

BST-1000 Series Quick Installation Guide

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Technical Support Contact Information
www.moxa.com/support



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P/N: 1802012200010



Overview

The BST-1000 Series 5G NR (New Radio) signal booster is a cellular radio front-end accessory designed to address the challenges associated with signal attenuation, coverage, and signal cable loss limitations. The signal booster uses advanced technology to amplify and extend the transmission power of 5G user equipment (UE) signals over multiple bands, providing greater reach and efficiency for 5G network communications.

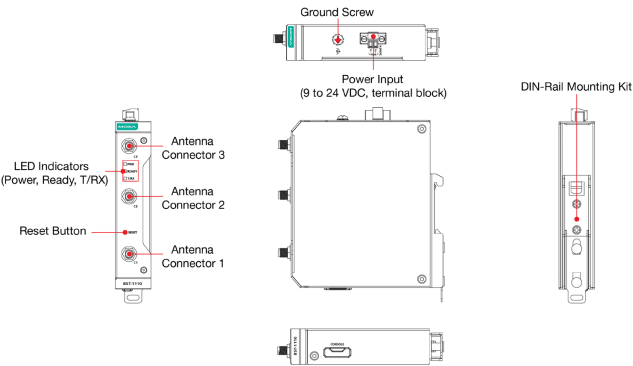
Package Checklist

Your BST-1000 Series device is shipped with the following items. If any of these items are missing or damaged, please contact your customer service representative for assistance.

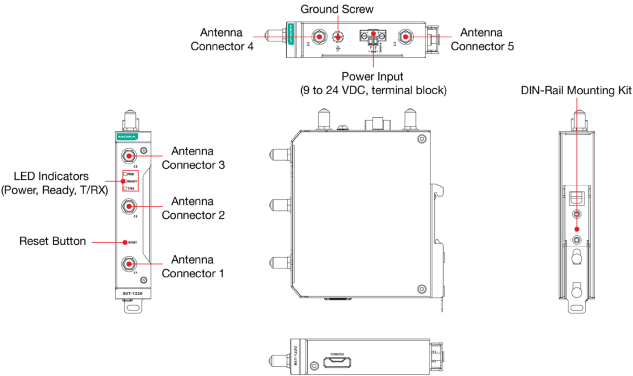
- 1 BST-1000 Series 5G signal booster
- Power jack for power adapter
- 2-pin terminal block for power input
- 1 antenna
- DIN-rail mounting kit (pre-installed)
- Quick installation guide (printed)
- Warranty card

Panel Layouts

BST-1110-T



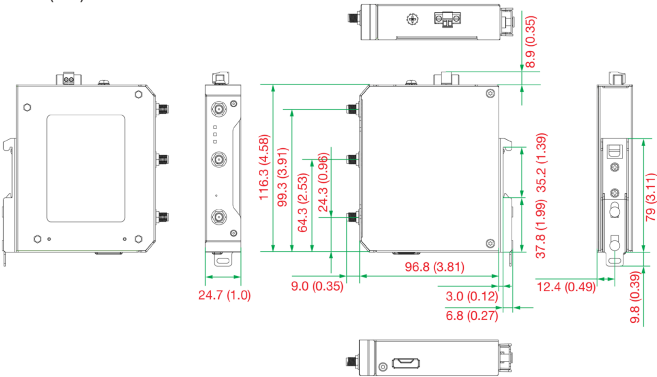
BST-1220-T



Device Dimensions

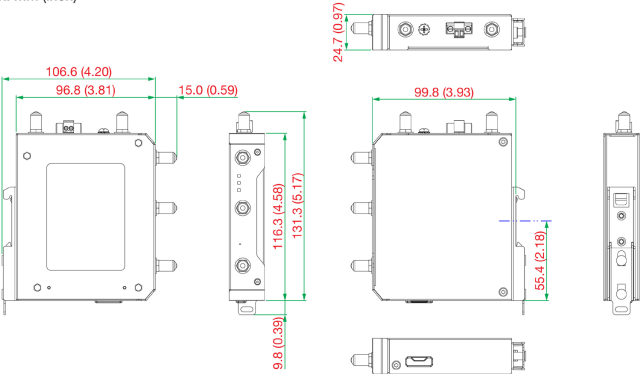
BST-1110-T

Unit: mm (inch)



BST-1220-T

Unit: mm (inch)



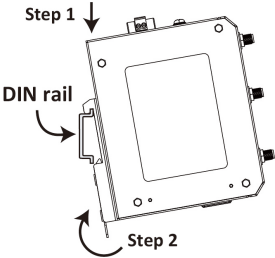
DIN-rail Mounting

The BST-1000 Series comes with a DIN-rail kit attached to the back panel. Mount the BST-1000 Series on corrosion-free mounting rails that meet the EN 60715 standard.

Installation

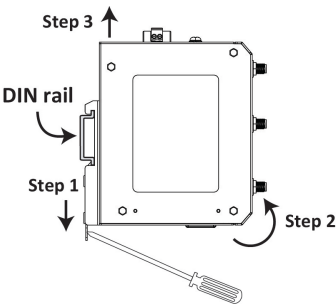
IMPORTANT Console port cover must covered to maintain IP30 compliance. Cover with rubber cap when not in-use.

- STEP 1:** Insert the upper lip of the DIN rail into the top hook of the DIN-rail mounting kit.
- STEP 2:** Press the BST-1000 Series towards the DIN rail until it snaps into place.



Removal

- STEP 1:** Pull down the latch on the mounting kit with a screwdriver.
- STEP 2:** Slightly pull the device backwards.
- STEP 3:** Lift the device up to remove it from the DIN rail.



Wall Mounting

For some applications, it may be more convenient to mount the BST-1000 Series onto a wall.

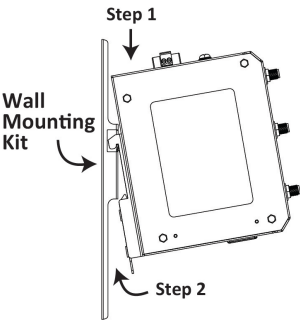
NOTE Mounting the BST-1000 Series onto a wall requires the WK-24-01 wall-mounting kit, which is sold separately.

Installation

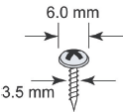
IMPORTANT Console port cover must covered to maintain IP30 compliance. Cover with rubber cap when not in-use.

STEP 1: Attach the wall-mounting kit to the BST-1000 Series by inserting the upper lip of the DIN-rail kit into the hook of the wall-mounting kit.

STEP 2: Press the BST-1000 Series towards the wall-mounting kit until it snaps into place.



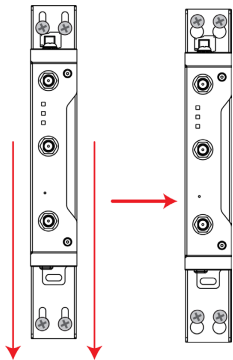
STEP 3: Mounting the BST-1000 Series onto a wall requires 4 screws. Use the BST-1000 Series with the wall-mounting kit attached as a guide to mark the correct location of the 4 screws. The head of the screws should be less than 6.0 mm in diameter, and the shaft should be less than 3.5 mm in diameter, as shown in the figure on the right. The length of the screws should be at least 10 mm.



NOTE Test the screw head and shank size by inserting the screws into one of the keyhole-shaped apertures of the wall-mounting plates before attaching the plates to the wall.

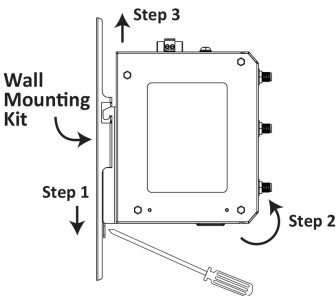
NOTE Do not screw the screws in all the way—leave about 2 mm to allow room for sliding the device with the wall-mounting kit onto the screws.

STEP 4: Once the screws are fixed to the wall, place the large keyhole-shaped apertures of the wall-mounting kit onto the four screw heads, then slide the device downwards. Tighten the four screws for more stability.



Removal

- STEP 1:** Pull down the latch on the wall-mounting kit with a screwdriver.
- STEP 2:** Slightly pull the device backwards.
- STEP 3:** Lift the device up to detach it from the wall-mounting kit.



LED Indicators

The BST-1000 Series features several LED indicators on the front panel.

LED	Color	State	Description
Power	Green	On	The system power is on.
		Off	The system power is off.
RDY	Green	On	The system is ready.
		Off	The system is not ready.
T/RX	Amber	On	The signal booster is receiving or transmitting packets.

Connecting the Antennas

NOTE Make sure to connect cables and antennas to the appropriate connectors on the BST and CCG devices. Connecting to the wrong connector may affect the performance of the module.

Connect the antennas to the C1 and C3 connectors on the front panel of the BST-1110-T Series module. For the BST-1220-T, connect the antennas to C2, C4 and C5 on the front and top panels. The BST-1000 Series uses the same antennas as the CCG-1500 Series gateways.

Connecting to the CCG-1500 Series Gateways

NOTE The BST-1000 Series is only supported by CCG-1510 models and 5G user equipment operating on the n48, n78, or n79 bands.

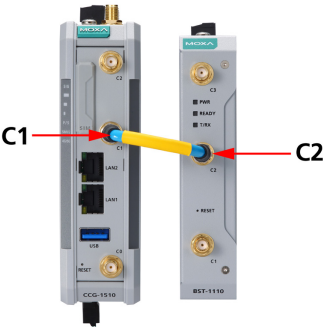
NOTE Make sure to connect cables and antennas to the appropriate connectors on the BST and CCG devices. Connecting to the wrong connector may affect the performance of the module.

NOTE Antenna cables are not included in the product package and must be purchased separately. The cables should meet the following specifications:

- SMA(M)-SMA(M) RF cable with frequency coverage including 6 GHz

Connecting to the CCG-1510 Series

To connect the BST-1110-T module to CCG-1510 models, use any suitable SMA(M)-to-SMA(M) type antenna cable to connect the C1 connector on the CCG-1510 gateway to the C2 port on the BST-1110-T module.



Connecting to the CCG-1520 Series

To connect the BST-1220-T module to CCG-1520 models, use any suitable SMA(M)-to-SMA(M) type antenna cable to connect the C3 connector on the CCG-1520 gateway to the C1 port on the BST-1220-T module. Use another cable to connect the C5 connector on the CCG-1520 gateway to the C3 port on the BST-1220-T module.

