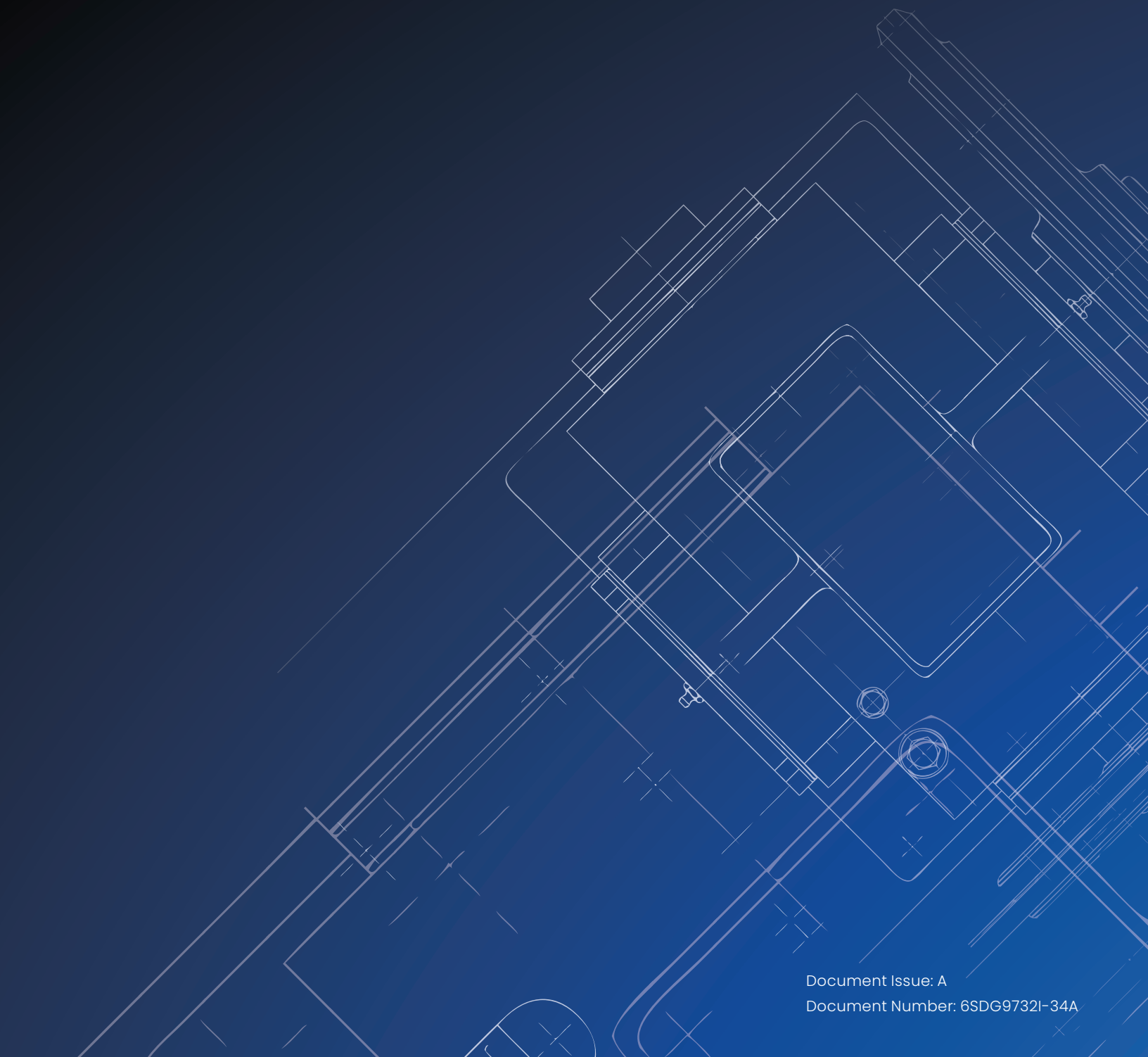
Adtran

SDG-9732i

Hardware Guide



Document Issue: A
Document Number: 6SDG9732I-34A

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Contents

Preface

This document is intended for Adtran customers under the terms of the applicable agreement. No part can be used, reproduced, modified, or transmitted in any form without prior written permission from Adtran.

NOTE

The illustrations in this document are for reference only. They are based on the latest hardware revision available at the time of publication. The equipment you receive might have a different appearance than the equipment shown in this document.

This section contains these topics:

Safety Symbol and Message Conventions

These symbols appear throughout this document and include important information related to your safety and the prevention of equipment damage.

All personnel should correctly follow and not ignore any provided safety instructions. Before you work on any equipment, be aware of the hazards involved and be familiar with standard practices for preventing accidents.

Icon	Meaning	Description
	Warning	Means danger and alerts you to a situation that could cause bodily injury.
	Caution	Alerts you to a potentially hazardous situation or condition that may result in minor or moderate injury.

Icon	Meaning	Description
	Note	Indicates supplemental information or helpful recommendations.

Documentation

Related Documentation

These online documents and resources provide additional information for this product:

- *SDG SmartOS User Guide*
- Applicable release notes based on firmware

Documentation Portal

You can view and download the Adtran product documentation from our documentation portal. To access our documentation portal, click one of these options:

- docs.adtran.com
- My Adtran > **Support Community** > **Technical Documentation**

After logging in, select the appropriate product category. Use the **Group by** option at the top to sort documents by **title** (default) or **release number** within the product categories.

Use the robust search engine to find documents by part name or number, alarm name, specifications, procedures, and more. You can refine results by filtering on **product category**, **document type** (title), and **release number**.

Revision History

Revision	Description
Document Number: 6SDG9732I-34A **Document Issue:** A **Issue Date:** September 2025	Initial release.

Warranty

Warranty information can be found at: my.adtran.com/warranty

Contact Adtran

Contact	Contact Information
Technical Support	Toll Free: +1-888-423-8726 International: +1-256-963-8716 Europe: +44 20 7523 5358 support@adtran.com adtran.com/GetStarted
Training	training@adtran.com adtran.com/training
Sales	+1-800-827-0807
Other	adtran.com/ContactUs

Chapter 1: Introduction

This section contains these topics:

Overview

The SDG-9732i is a tri-band Wi-Fi 7 Access Point, with eight spatial streams and 6 GHz support, designed to provide multi-Gigabit throughput, and advanced service delivery capabilities in indoor environments.

Figure 1: SDG-9732i - Top View

Table 1: SDG-9732i Variants

Description	P/N
SDG-9732i	17600081FNS

Features

- PoE In 2.5 GbE LAN port
- 12 VDC power connector
- Reset button

Figure 2: SDG-9732i Features (Top View)

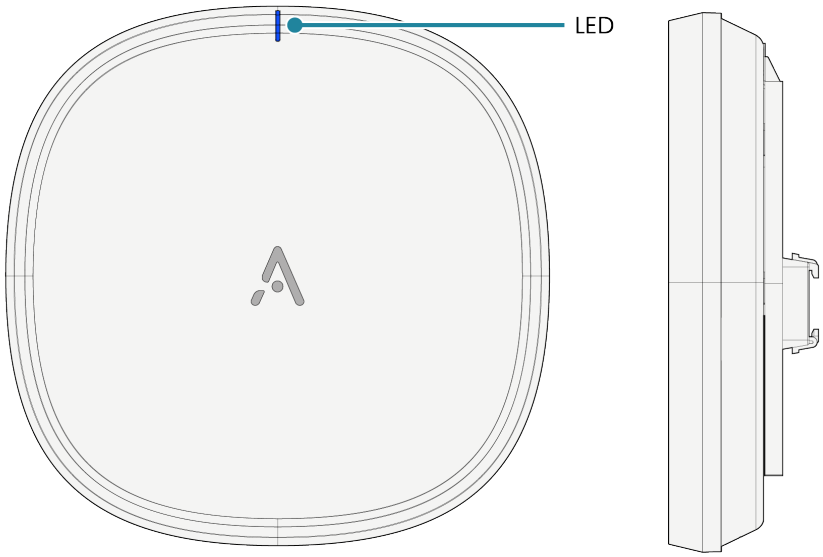
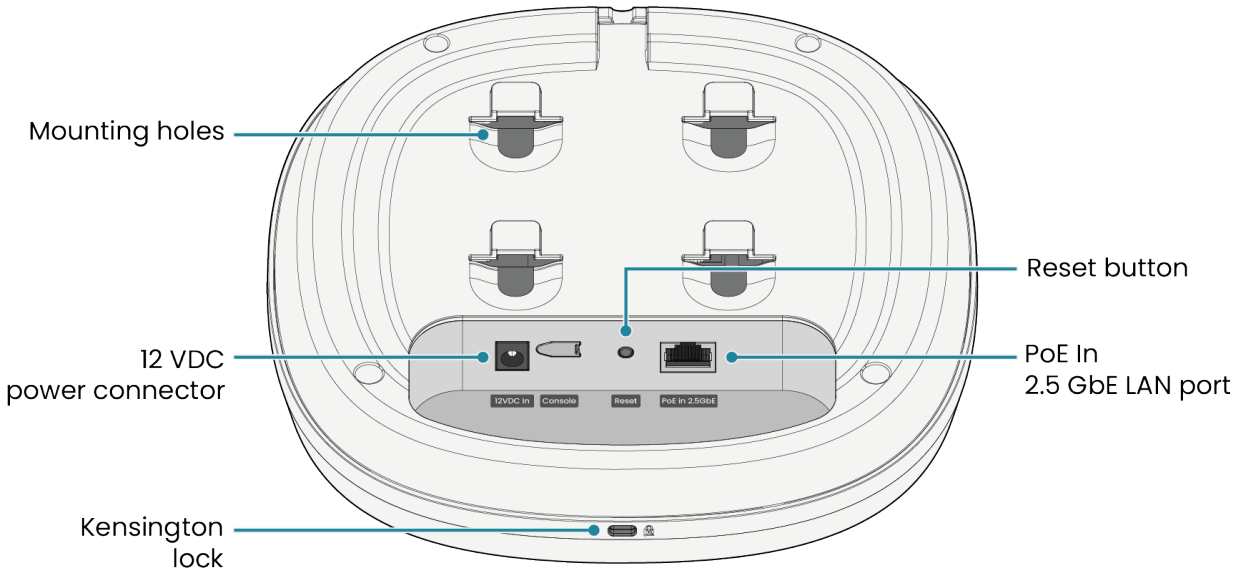


Figure 3: SDG-9732i Features (Bottom View)



Shipment Contents

- SDG-9732i Wi-Fi 7 Access Point
- SDG-9732i mount plate
- SDG-9732i T-bar mounting bracket
- T-bar mounting bracket screws

Specifications

Electrical

- Input: 48 VDC Power over Ethernet or 12 VDC 3A external PSU
- Nominal Power Consumption: 18.4 W (PoE) or 14.7 W (12 VDC)

Physical

- Height: 7.9 in. (20 cm)
- Width: 1.4 in. (3.5 cm)
- Depth: 7.9 in. (20 cm)
- Weight: 1.3 lbs (0.6 kg)

Environmental

- Operating Temperature: 41°F to 104°F (5°C to 40°C)
- Storage Temperature: –13°F to 158°F (–25°C to 70°C)
- Transportation Temperature: 40°F to 158°F (–40°C to 70°C), any humidity
- Operating Humidity: 5 to 85 percent, condensing

Compliance

This product meets these compliance requirements:

- UL/cUL Listed, IEC/EN/AS/NZS 62368-1
- FCC Part 15, Class B
- FCC Part 2, 2. 1091 (MPE)
- ICES-003 (Class B)
- ACMA/RCM
- ErP
- RoHS Compliant
- UKCA

NOTE

Changes or modifications not expressly approved by Adtran voids the warranty.

Chapter 2: Pre-Installation Considerations

This section contains these topics:

Powering Considerations

This section contains these topics:

PoE+ Powering Options

You can power the SDG-9732i directly by a supported Adtran PoE+ switch, router, or with an external PoE+ injector.

PoE+ devices can include:

- PoE+ Ethernet switches/routers
- PoE+ injector (25 W or greater)
- Type 2 PoE+ device

12 VDC External PSU

If you do not power the SDG-9732i with PoE, connect a 12 VDC external PSU (Adtran P/N: 17600093F1, available for separate purchase).

Chapter 3: Installation

After you unpack the unit, inspect it for damage. If you notice any damage, file a claim with the carrier and then contact Adtran. For more information, see Warranty.

This section contains these topics:

Installation Guidelines

NOTE

- Read all warnings and cautions before you install or service the SDG-9732i.
- See the national, state, and local electrical codes for the requirements for power, grounding, wiring, and installation methods.

CAUTION

- This product is intended for indoor use only. Ethernet, PoE cables, and attached equipment are intended for use within the same building with equipotential bonding. Do not place them 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.
- Ensure that the Adtran Business Class Wi-Fi devices are professionally installed.

Electrical Safety Information

- There are no operator serviceable parts inside this equipment. Only qualified service technicians should service the equipment.
- Contact a qualified electrician or the manufacturer if you have questions about the installation prior to connecting the equipment.

Required Equipment

In addition to standard technician tools, use this equipment to install the SDG-9732i:

Installation

- Assorted tie wraps for securing cabling

Mounting

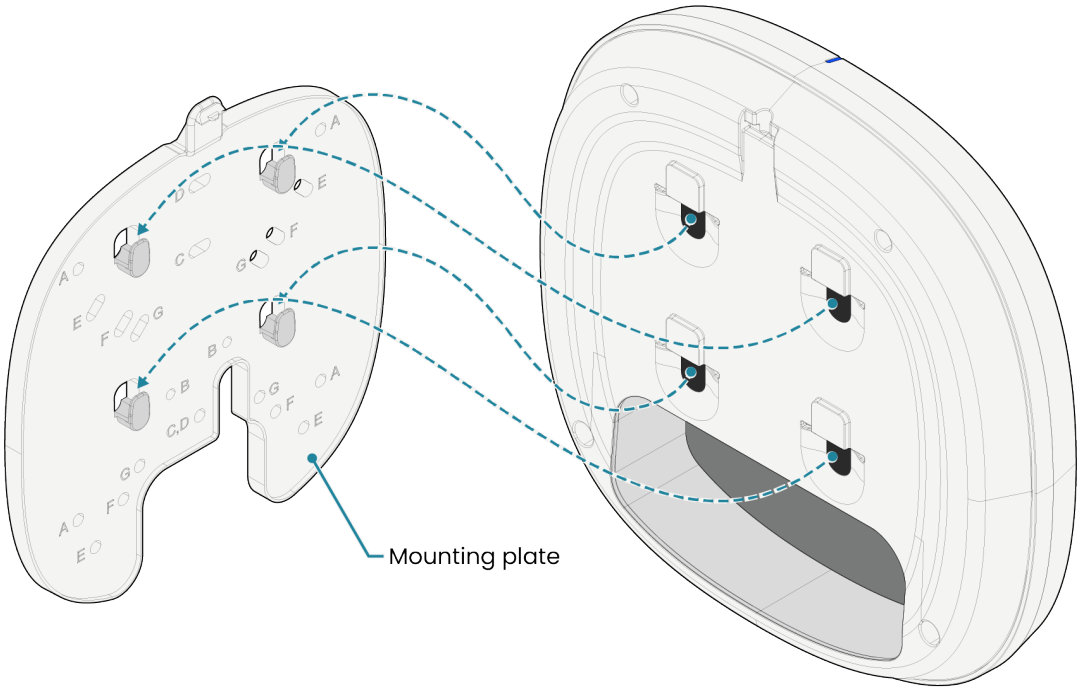
- Self-tapping screws
- Screw anchors
- Drill
- 1/4-inch drill bit
- Hammer

Mounting the SDG-9732i

You can mount the SDG-9732i on a ceiling surface, a junction box, or a drop ceiling T-bar. You must use the mount plate for all mounting options. Adtran recommends using four screws for each mounting mode. This table provides the recommended screw types.

Mounting Mode	Screw Type
1-gang junction box	#6-32 pan head zinc steel Phillips, 3/4" length
2-gang junction box	M3.5 pan head zinc steel Phillips, 18 mm length
Junction box	#8-32 pan head zinc steel Phillips, 3/4" length
Drywall	#8 screw, 2" length, with drywall anchors

Figure 4: SDG-9732i Mounting Plate



Follow one of these procedures to install the SDG-9732i:

NOTE

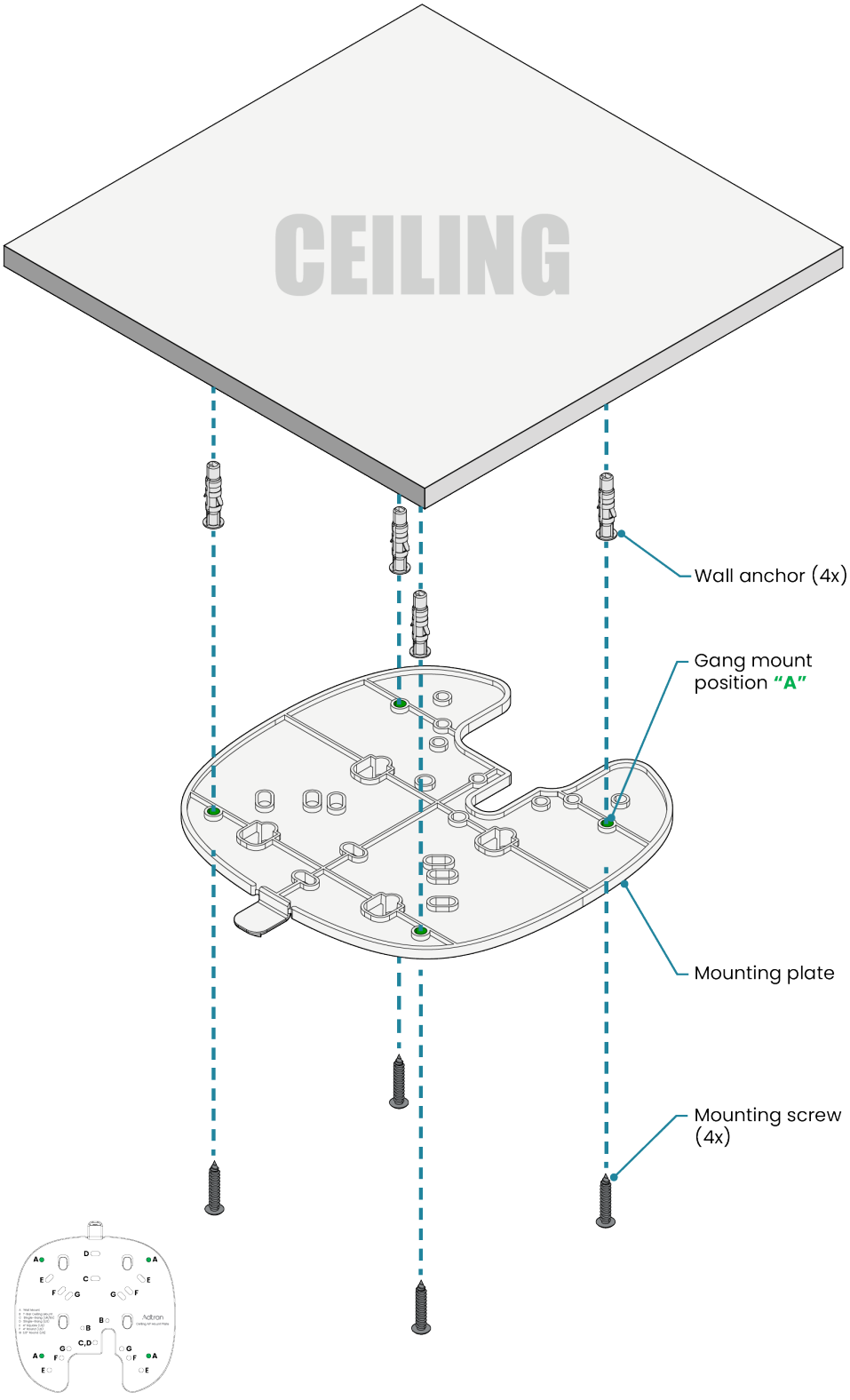
Route and secure the cables in a manner that prevents damage.

Ceiling Mounting (Direct)

To mount the SDG-9732i directly to a ceiling surface:

1. Position the mounting plate on the chosen ceiling surface.
2. Use a pencil to mark the ceiling through the four holes (labeled "A" on the mounting plate).
3. If necessary, pre-drill the holes and place screw anchors.
4. Secure the mounting plate to the ceiling surface with the appropriate screws and anchors.

Figure 5: Securing Mounting Plate to Ceiling



5. Align the SDG-9732i body notches with the mounting tabs on the bottom of the mount plate, and slide the device into position until it clicks.

Ceiling Mounting (Junction Box)

To mount the SDG-9732i to a junction box:

1. Position the mounting plate on the junction box using the appropriate alignment holes for the given junction box.
2. Secure the mounting plate to the junction box with the appropriate screws. There are five mounting positions:

Figure 6: Mounting with Single Gang Junction Box (UK)

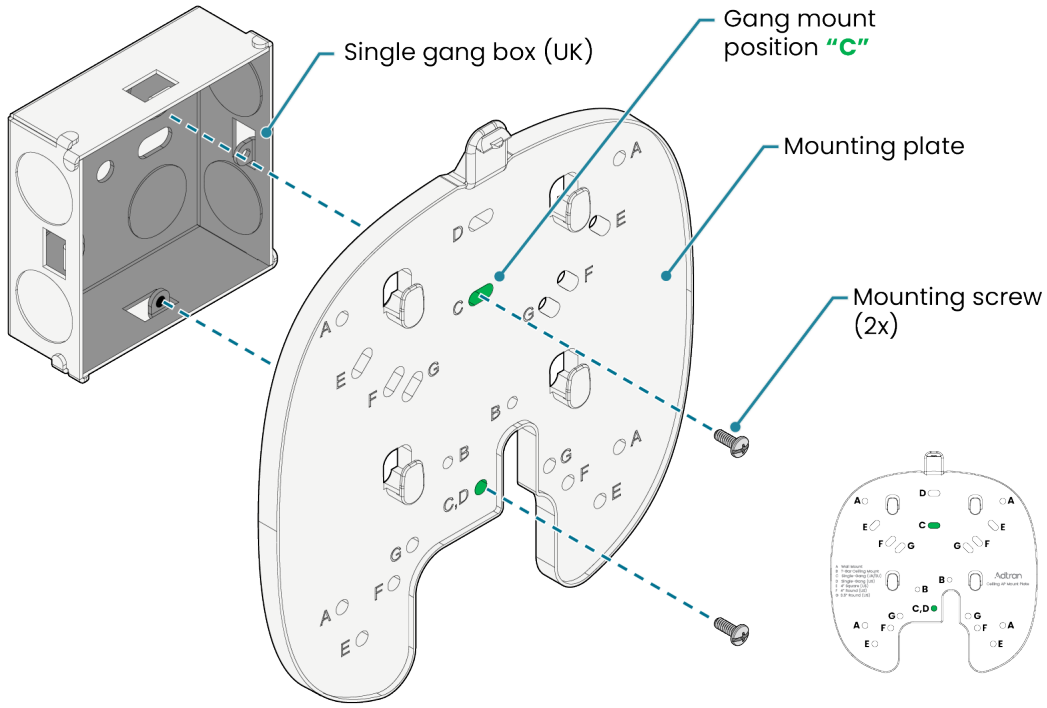


Figure 7: Mounting with Single Gang Junction Box (US)

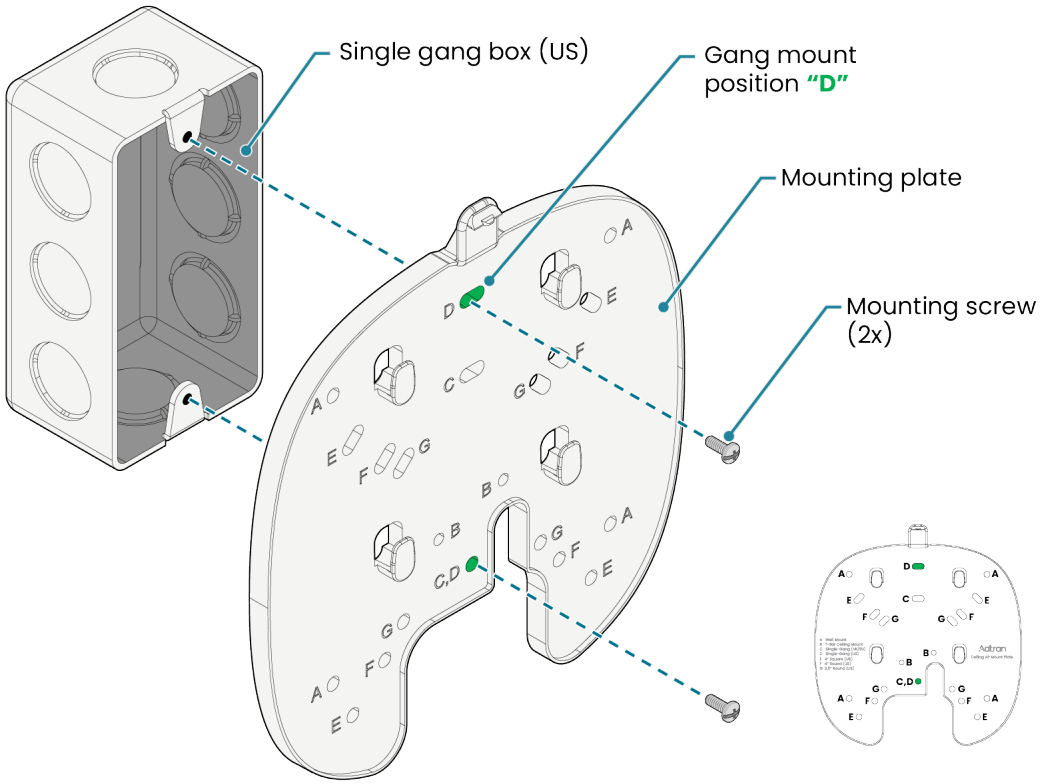


Figure 8: Mounting with 4" Square (US)

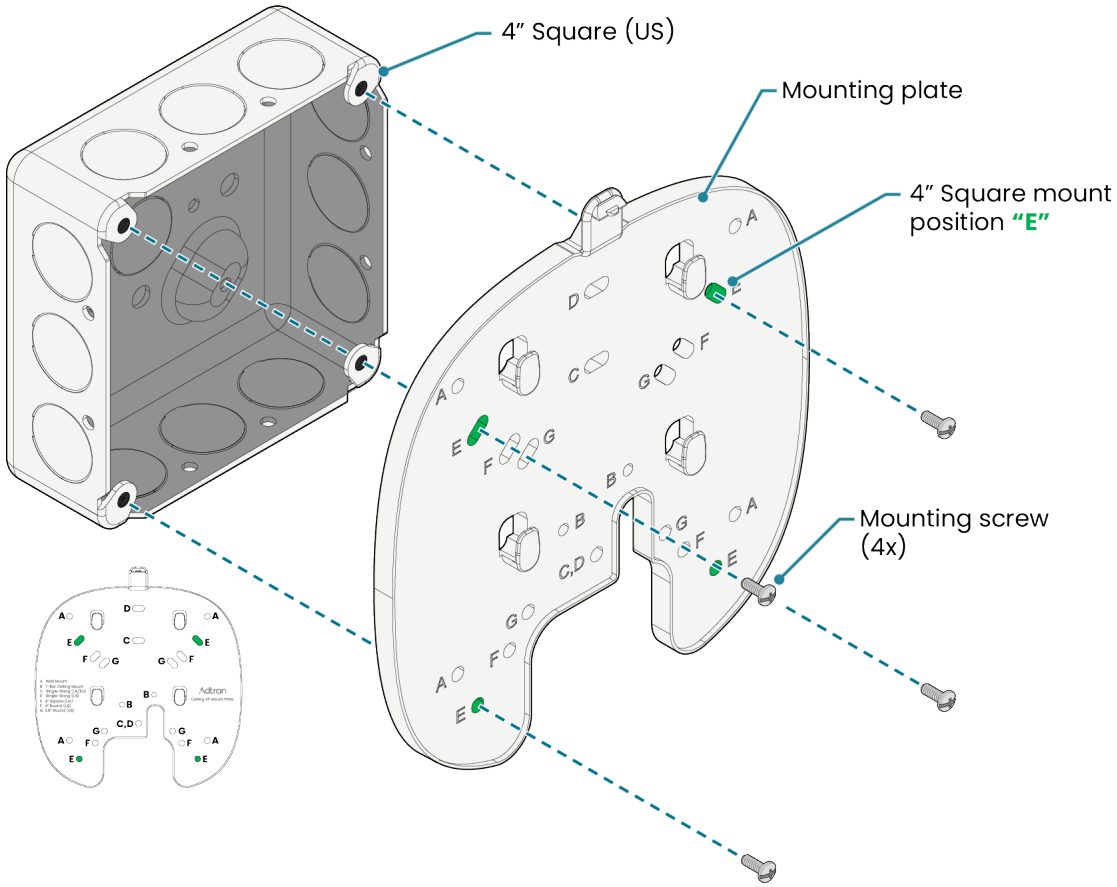


Figure 9: Mounting with 4" Round (US)

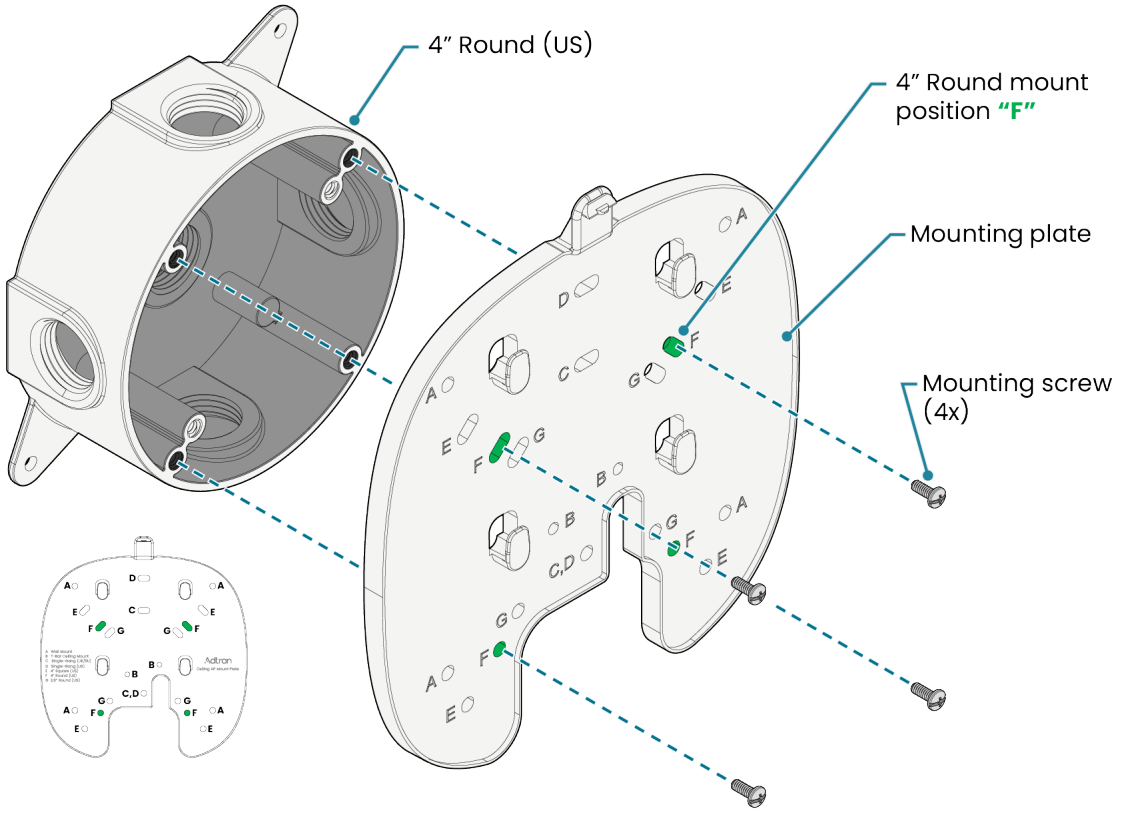
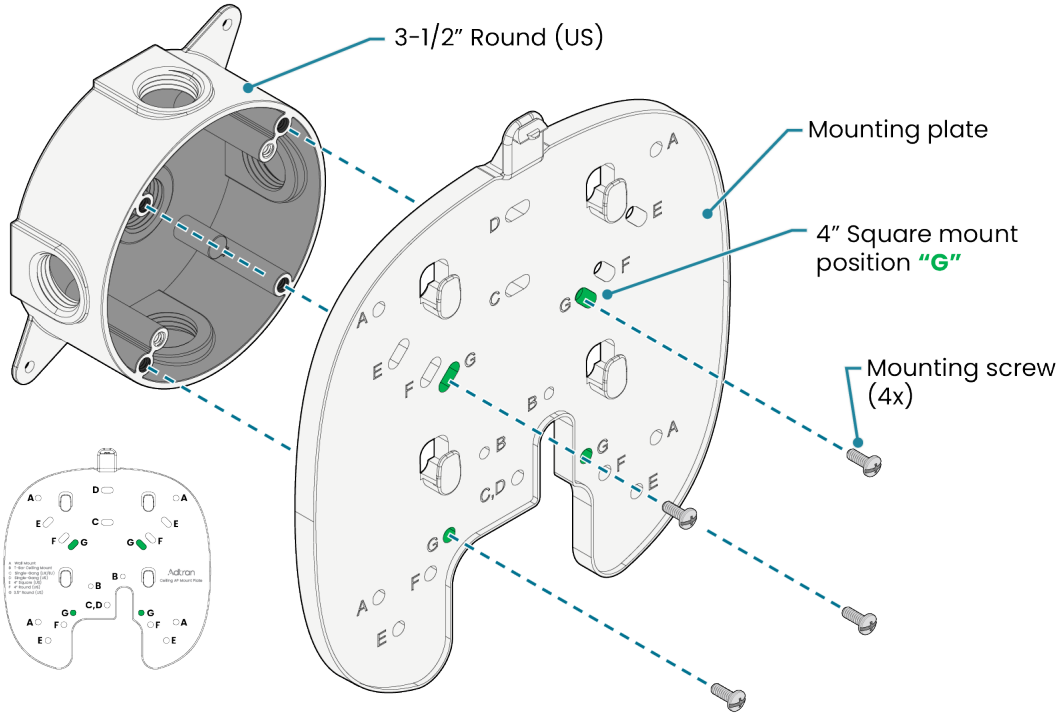


Figure 10: Mounting with 3-1/2" Round (US)



3. Align the SDG-9732i body notches with the mounting tabs on the bottom of the mount plate, and slide the device into position until it clicks.

T-Bar Mounting

To mount the SDG-9732i to a drop-ceiling T-bar:

1. Attach the T-bar mounting bracket to the mounting plate using the two included mounting screws.
2. Lift up any ceiling tiles in the way and push the mounting plate onto the T-bar.
3. Rotate the mounting plate clockwise until it locks in place.
4. Align the SDG-9732i body notches with the mounting tabs on the bottom of the mount plate, and slide the device into position until it clicks.

Figure 11: Securing Mounting Plate to T-Bar Mounting Bracket

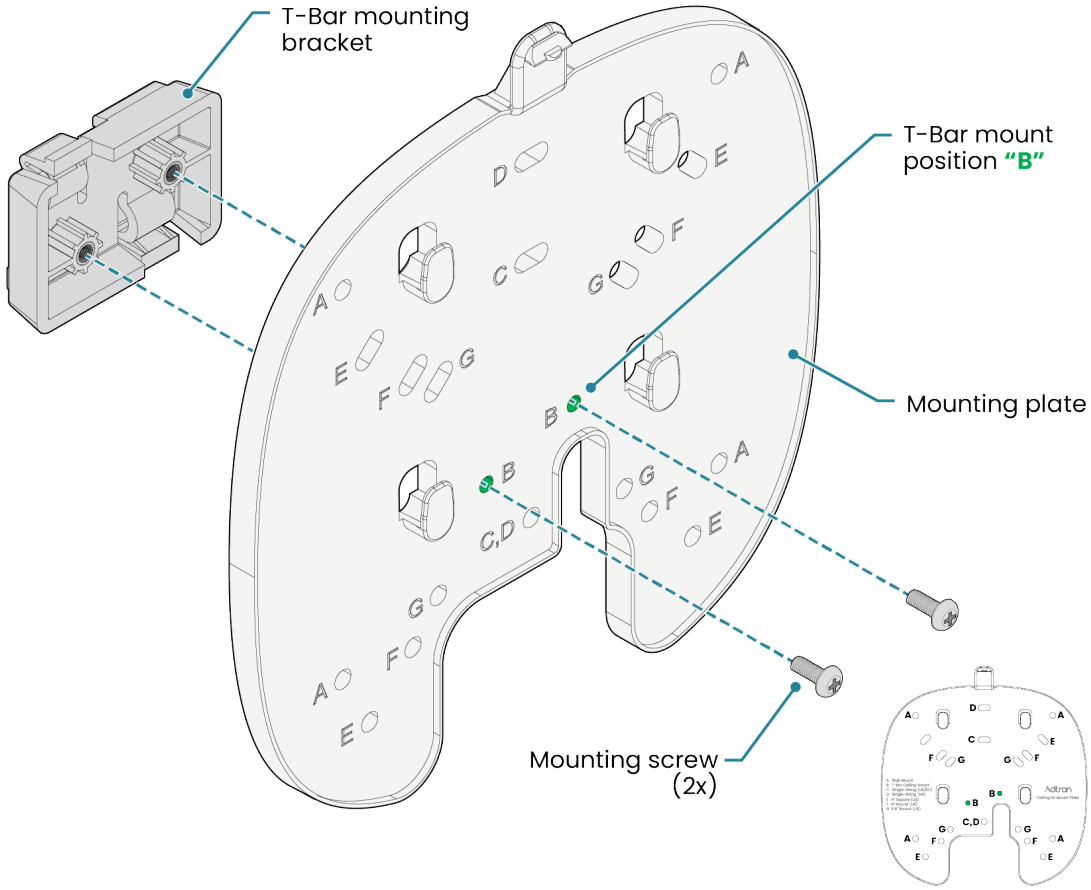


Figure 12: Attaching Mounting Plate to T-Bar

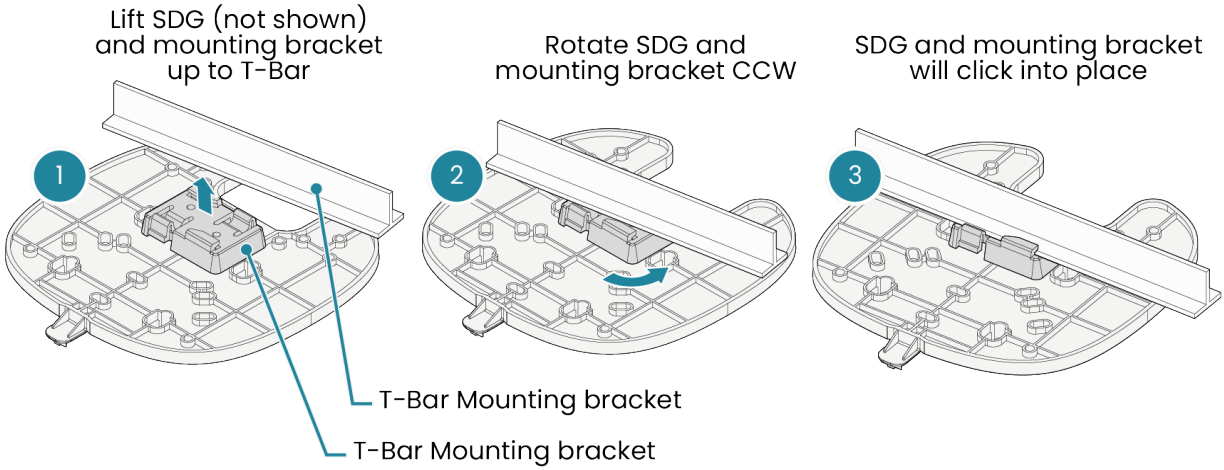


Figure 13: Sliding SDG onto Mounting Plate

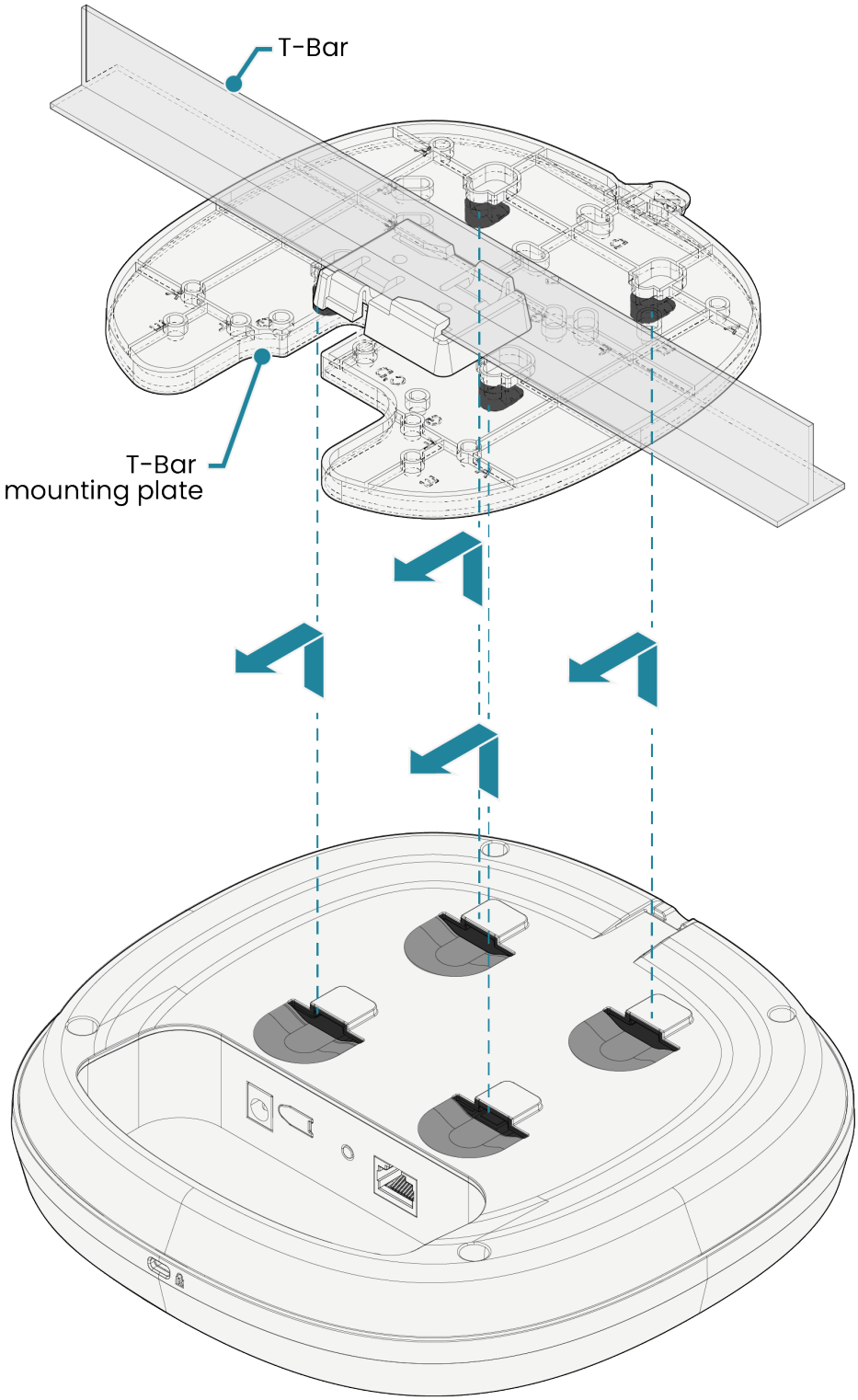
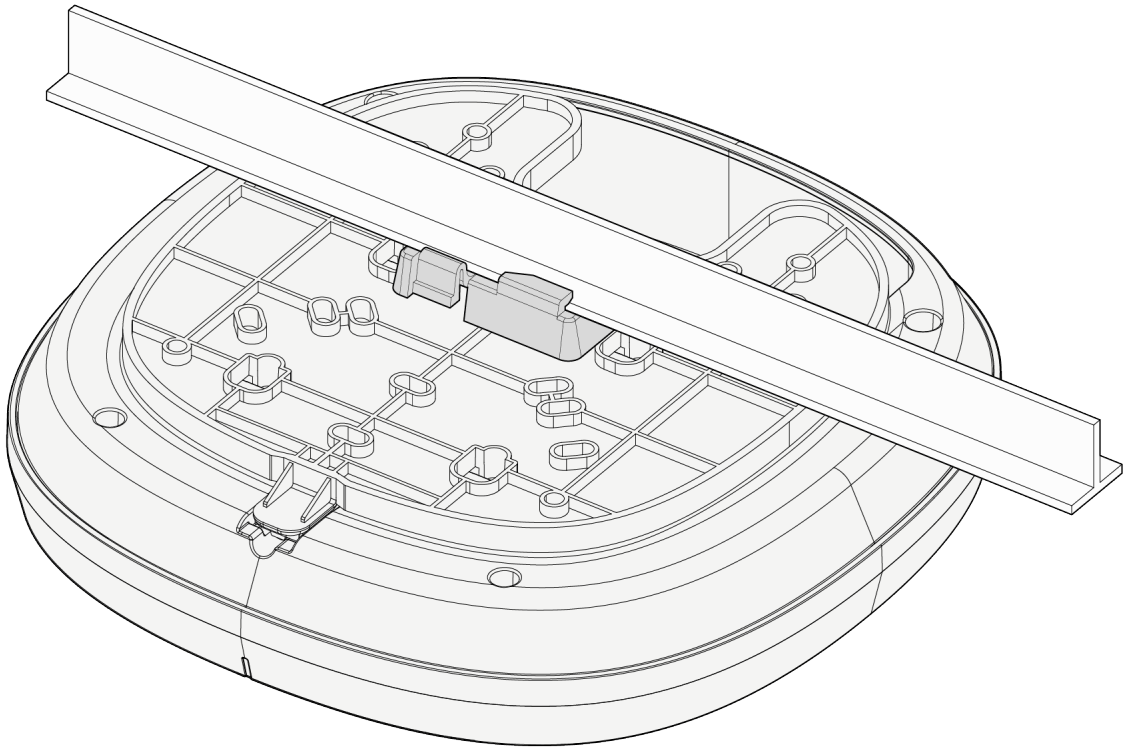


Figure 14: Attaching SDG to T-Bar



Connecting the Ethernet Port

1. Connect an RJ45 terminated Cat5 or better cable to the PoE In 2.5 GbE port.
2. Connect the other end of the Ethernet cable to a PoE source port on the router/switch or PoE injector.

CAUTION

- In all cases, use 802.3at PoE injectors with GR-1089 -Core Criteria B surge protection.
- Consult a certified electrician to ensure that all grounding and cabling is installed in compliance with local electrical code.
- Any damage or malfunction resulting from exposure of this unit to lightning or transient voltage events voids the warranty.

Verifying the Power Connection

The SDG-9732i has no on/off power switch, so it powers up immediately following connection.

Verify that the Power LED is green, indicating that the SDG-9732i is receiving power. If the LED is red, the unit is receiving an incorrect amount of power.

The Status LED should be lit on the top of the device (side opposite of the mounting), as described in LEDs.

Logging In

The SDG-9732i provides a browser-based GUI to manually configure the device from a connected computer. To connect and log in to the device using SmartOS:

1. Ensure your computer is connected to the SDG-9732i either using Wi-Fi or the Ethernet connection to the LAN port.
2. Assign a static IP address to log in to the device.
3. Open a web browser and enter **`http://router`** or **`http://setup`**. A sign-in page appears.

   NOTE

   If you are unable to connect to the SDG-9732i 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. Enter the default username (**`admin`**) and password.

   NOTE

   If you forgot the password for this device, select **Forgot password?** and follow the instructions to reset the gateway configuration to the factory defaults.

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

   NOTE

   If you use the Intellifi® MeshView solution, choose the set up procedures in the Intellifi® Mobile App.

Configuring Software

You can manage your wireless network using the Intellifi® MeshView app, the local WebUI of the supported Adtran router, or the Intellifi® MeshView cloud service. For more information on configuring and using Intellifi®, see the *Intellifi® User Guide*.

Chapter 4: Troubleshooting

The SDG-9732i does not require routine hardware maintenance for normal operation. Adtran does not recommend that you attempt to repair the device. Instead, return the defective unit to Adtran. See Warranty for further information. Field support for software is provided through upgrade facilities.

If the SDG-9732i does not power on, check the PoE source to make sure the connection is adequate. For more information on troubleshooting, see the *Intellifi® User Guide*.

LEDs

When the SDG-9732i first powers up, it performs self-tests. When the tests are complete, the LEDs display the device status.

The LED on the bottom of the unit (side opposite of the mounting) indicates the status of the device. The LEDs appear in order of operation.

Color	LED State	Indication
Initial Set Up		
Blue	Solid	Cold boot
Red	Pulsing	Reboot and system upgrade (persists over uboot)
Green	Pulsing	Linux booting up
Light blue	Pulsing	Quick start
White	Solid	Controller WAN up, Internet
Amber	Solid	Controller WAN down, no Internet
Satellite Set Up		
Purple	Pulsing	Satellite set up
White	Solid	Satellite up
Red	Pulsing	Satellite up, fair signal
Amber	Pulsing	Satellite up, poor signal
White	Pulsing	Reverting

Reset Button

If you need to reboot the SDG-9732i, press **Reset** for at least 1 second.

WARNING

If you press **Reset** for at least 10 seconds, the SDG-9732i resets to factory defaults.

Chapter 5: Safety and Regulatory

This section contains these topics:

WARNING

- Do not use this product in a location where it can be exposed to water.
- Avoid using this product during an electrical storm. There might be a remote risk of electric shock from lightning.

CAUSTION

- Connect the DC power input to an approved Limited Power Source (LPS) power supply only.
- This product is intended to operate in ambient temperatures up to 40°C.

NOTE

Read all compliance notes and requirements:

- This equipment contains no parts that can be serviced by the user.
- This product meets EU RoHS Directive. See www.adtran.com/environmental for further information on RoHS/WEEE.
- This product is NRTL Safety Listed to the applicable UL/CSA Standards.
- This product has been evaluated to applicable international standards as indicated by CE, UKCA, and RCM marking.
- When using a 12V adapter for power, the AC branch circuit socket-outlet must be installed near the equipment and must be easily accessible.
- The RJ45 jack is not used for telephone line connection.

Regulatory Compliance

The following sections include user requirements for operating this product in accordance with national laws for usage of radio spectrum and operation of radio devices. Your failure to comply with the applicable requirements can result in unlawful operation and adverse action against you by the applicable national regulatory authority.

This product firmware limits operation to only the channels allowed in a particular region or country. All options described in this guide might not be available in your version of the product.

Europe - EU and UKCA Declaration of Conformity

Products bearing the marking comply with these EU directives:

- EMC Directive 2014/30/EU
- Low Voltage Directive 2014/35/EU
- EMC Directive 2014/53/EU
- ErP Directive reference: 2009/125/EC
- RoHS Directive 2015/863/EU
- WEEE Directive reference: 2012/19/EU
- RED 2014/53/EU

Compliance with these directives implies conformity to harmonized European standards that are noted in the EU Declaration of Conformity.

This device complies with the essential requirements of the Radio Equipment directive: 2014/53/EU and Radio Equipment Regulations 2017 (SI 2017/1206). These test methods demonstrate presumed conformity with the essential requirements of the Radio Equipment directive: 2014/53/EU and Radio Equipment Regulations 2017 (SI 2017/1206).

Radio Equipment directive: 2014 / 53 / EU	Radio Equipment Regulations 2017(SI 2017/1206)
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

Radio Equipment directive: 2014 / 53 / EU	Radio Equipment Regulations 2017(SI 2017/1206)
ETSI EN 303 687 V1.1.1	ETSI EN 303 687 V1.1.1
	IR 2030 – UK Interface Requirements 2030
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 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 50654: 2011	BS EN 50564: 2011

For indoor use only. Valid in all EU member states, EFTA states, and Switzerland.

Install and operate this equipment with a minimum distance of 46 cm between the radiator and your body.

Do not use this device for setting up outdoor radio links in France and in some areas the RF output power may be limited to 10 mW EIRP in the frequency range of 2454 - 2483.5 MHz. For detailed information, the end-user should contact the national spectrum authority in France.

This device is restricted to indoor use only when operating in the 5150~5350 MHz and 5945~ 6425 MHz range when used in below countries:

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

Software version: 12.6.3.101

FCC Requirements for Operation in the United States

This section contains these topics:

FCC Information to User

This product does not contain any user serviceable components and is to be used with approved antennas only. Any product changes or modifications will invalidate all applicable regulatory certifications and approvals.

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 a minimum distance of 41 cm between the radiator and your body.

Do not co-locate or operate this device in conjunction with any other antenna or transmitter except in accordance with FCC multi-transmitter product procedures.

FCC Declaration of Conformity

This device complies with Part 15 of the FCC rules. Operation is subject to these 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 Radio Frequency Interference Warnings and Instructions

This equipment was tested and complies 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 causes

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 or TV technician for help.

The specification for this product also lists FCC CFR Part 2, 2.1091 (MPE).

FCC regulations restrict the operation of this device to indoor use only.

- This device is prohibited from being operated on oil platforms, cars, trains, boats, and aircraft, except for large aircraft while flying above 10,000 feet in the 5.925-6.425 GHz band.
- Transmitters in the 5.925-7.125 GHz band are prohibited from operating to control or communicate with unmanned aircraft systems.

CAN ICES-3(B)/NMB-3(B)

This section contains these topics:

Canadian Department of Communications Radio Interference Regulations

This digital apparatus (Wi-Fi 7 Ceiling AP Model SDG-9732i) does not exceed the Class B limits for radio-noise emissions from digital apparatus as set out in the Radio Interference Regulations of the Canadian Department of Communications.

Industry Canada

This device complies with RSS-247 of the Industry Canada Rules.

1. This device may not cause interference, and
2. This device must accept any interference received, 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

Radiation Exposure Statement: This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 23 cm between the radiator and your body.

ATTENTION

Déclaration d'exposition aux radiations: Cet équipement est conforme aux limites d'exposition aux rayonnements IC établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 23 cm de distance entre la source de rayonnement et votre corps.

This radio transmitter (IC: 2250A-17600081) has been approved by Industry Canada to operate with the antenna types listed below. Antenna types not included in this list are strictly prohibited for use with this device.

RSS-102 (MPE)4

CAUTION

1. Operation of this device in the band 5150 to 5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems;
2. Users should also be advised that high-power radars are allocated as primary users (i.e. priority users) of the bands 5250 to 5350 MHz and 5650 to 5850 MHz and that these radars could cause interference and/or damage to LE-LAN devices.
3. The maximum antenna gain permitted for devices in the bands 5250 to 5350 MHz and 5470 to 5725 MHz shall be such that the equipment still complies with the e.i.r.p. limit;
4. The maximum antenna gain permitted for devices in the band 5725 to 5850 MHz shall be such that the equipment still complies with the e.i.r.p. limits specified for point-to-point and non-point-to-point operation as appropriate;
5. This device must not be used for control of or communications with unmanned aircraft systems.
6. This device must not be used on oil platforms.

7. This device must not be used on aircraft, except for the low-power indoor access points, indoor subordinate devices, low-power client devices, and very low-power devices operating in the 5925 to 6425 MHz band, that may be used on large aircraft as defined in the Canadian Aviation Regulations, while flying above 3,048 metres (10,000 feet).
8. This device must not be used on automobiles.
9. This device must not be used on trains.
10. This device must not be used on maritime vessels.
11. Operation of this device must be limited to indoor use only.

ATTENTION

1. Les dispositifs fonctionnant dans la bande 5150 à 5250 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;
2. De plus, les utilisateurs devraient aussi être avisés que les utilisateurs de radars de haute puissance sont désignés utilisateurs principaux (c.-à-d., qu'ils ont la priorité) pour les bandes 5250-5350 MHz et 5650-5850 MHz et que ces radars pourraient causer du brouillage et/ou des dommages aux dispositifs LAN-EL.
3. Le gain maximal d'antenne permis pour les dispositifs utilisant les bandes de 5250 à 5350 MHz et de 5470 à 5725 MHz doit être conforme à la limite de la p.i.r.e;
4. Le gain maximal d'antenne permis (pour les dispositifs utilisant la bande de 5725 à 5850 MHz) doit être conforme à la limite de la p.i.r.e. spécifiée pour l'exploitation point à point et l'exploitation non point à point, selon le cas;

5. Les dispositifs ne doivent pas être utilisés pour commander des systèmes d'aéronef sans pilote ni pour communiquer avec de tels systèmes.
6. Les dispositifs ne doivent pas être utilisés sur les plateformes de forage pétrolier.
7. Les dispositifs ne doivent pas être utilisés dans les aéronefs, à l'exception des points d'accès intérieurs de faible puissance, des dispositifs subordonnés intérieurs, des dispositifs clients de faible puissance et des dispositifs de très faible puissance fonctionnant dans la bande de 5 925 à 6 425 MHz, qui peuvent être utilisés dans les gros aéronefs tel qu'il est défini dans le Règlement de l'aviation canadien, et ce, lorsqu'ils volent à une altitude supérieure à 3 048 mètres (10 000 pieds).
8. Les dispositifs ne doivent pas être utilisés dans les automobiles.
9. Les dispositifs ne doivent pas être utilisés dans les trains.
10. Les dispositifs ne doivent pas être utilisés sur les navires maritimes.
11. Le fonctionnement doit être limitée à une utilisation à l'intérieur seulement.