

IRM-1100-4A2T Expansion Module Installation

This chapter describes the equipment and procedures necessary for successfully installing the Cisco IRM-1100-4A2T Expansion Module onto the IR1101.

For details on the expansion module, see Cisco IRM-1100-4A2T Expansion Module section.

- Items Shipped with your Expansion Module, on page 1
- Installing the Expansion Module on the EM Side, on page 1
- Installing the Expansion Module on the CM Side, on page 4
- Mounting the IR1101 Router with the IRM-1100-4A2T Expansion Module Attached, on page 7
- Installing a DIN Rail, on page 12

Items Shipped with your Expansion Module

Unpack the box and verify that all items listed on the invoice were shipped with the Cisco IRM-1100-4A2T.

The following items are shipped with your Expansion Module:

- Four mating screws to connect the IRM-1100-4A2T to the IR1101

Installing the Expansion Module on the EM Side

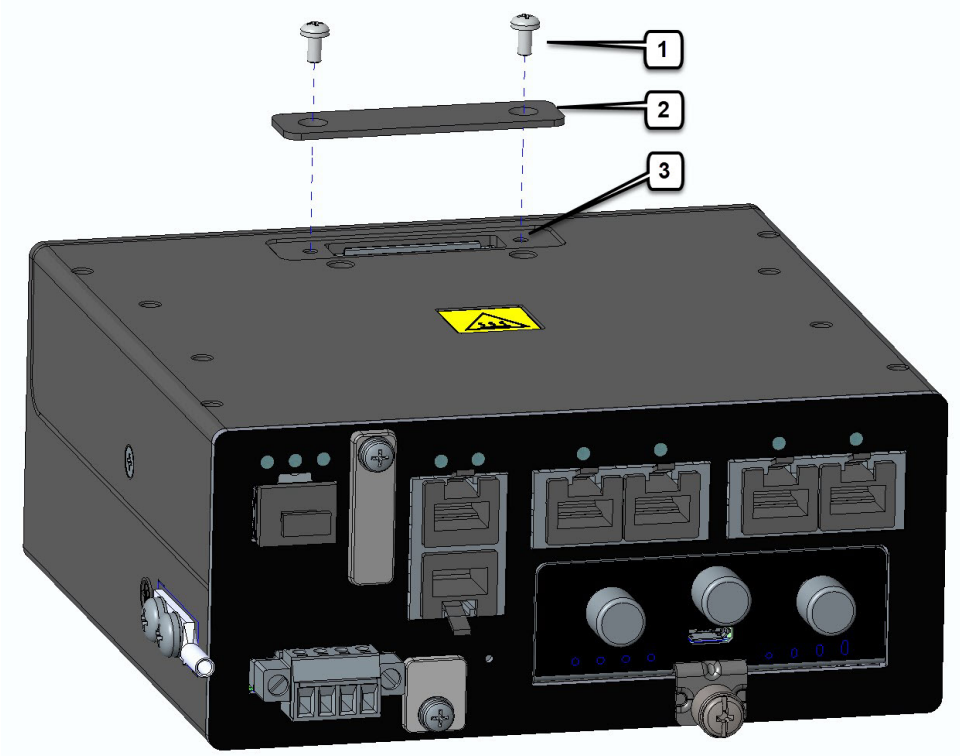
This section describes how to install the Cisco IRM-1100-4A2T on the EM (top) side of the router. The Expansion Module attaches to the IR1101 Base using 4 mating screws, and is connected through a mating connector. The Expansion Module is grounded and powered through the connection to the IR1101.

To attach the IRM-1100-4A2T to the IR1101 on the EM side, perform the following steps:

Procedure

Step 1 Remove the protective cover from the mating connector on the IR1101 by unscrewing the two Phillips head screws. Refer to the following figure.

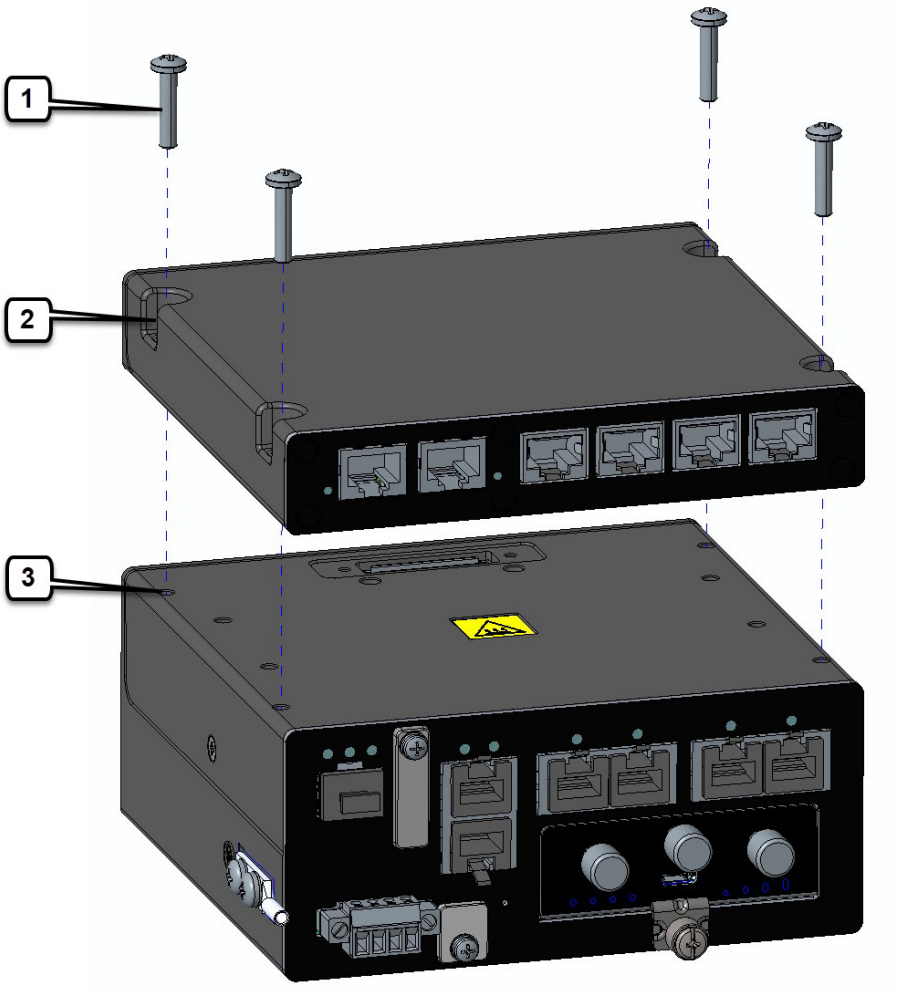
Figure 1: Protective Cover



1	Phillips head screws
2	Protective cover
3	Cover mounting holes

Step 2 After removing the protective connector cover from the IR1101, carefully align the Expansion Module to the IR1101 so that both mating connectors engage. Refer to the following figure. Once properly seated, install the four mating screws to fully secure the Expansion Module to the IR1101.

Figure 2: Mounting the Expansion Module



1	Mating screws
2	Expansion mating screw holes
3	Mounting holes

Step 3 Tighten the screws to a torque of 13-15 in. lbs (1.5-1.7 newton meter). When complete, the two devices form a single assembly as shown in the following figure.

Figure 3: Completed Assembly



Installing the Expansion Module on the CM Side

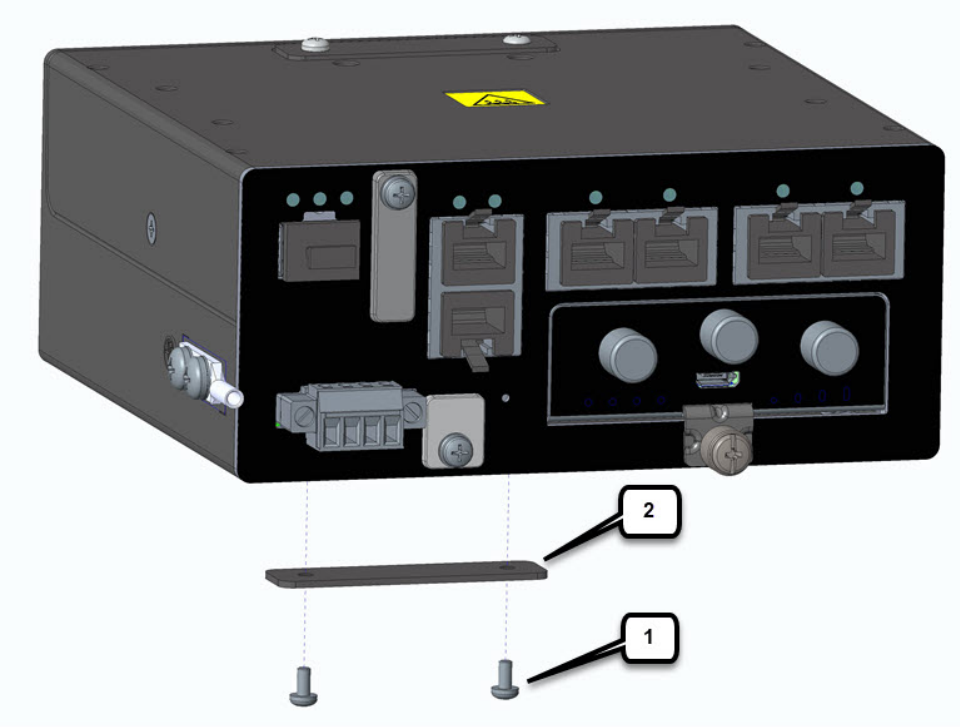
This section describes how to install the Cisco IRM-1100-4A2T on the CM (bottom) side of the router. The Expansion Module attaches to the IR1101 Base using 4 mating screws, and is connected through a mating connector. The Expansion Module is grounded and powered through the connection to the IR1101.

To attach the IRM-1100-4A2T to the IR1101 on the CM side, perform the following steps:

Procedure

Step 1 Remove the protective cover from the mating connector on the IR1101 by unscrewing the two Phillips head screws. Refer to the following figure.

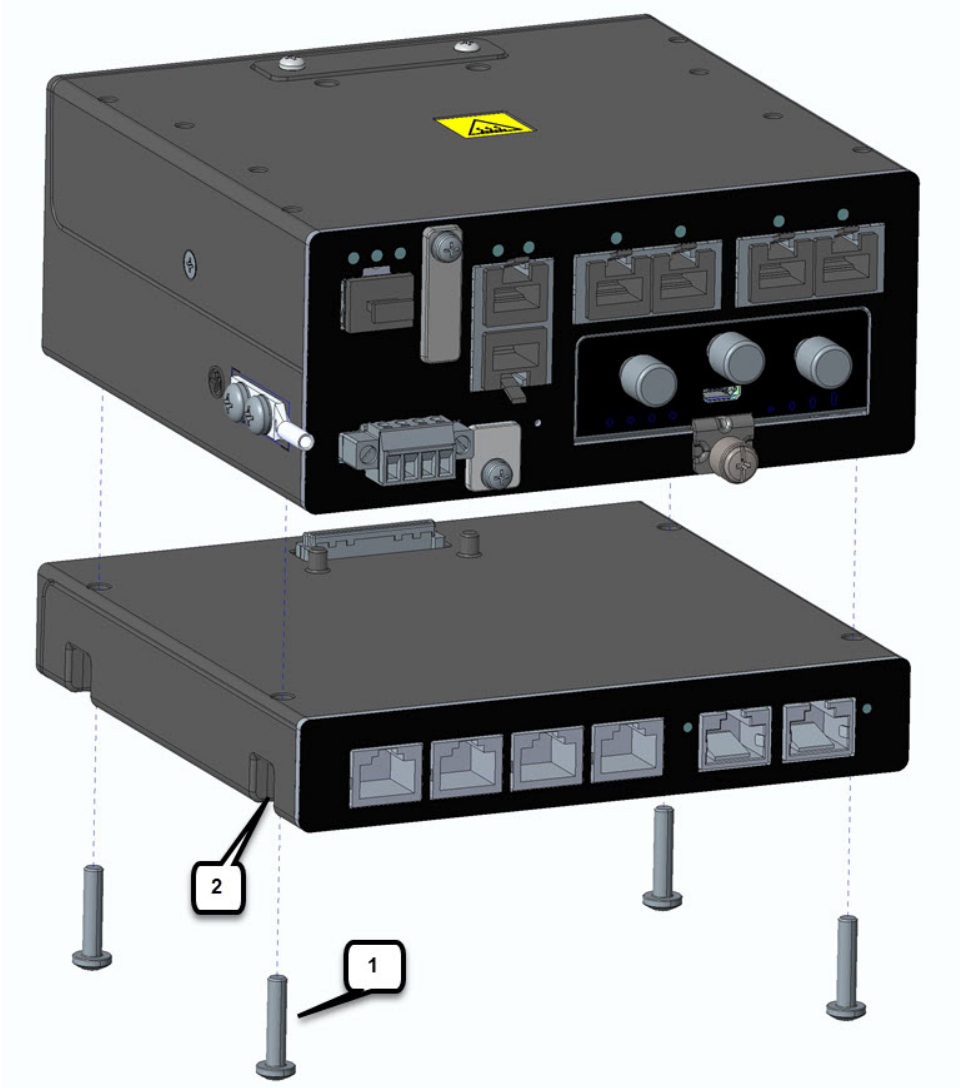
Figure 4: Protective Cover



1	Phillips head screws
2	Protective cover

Step 2 After removing the protective connector cover from the IR1101, rotate the expansion module upside down so the mating connector is facing the IR1101 base unit. Carefully align the Expansion Module to the IR1101 so that both mating connectors engage. Refer to the following figure. Once properly seated, install the four mating screws to fully secure the Expansion Module to the IR1101.

Figure 5: Mounting the Expansion Module



1	Mating screws
2	Expansion mating screw holes

Step 3 Tighten the screws to a torque of 13-15 in. lbs (1.5-1.7 newton meter). When complete, the two devices form a single assembly as shown in the following figure.

Figure 6: Completed Assembly



Mounting the IR1101 Router with the IRM-1100-4A2T Expansion Module Attached

After the Cisco IRM-1100-4A2T is attached to the IR1101, it can be mounted in the following ways:

- On a DIN Rail
- Using mounting brackets

Note For the remainder of these instructions, we will refer to the combined IR1101/IRM-1100-4A2T as the “Device”.

Mounting the Device Using Mounting Brackets

The wall mounting kit part number is IR1101-WALLMNT and contains the following:

- Mounting brackets (x2)
- Mounting screws (x4)

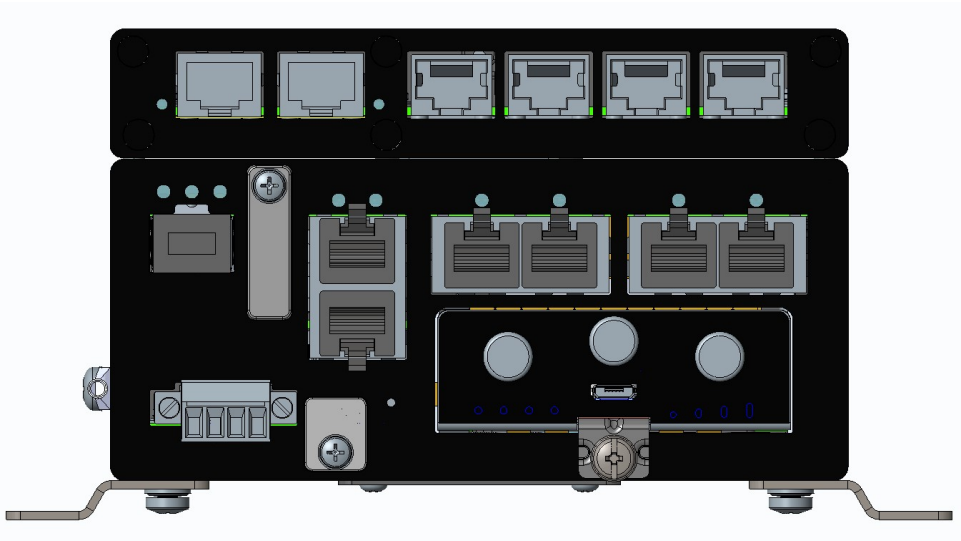
Warning Read the wall-mounting instructions carefully before beginning installation. Failure to use the correct hardware or to follow the correct procedures could result in a hazardous situation to people and damage to the system. **Statement 378**

Tip When choosing a location for wall-mounting the Device, consider cable limitations and wall structure.

Note A minimum of 1 inch clearance is required on all sides of the device except for the side mounted against the wall/floor or DIN rail, to allow for proper air flow.

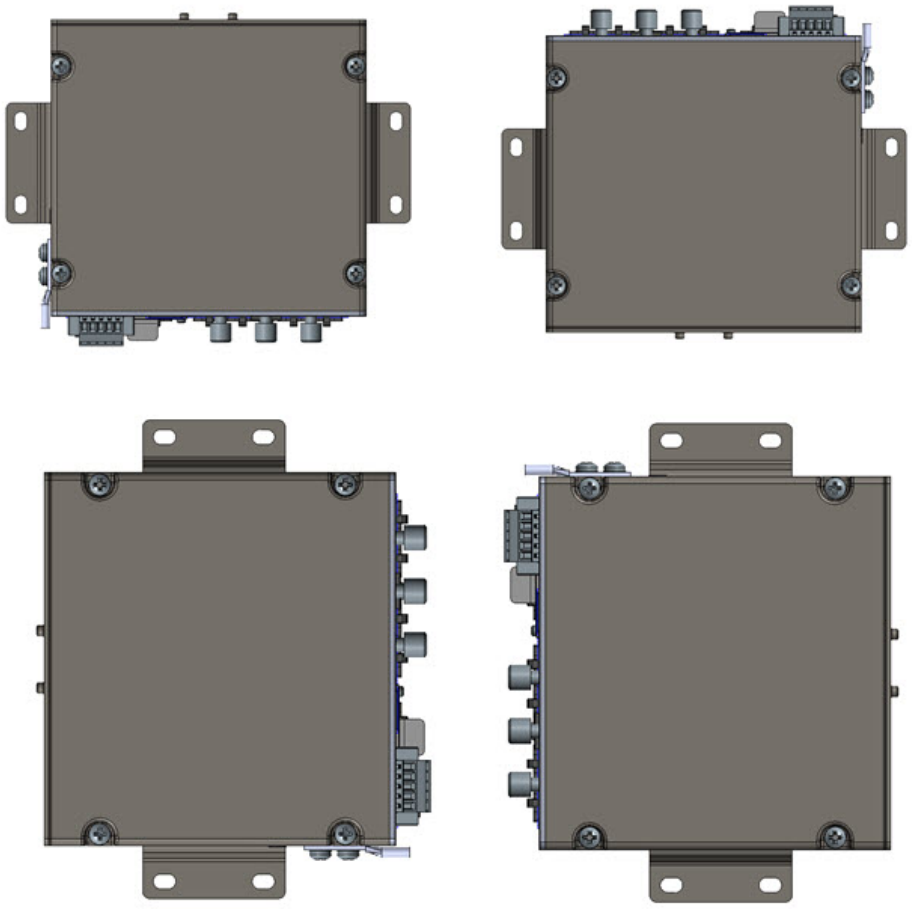
The Device can be mounted on the top of a flat surface as shown in the following figure, but cannot be mounted upside down.

Figure 7: Table Mounting



The device can also be mounted vertically on a wall in four orientations as shown in the following figure.

Figure 8: Wall Mounting

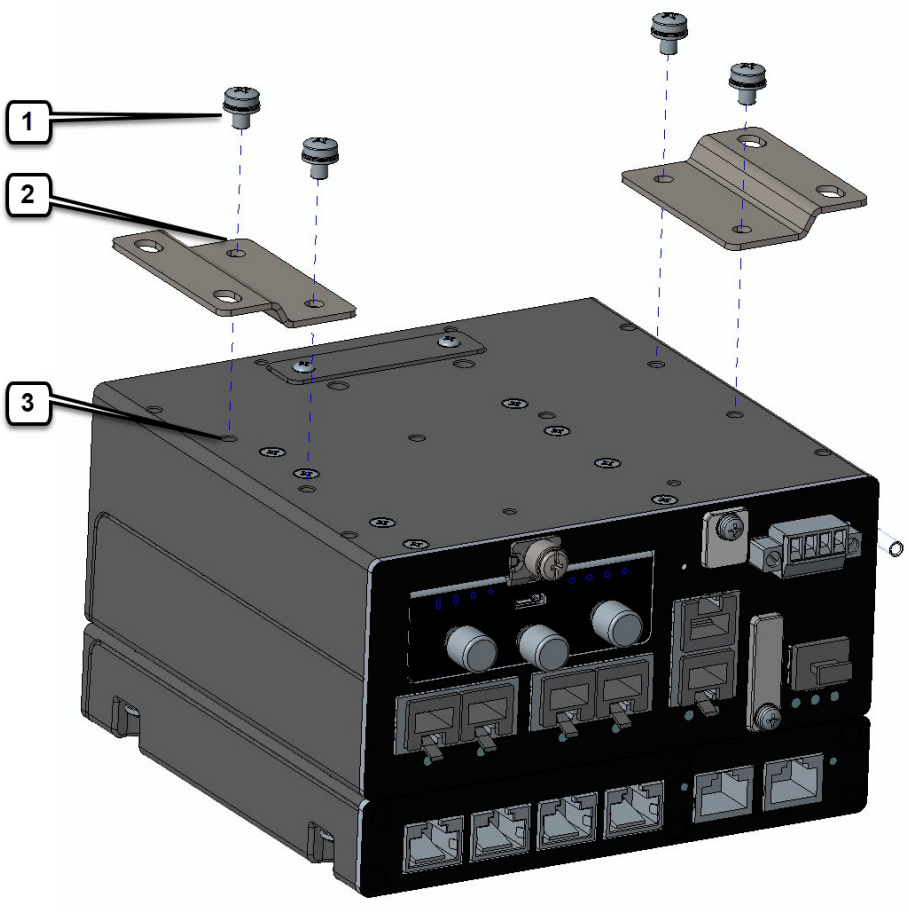


To mount the Device on a wall or other flat surface, follow these steps:

Procedure

Step 1 Attach the mounting brackets to the bottom of the Device. Refer to the following figure for guidance.

Figure 9: Mounting Brackets



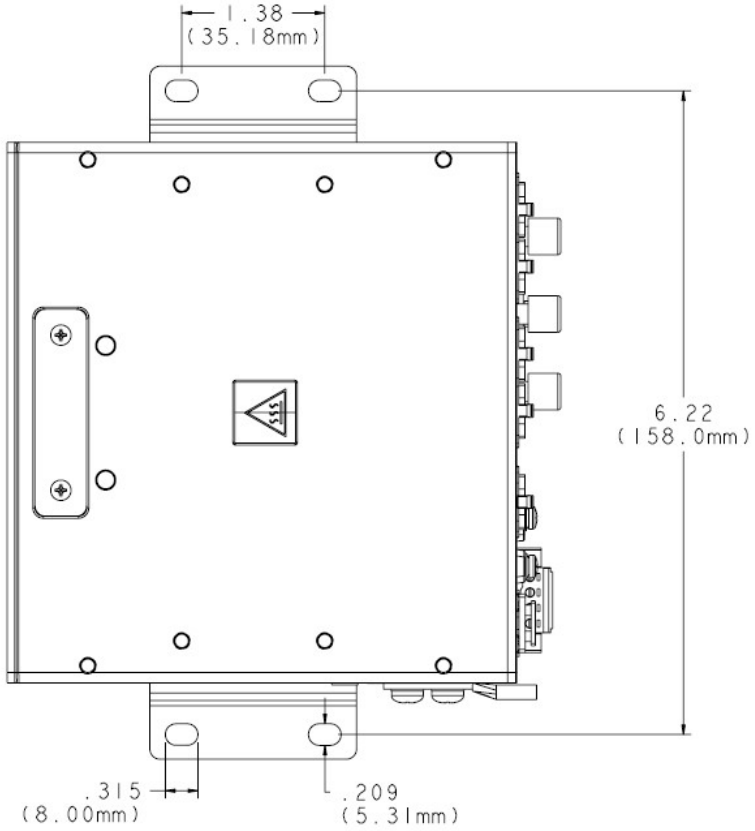
1	Provided screws
2	Holes in provided mounting brackets
3	Mounting holes

Step 2 Align the mounting brackets over the mounting holes so that the larger holes on the brackets extend out over the Device.

Step 3 Attach the brackets to the Device with the four screws provided using a Phillips head driver. Torque to 13-15 in. lbs (1.5-1.7 newton meter).

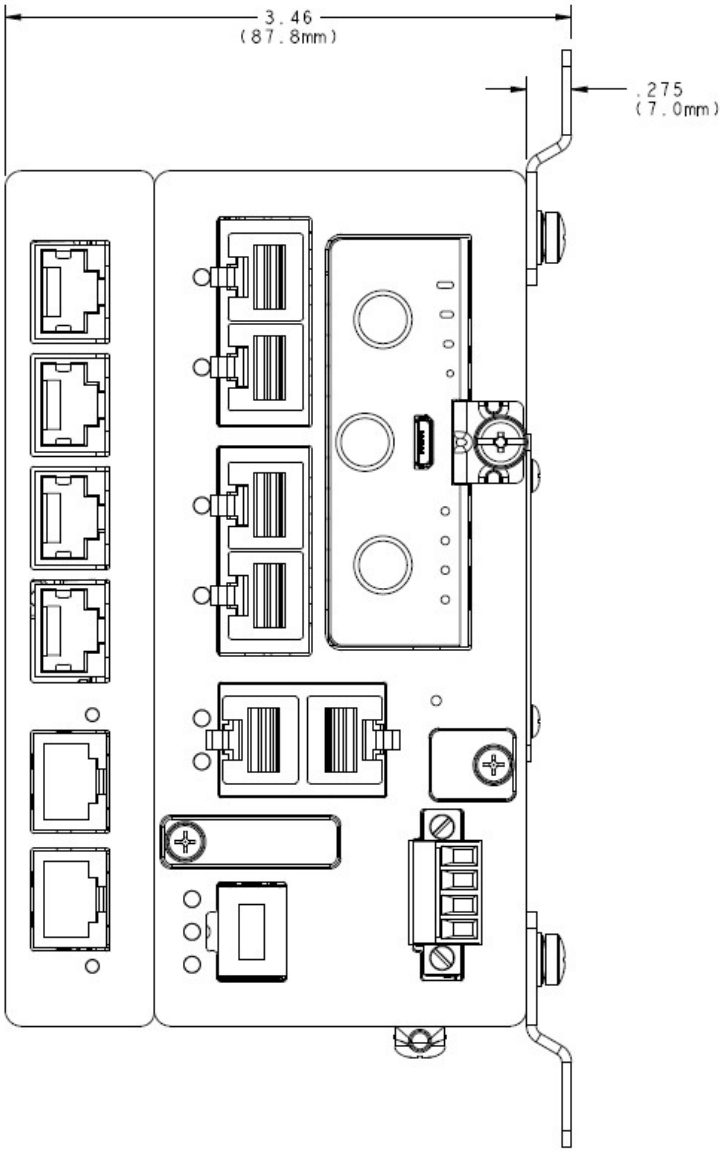
Step 4 Mount the Device with the attached brackets in a proper wall structure to carry the weight of the device, which is a combined 3.85 lbs. See the following figures for the dimensions of the mounting holes with the brackets attached to the Device.

Figure 10: Wall/Floor mounting hole dimensions with mounting brackets attached



Note
Four #10-32 screws (customer provided), are recommended when mounting the Device with these brackets attached to the neighboring surface.

Figure 11: Wall/Floor mounting clearance and overall dimensions with mounting brackets attached

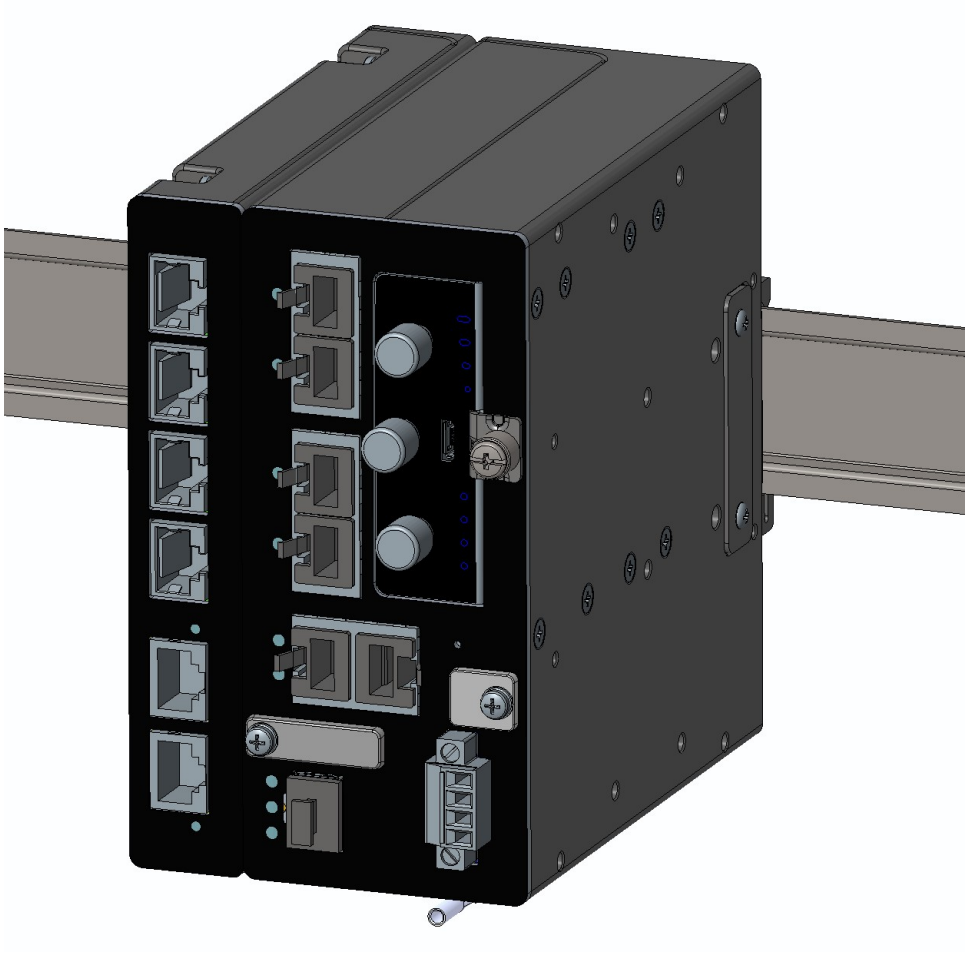


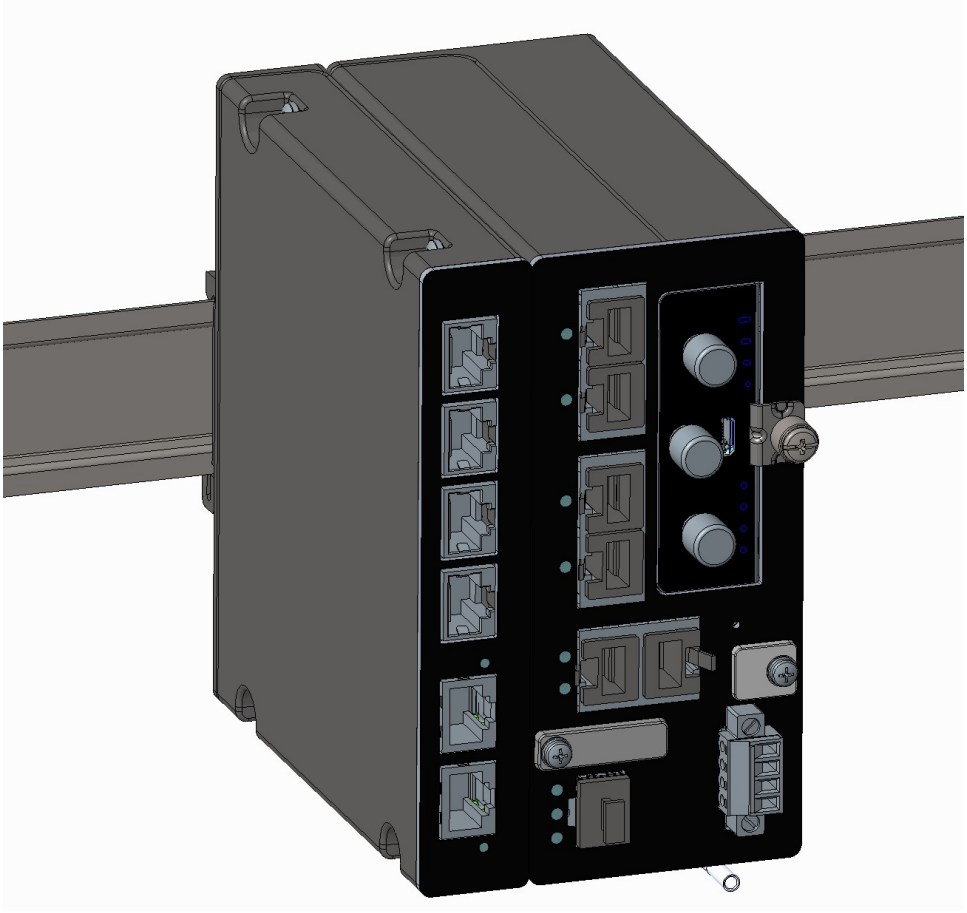
Step 5 Route the cables so that they do not put a strain on the connectors or mounting hardware.

Installing a DIN Rail

The DIN Rail kit is ordered separately, and the part number is IRM-1100-DINRAIL. The Device can only be mounted vertically, with the ground lug on the bottom side as shown in the following figures.

Figure 12: Device Orientation



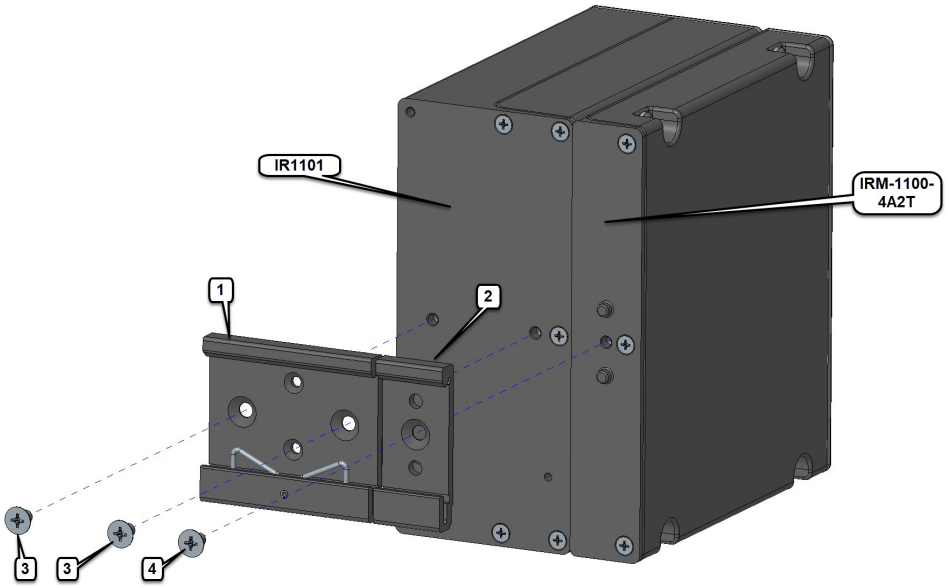


Mounting the DIN Rail Bracket on the Device

Procedure

Step 1 Attach the DIN rail brackets to the back of the Device. There are two separate mounting brackets. One attaches to the IR1101, and the other attaches to the IRM-1100-4A2T. The combined DIN rail brackets mount in the vertical orientation only. See the following figure.

Figure 13: Attaching the DIN Rail Brackets



1	DIN mounting bracket
2	IRM-1100-DINRAIL mounting bracket
3	Screws from IR1101 kit
4	Screw from IRM-1100-DINRAIL kit

Step 2 Attach the IR1101 DIN mounting bracket to the Device using the two screws provided in the kit. Position the bracket over the two mounting holes, then use 13-15 in. lbs. (1.5-1.7 newton meter) of torque to screw the bracket onto the Device.

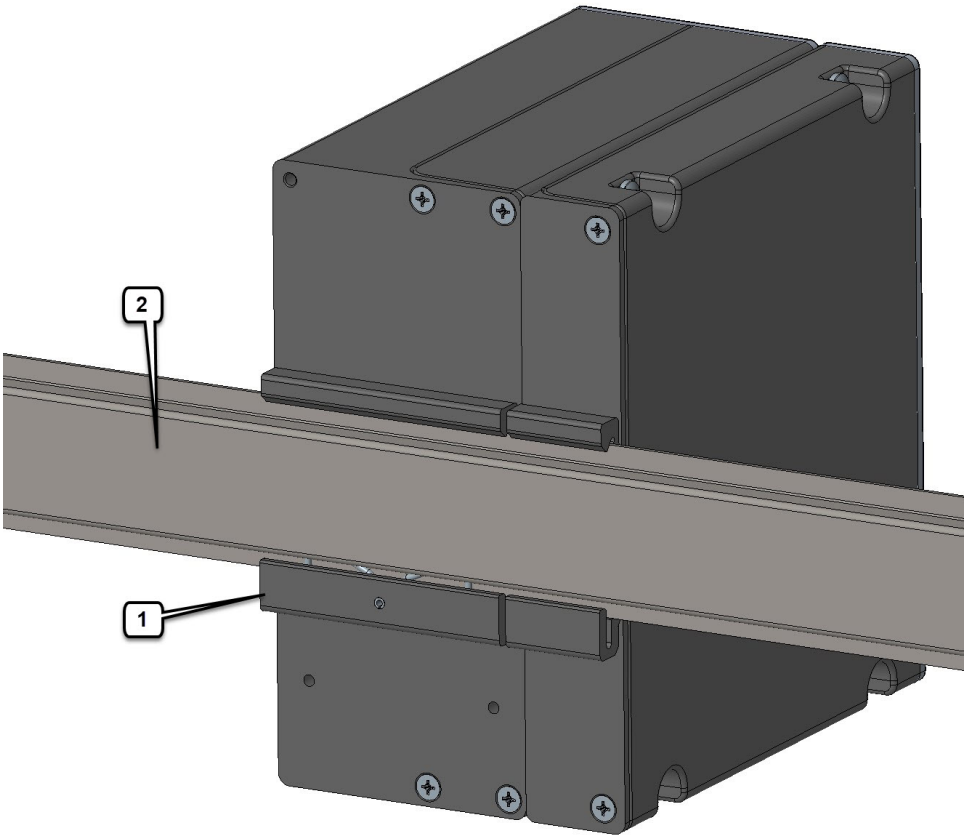
Step 3 Attach the IRM-1100-DINRAIL mounting bracket to the Device using the screw provided in the kit. Position the bracket over the single mounting hole, then use 13-15 in. lbs. (1.5-1.7 newton meter) of torque to screw the bracket onto the Device.

Step 4 Once the two brackets are attached to the Device, it can be mounted onto the DIN Rail.

Attaching the Bracket Onto the DIN Rail

To attach the Device with the brackets to a DIN rail, follow these steps. Refer to the following figure for details of a completed attachment.

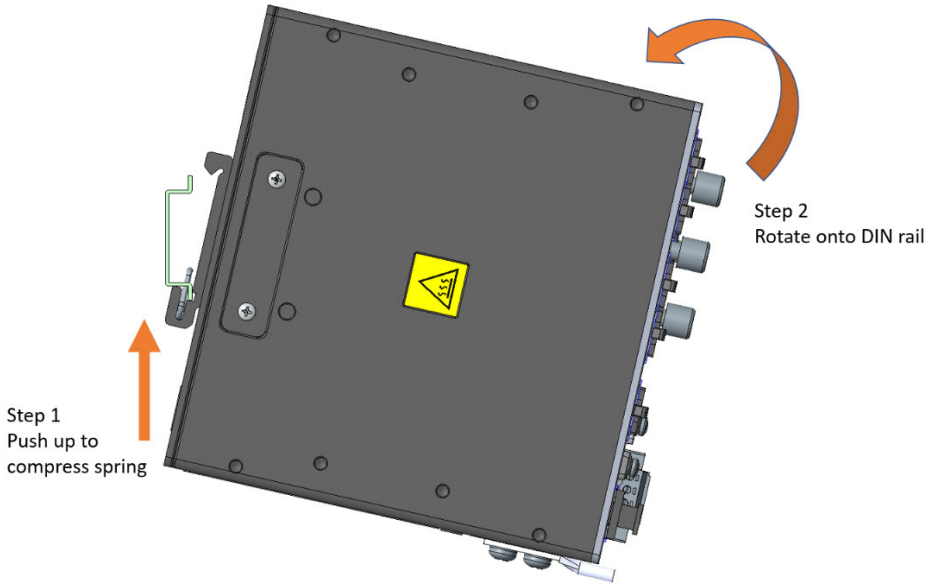
Figure 14: Attaching the Brackets to the DIN Rail



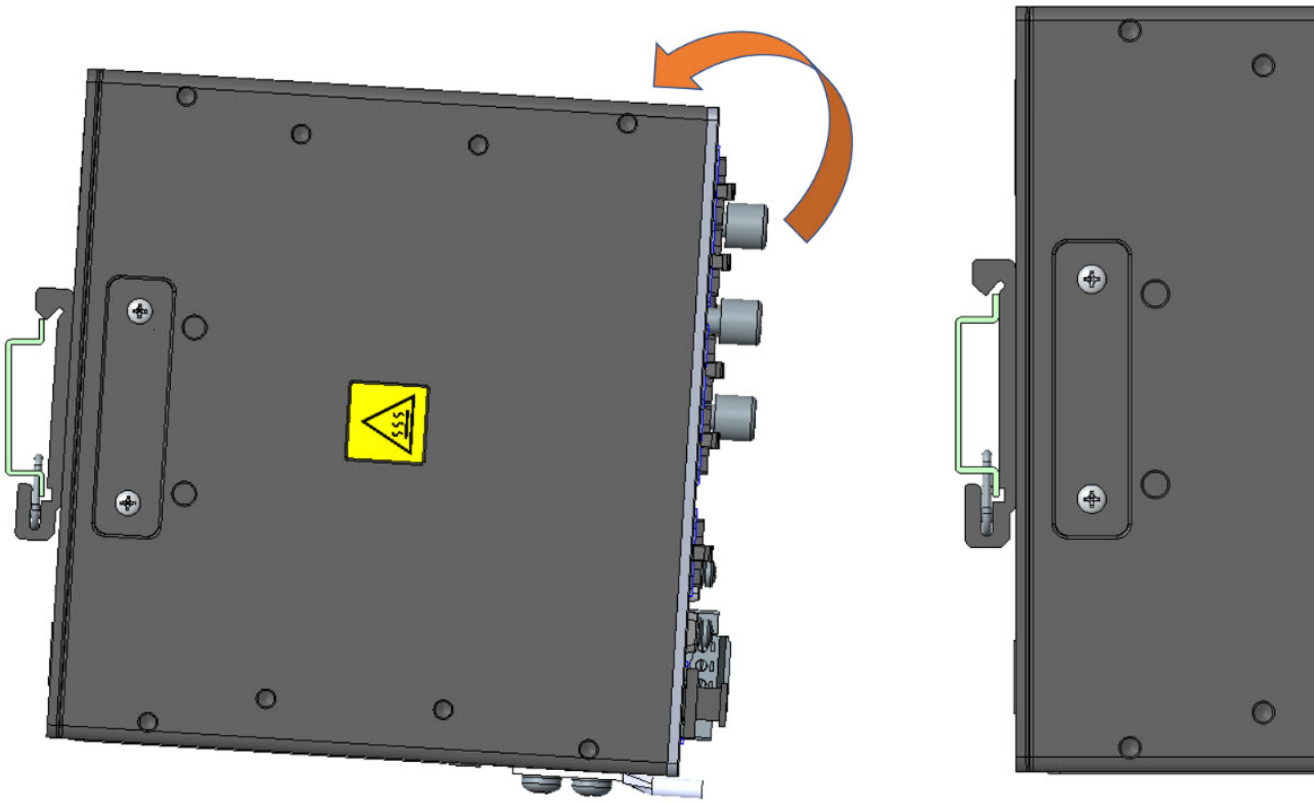
1	DIN rail clips
2	DIN rail

Procedure

Step 1 Position the router so that the lower edge and spring of the DIN clip, located within the bottom of the DIN rail bracket, engages with the bottom section of the DIN rail. Push up to compress the spring.



Step 2 Rotate the router so that the top hook of the DIN clip clamps to the top section of DIN rail. Refer to the following figures.



Step 3 To remove the Device from the DIN Rail, simply reverse the procedure.

Note

In order to prevent excessive side to side movement of the unit it is advised to install DIN rail stop plates such as Mouser part Numbers 653-PFP-M, 651-1201662 or 845-CA402. These stop plates can be installed on one or both sides of the unit to limit excessive side to side movement that typically occurs in high vibration environments.

What to do next

After you install and properly ground the Device, you can connect the power wiring, the LAN cables, and the cables for administrative access as required for your installation.