features

The features of the SDG-8733 and SDG-8734 include the following:

- **Interface**
  - ◆ 1 x 10 Gigabit Ethernet RJ-45 WAN interface (SDG-8733 only)
  - ◆ 1 x 10 Gigabit SFP+ Cage (SDG-8734 only)
  - ◆ 1 x 10 Gigabit Ethernet RJ-45 LAN interface
  - ◆ 3 x Gigabit Ethernet RJ-45 LAN interfaces
  - ◆ 1 x USB3.0 Host Port (USB-A)
  - ◆ Multi-function Status LED
  - ◆ WPS Button
  - ◆ Reset Button
  - ◆ USB-C Power In Port

- **Environment**
  - ◆ Operating Temperature: 41℉ to 104℉ (5℃ to 40℃)
  - ◆ Storage Temperature: -13℉ to 158℉ (-25℃ to 70℃)

- **Dimensions**

  195.5(H) x 124.5mm(φ)

- **Power Supply**

  AC Input: 100~240 VAC @ 50/60Hz

SDG-8733 and SDG-8734 Front View SDG-8733 Back View SDG-8734 Back View

Figure 1. SDG-8733 and SDG-8734 Router

⚠ **WARNING!**

WARNING indicates a hazard which, if not avoided, could result in death, injury or serious property damage.

⚠ **CAUTION!**

CAUTION indicates a hazard which, if not avoided, could result in service interruption, damage to the equipment, or minor property damage.

ⓘ **NOTE**

NOTES inform the user of additional, but important, information or features.

Features

The features of the SDG-8733v and SDG-8734v include the following:

■ **Interface**

◆ 1 x 10 Gigabit Ethernet RJ-45 WAN interface (SDG-8733v only)

◆ 1 x 10 Gigabit SFP+ Cage (SDG-8734v only)

◆ 2 x FXS RJ11 interface

◆ 1 x 10 Gigabit Ethernet RJ-45 LAN interface

◆ 3 x Gigabit Ethernet RJ-45 LAN interfaces

◆ 1 x USB3.0 Host Port (USB-A)

◆ Multi-function Status LED

◆ WPS Button

◆ Reset Button

◆ USB-C Power In Port

■ **Environment**

◆ Operating Temperature: 41℉ to 104℉ (5℃ to 40℃)

◆ Storage Temperature: -13℉ to 158℉ (-25℃ to 70℃)

■ **Dimensions**

195.5(H) x 124.5mm(ϕ)

■ **Power Supply**

AC Input: 100~240 VAC @ 50/60Hz

SDG-8733v/SDG-8734v Front View   SDG-8733v Back View   SDG-8734v Back View

Figure 2. SDG-8733 and SDG-8734 Router

⚠ **WARNING!**

WARNING indicates a hazard which, if not avoided, could result in death, injury or serious property damage.

⚠ **CAUTION!**

CAUTION indicates a hazard which, if not avoided, could result in service interruption, damage to the equipment, or minor property damage.

ⓘ **NOTE**

NOTES inform the user of additional, but important, information or features.

Installing the SDG-8733/SDG-8733v/SDG-8734/SDG-8734v Router

i **NOTE**	Refer to the national, state and local electrical codes for the requirements for power, grounding, wiring, and installation methods.

Package Contents

■ ADTRAN's SDG-8733 or SDG-8733v or SDG-8734 or SDG-8734v WiFi 7 Router

■ 15V DC USB Type-C power adapter

■ Ethernet cable

■ Quick Install Guide

⚠ **CAUTION!**	The product is intended for indoor use only. Ethernet cables and attached equipment are intended for use within the same building with equipotential bonding, and not intended to be placed in separate buildings or structures. Failure to deploy as described could result in permanent damage from lightning or other electrical events and voids the warranty. Furthermore, all connections from outside of the building, such as old wiring, must be disconnected prior to use.

Prior to Installation

Before installing the equipment, inspect the device. If damage has occurred during shipping, file a claim with the carrier, and then contact Adtran Customer Support.

Mounting Option

There are two options to install the SDG-8733/SDG-8733v/SDG-8734/SDG-8734v: desktop and wall mount. Be sure to route and secure the cables in a manner that will prevent damage. These options are described below.
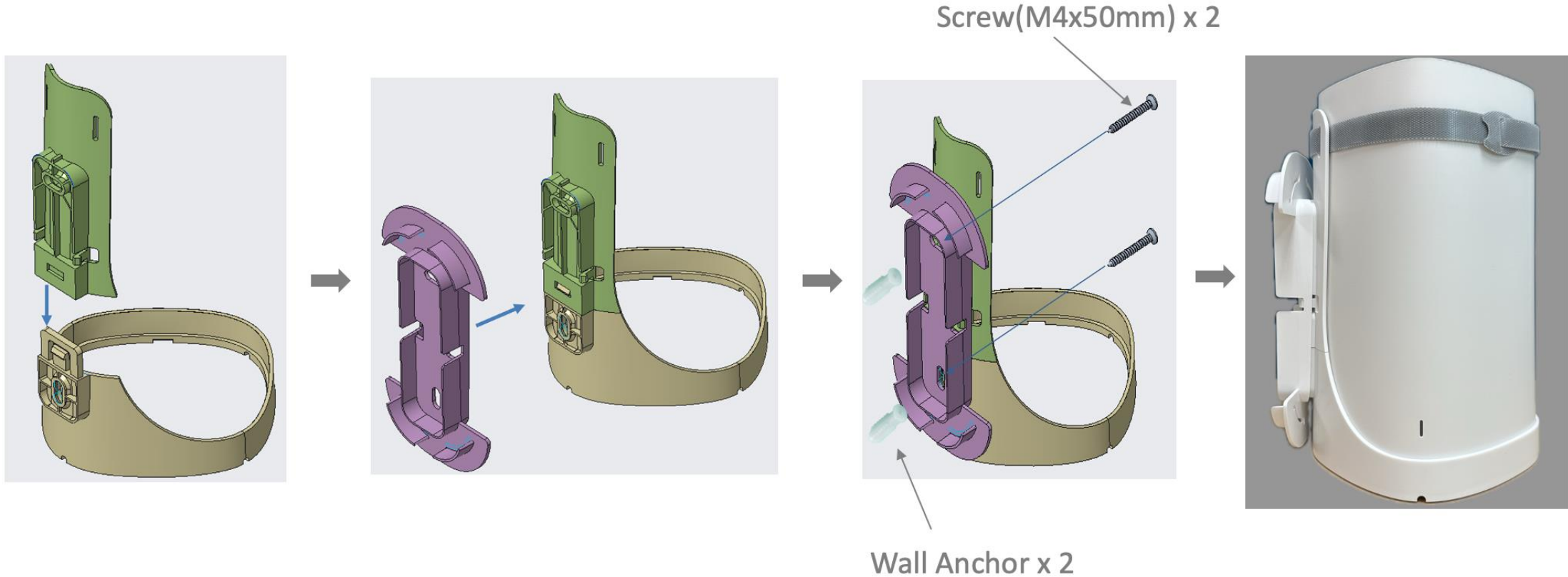
Desktop Installation

The SDG-8733/SDG-8733v/SDG-8734/SDG-8734v can be placed on a desk or table. Table 1 shows the recommended minimum distance (in feet and meters) between the device and household appliances to reduce interference.

Table 1: Recommended Minimum Distance Between the SDG and Household Appliances

Household Appliance	Recommended Minimum Distance (in feet and meters)
Microwave ovens	30 feet / 9 meters
Baby monitor – analog	20 feet / 6 meters
Baby monitor – digital	40 feet / 12 meters
Cordless phone – analog	20 feet / 6 meters
Cordless phone – digital	30 feet / 9 meters
Bluetooth devices	20 feet / 6 meters
ZigBee	20 feet / 6 meters

Wall Mount Installation

The SDG-8733/SDG-8733v/SDG-8734/SDG-8734v can be mounted on a wall. Wall Mount Kit is an optional accessory. Please contact the distributor to order the wall mount kit if needed.

Screw(M4x50mm) x 2

Wall Anchor x 2

Connecting the Gateway_SDG-8733

Figure 3 illustrates the installation (connection) options for the SDG-8733.

The following subscriber connections are available on the rear of the SDG-8733:

- 1x 10 Gigabit Ethernet port – WAN port

- 1x 10 Gigabit Ethernet port - LAN port

- 3 x Gigabit Ethernet port - LAN port

- 1x USB 3.0 (Type A Connector) port

To connect the Ethernet interfaces, refer to Figure 2 and insert a Ethernet cable into the WAN port and any LAN ports until there is an audible click.

The USB 3.0 host port is reserved for future use. This port currently provides +5 VDC for charging external devices.
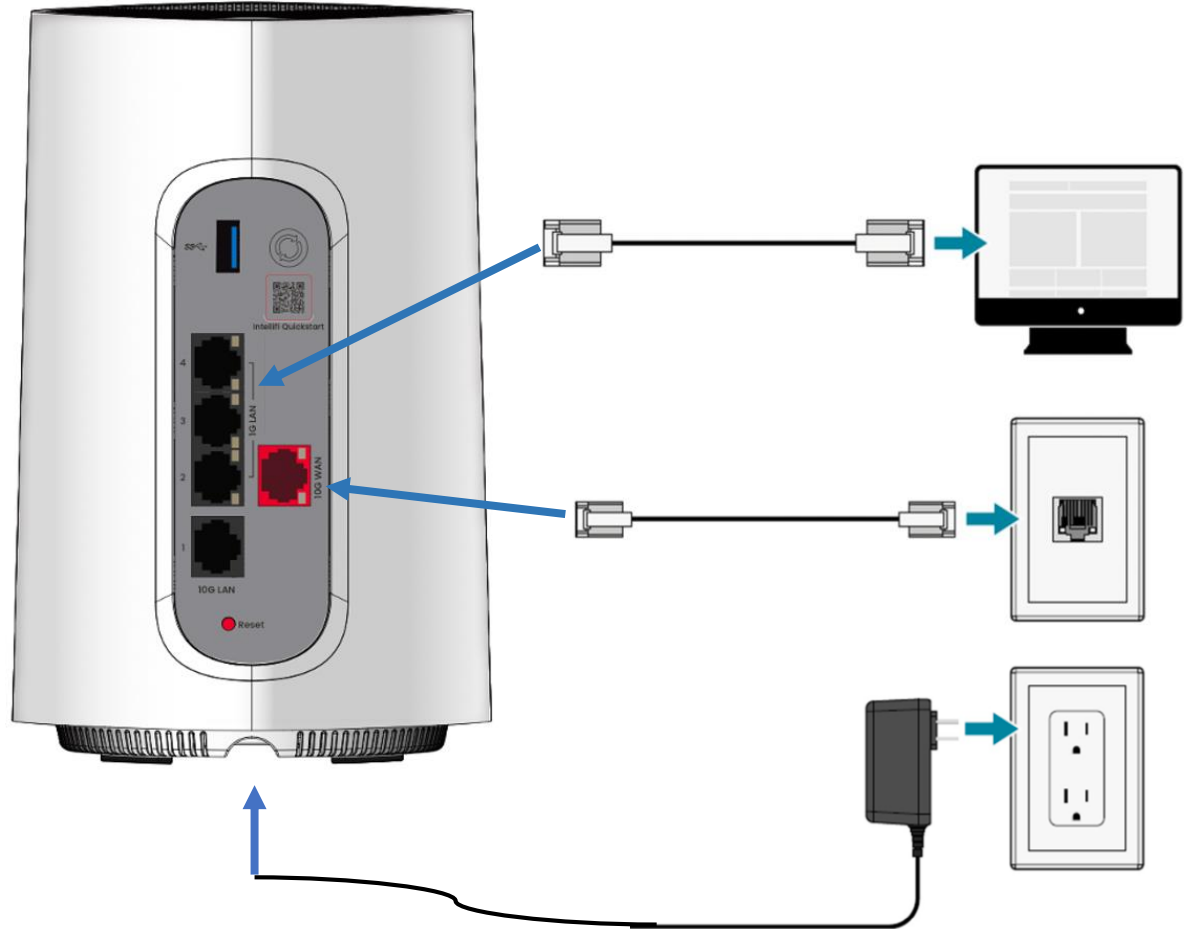

Figure 3. Gateway Installation_SDG-8733

Connecting the Gateway_SDG-8733v

Figure 4 illustrates the installation (connection) options for the SDG-8733v.

The following subscriber connections are available on the rear of the SDG-8733v:

■ 1x 10 Gigabit Ethernet port – WAN port

■ 1x 10 Gigabit Ethernet port - LAN port

■ 3 x Gigabit Ethernet port - LAN port

■ 2 x FXS RJ11 interface

■ 1x USB 3.0 (Type A Connector) port

To connect the Ethernet interfaces, refer to Figure 2 and insert a Ethernet cable into the WAN port and any LAN ports until there is an audible click.

The USB 3.0 host port is reserved for future use. This port currently provides +5 VDC for charging external devices.
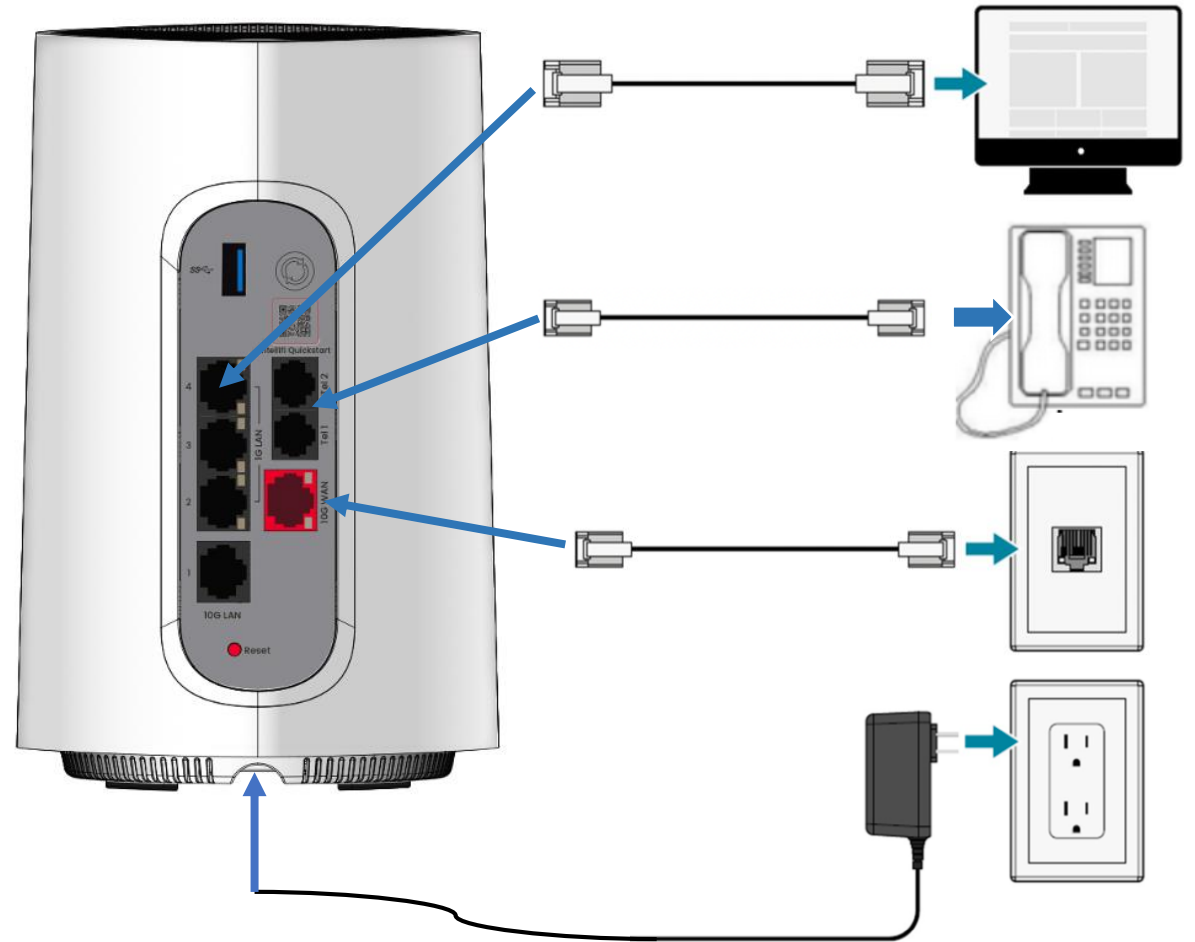
Figure 4. Gateway Installation_SDG-8733v

Connecting the Gateway_SDG-8734

Figure 5 illustrates the installation (connection) options for the SDG-8734.

The following subscriber connections are available on the rear of the SDG-8734:

- 1x 10 Gigabit SFP$^+$ Cage – WAN port

- 1x 10 Gigabit Ethernet port - LAN port

- 3 x Gigabit Ethernet port - LAN port

- 1x USB 3.0 (Type A Connector) port

To install a SFP$^+$ into the SDG-8734, complete the following steps:

1. Insert the SFP$^+$ into the SFP$^+$ cage on the device.
2. Slide the SFP$^+$ all the way into the SFP$^+$ cage until there is an audible click.

The USB 3.0 host port is reserved for future use. This port currently provides +5 VDC for charging external devices.

If optical transceivers are used to be connected to SFP+ connectors, only CDRH certified laser class I (1) optical transceivers shall be used.
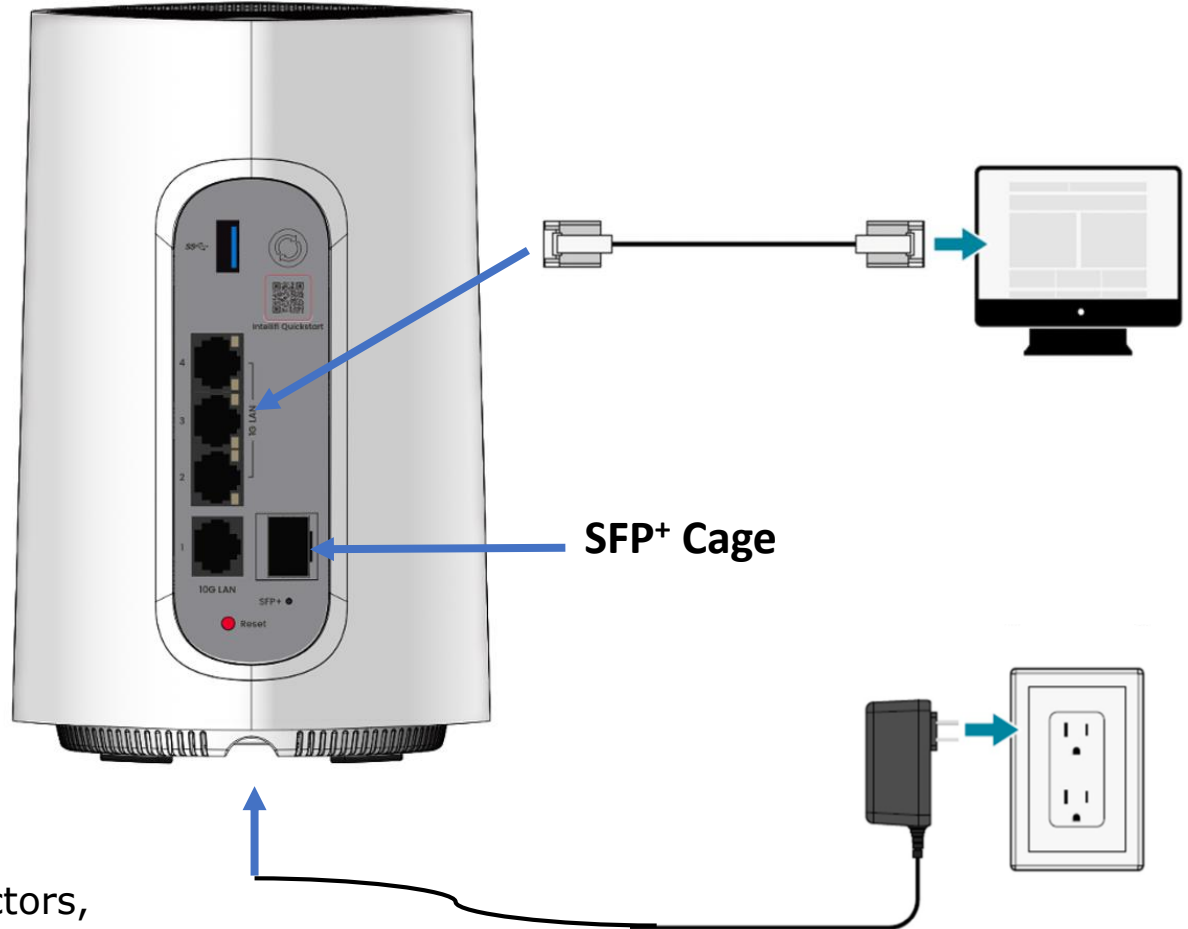
SFP$^+$ Cage

Figure 5. Gateway Installation_SDG-8734

Connecting the Gateway_SDG-8734v

Figure 6 illustrates the installation (connection) options for the SDG-8734v.

The following subscriber connections are available on the rear of the SDG-8734v:

- 1x 10 Gigabit SFP$^+$ Cage – WAN port
- 1x 10 Gigabit Ethernet port - LAN port
- 3 x Gigabit Ethernet port - LAN port
- 2 x FXS RJ11 interface
- 1x USB 3.0 (Type A Connector) port

To install a SFP$^+$ into the SDG-8734, complete the following steps:

1. Insert the SFP$^+$ into the SFP$^+$ cage on the device.
2. Slide the SFP$^+$ all the way into the SFP$^+$ cage until there is an audible click.

The USB 3.0 host port is reserved for future use. This port currently provides +5 VDC for charging external devices.

If optical transceivers are used to be connected to SFP+ connectors, only CDRH certified laser class I (1) optical transceivers shall be used.
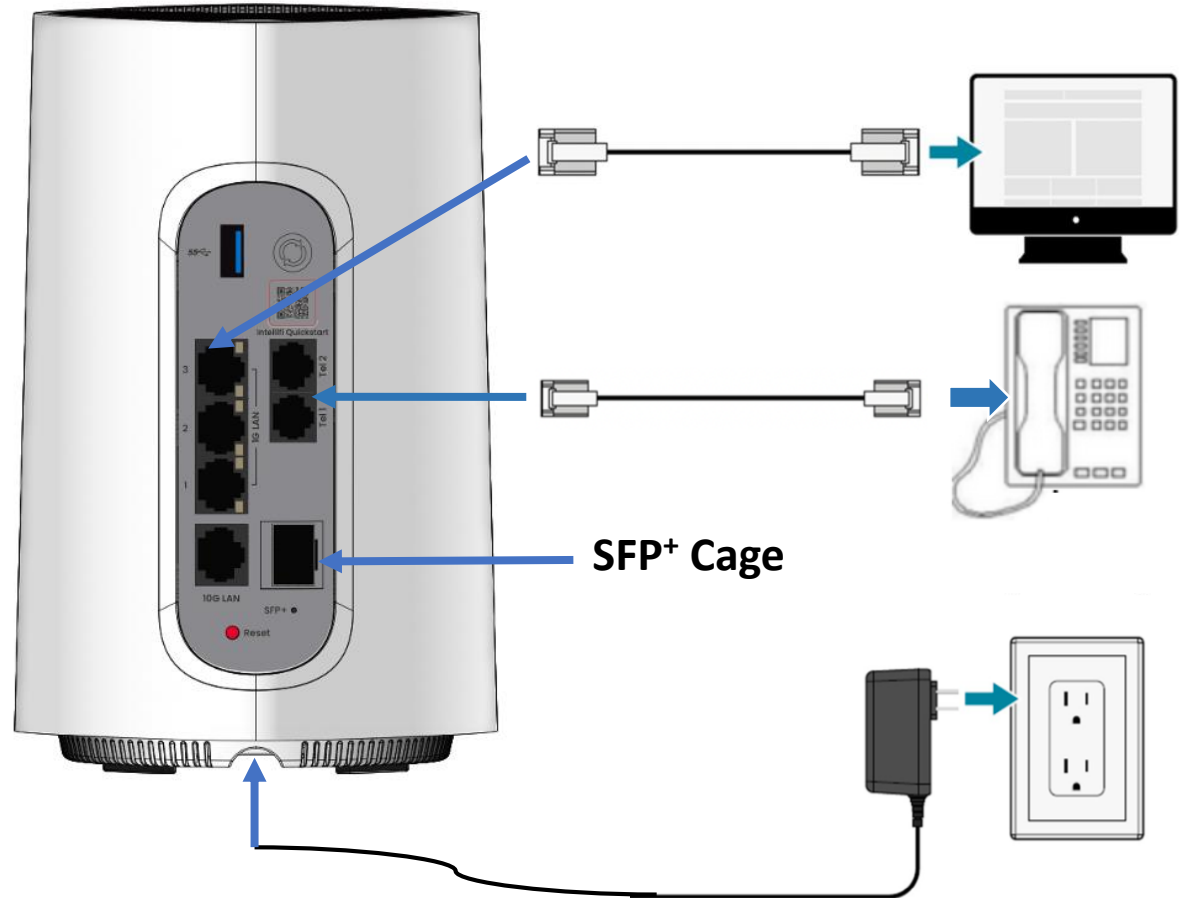
SFP$^+$ Cage

Figure 6. Gateway Installation_SDG-8734v

Connecting the Power Supply

1. Connect the USB-C end of the power adapter to the USB-C Power In Port on the bottom of the device.

2. Plug the other end of the power adapter into the wall outlet.

3. Confirm that the power is connected properly by checking the Power LED located beside the Power In Port.

LED	Color	State	Description
Power	Green	Solid	Correct Power
	Red		Incorrect Power
	Off		No Power

Resetting the Device

A reset button is available on the back of the SDG-8733/SDG-8733v/SDG-8734/SDG-8734v and can be used to reboot or restore the device to factory defaults. To reboot the SDG-8733/SDG-8733v/SDG-8734/SDG-8734v, press the Reset button on the back panel of the device for less than 5 seconds. To reset the device to factory defaults, press the Reset button for 5 seconds or longer.

Quick Setup for the SDG-8733/SDG-8733v/SDG-8734/SDG-8734v

Scan the QR code labeled Intellifi QuickStart located on the back of the unit. You will be presented with a series of self-guided steps to choose your account password, select gateway or access point mode, and configure the Wi-Fi SSID and passphrase. The specified account password will be used when logging into the GUI in the SDG.

Logging Into the SDG-8733/SDG-8733v/SDG-8734/SDG-8734v

Using SmartOS

A browser-based graphical user interface (GUI) is used to manually configure the SDG-8733/SDG-8733v/SDG-8734/SDG-8734v. The following steps describe how to connect and login to the device:

1. Ensure your computer is connected to the SDG-8733 or SDG-8733v or SDG-8734 or SDG-8734v either via Wi-Fi or Ethernet connection to one of the LAN ports.

2. Configure your computer's network interface to acquire an IP address automatically using DHCP.

3. Open a web browser and enter the following: http://router or http://setup. A sign-in page should appear. If you are unable to connect to the SDG-8733/SDG-8733v/SDG-8734/SDG-8734v using either of these shortcuts, you can also enter the IP address of the unit. The default IP address is 192.168.1.1.

4. The default username is admin. The password is the account password that was specified during the quick setup.

5. Select Sign In. The Dashboard page appears, showing data about the system.

Safety and Regulatory

Federal Communication Commission Interference Statement

This equipment 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 radiate 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 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 Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this 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.

FCC Guidelines for Human Exposure

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 25 cm between the radiator & your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter except in accordance with FCC multi-transmitter product procedures.

Country Code selection feature to be disabled for products marketed to the US/CANADA.

FCC Requirements for Operation in the United States

FCC regulations restrict the operation of this device to indoor use only.
The operation of this device is prohibited on oil platforms, cars, trains, boats, and aircraft, except that operation of this device is permitted in large aircraft while flying above 10,000 feet.

Operation of transmitters in the 5.925-7.125 GHz band is prohibited for control of or communications with unmanned aircraft systems

Industry Canada Statement

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

(1) This device may not cause interference

(2) This device must accept any interference, including interference that may cause undesired operation of the device

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique 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;

(2) L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Caution:

(i) The device for operation in the band 5150–5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems;

(ii) For devices with detachable antenna(s), the maximum antenna gain permitted for devices in the bands 5250-5350 MHz and 5470-5725 MHz shall be such that the equipment still complies with the e.i.r.p. limit;

(iii) For devices with detachable antenna(s), the maximum antenna gain permitted for devices in the band 5725-5850 MHz shall be such that the equipment still complies with the e.i.r.p. limits as appropriate; and

Avertissement:

(i) les dispositifs fonctionnant dans la bande de 5 150 à 5 250 MHz sont réservés uniquement pour une utilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux;

(ii) pour les dispositifs munis d'antennes amovibles, le gain maximal d'antenne permis pour les dispositifs utilisant les bandes de 5 250 à 5 350 MHz et de 5 470 à 5 725 MHz doit être conforme à la limite de la p.i.r.e;

(iii) pour les dispositifs munis d'antennes amovibles, le gain maximal d'antenne permis (pour les dispositifs utilisant la bande de 5 725 à 5 850 MHz) doit être conforme à la limite de la p.i.r.e. spécifiée, selon le cas;

Radiation Exposure Statement:

This equipment complies with Canada radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 25 cm between the radiator & your body.

Déclaration d'exposition aux radiations:
Cet équipement est conforme Canada limites d'exposition aux radiations dans un environnement non contrôlé. Cet équipement doit être installé et utilisé à distance minimum de 25 cm entre le radiateur et votre corps.

Operation shall be limited to indoor use only.
Operation on oil platforms, automobiles, trains, maritime vessels and aircraft shall be prohibited except for on large aircraft flying above 3,048 m (10,000 ft).
Devices shall not be used for control of or communications with unmanned aircraft systems.

leur utilisation doit être limitée à l'intérieur seulement

leur utilisation à bord de plateformes de forage pétrolier, d'automobiles, de trains, de navires maritimes et d'aéronefs doit être interdite, sauf à bord d'un gros aéronef volant à plus de 3 048 m (10 000 pi) d'altitude
Les dispositifs ne doivent pas être utilisés pour commander des systèmes d'aéronef sans pilote ni pour communiquer avec de tels systèmes.

EU & UKCA Declaration of Conformity

Hereby, Adtran Inc declares that the radio equipment type [SDG-8733/SDG-8733v/SDG-8734/SDG-8734v] are in compliance with Directive 2014/53/EU. The following test methods have been applied in order to prove presumption of conformity with the essential requirements of the Radio Equipment directive: 2014 / 53 / EU:The full text of the EU declaration of conformity is available at the internet address:

This device complies with the essential requirements of the Radio Equipment directive: 2014 / 53 / EU and Radio Equipment Regulations 2017 (SI 2017/1206). The following test methods have been applied in order to prove presumption of conformity with the essential requirements of the Radio Equipment directive: 2014 / 53 / EU and the Radio Equipment Regulations 2017(SI 2017/1206):

Radio Equipment directive: 2014 / 53 / EU	Radio Equipment Regulations 2017(SI 2017/1206)
EN 303 413 V1.2.1	EN 303 413 V1.2.1
EN 300 328 v2.2.2	EN 300 328 v2.2.2
EN 301 893 V2.1.1	EN 301 893 V2.1.1
	IR 2030 – UK Interface Requirements 2030
ETSI EN 303 687 V1.1.1	ETSI EN 303 687 V1.1.1
EN IEC 62311:2020	BS EN IEC 62311:2020
EN 50385: 2017	BS EN 50385: 2017
EN 50665: 2017	BS EN 50665: 2017
EN 301 489-1 V2.2.3	EN 301 489-1 V2.2.3
EN 301 489-17 V3.2.4	EN 301 489-17 V3.2.4
EN 301 489-19 V2.2.1	EN 301 489-19 V2.2.1
EN 55032: 2015/ A11 : 2020	BS EN 55032: 2015/ A11 : 2020
EN 55035: 2017+A11: 2020	BS EN 55035: 2017+A11: 2020
EN 62368-1:2014+AC:2015+A11:2017+AC:2017-03	BS EN 62368-1:2014+A11:2017
EN 50564: 2011	EN 50564: 2011

WiFi

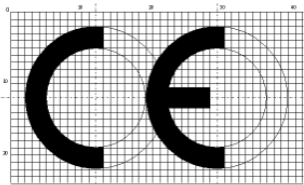| Freq. range	Power
2400MHz ~ 2483.5MHz	20 dBm
5150MHz ~ 5250MHz	23 dBm
5250MHz ~ 5350MHz	23 dBm
5470MHz ~ 5725MHz	29dBm
5725 MHz ~5850MHz	23 dBm
5925MHz ~ 6425MHz	23 dBm

Bluetooth

Freq. range	Power
2400MHz ~ 2483.5MHz	1 dBm

SW version: 12.5.0.101

The minimum distance between the user and/or any bystander and the radiating structure of the transmitter is 25 cm.
The frequency of 5725-5850 MHz is for UK band not for EU band.

5150 ~ 5350 MHz is limited to indoor used in below countries.

	BE	BG	CZ	DK	DE	EE	IE	EL	ES	FR	HR
	IT	CY	LV	LT	LU	HU	MT	NL	AT	PL	PT
	RO	SI	SK	FI	SE	UK(NI)	LI	IS	NO	TR	CH