

# Strand Mount Access Point TCG400-o Installation Guide

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## Product info

### Dimensions



### Usage Scenario



Product spec.

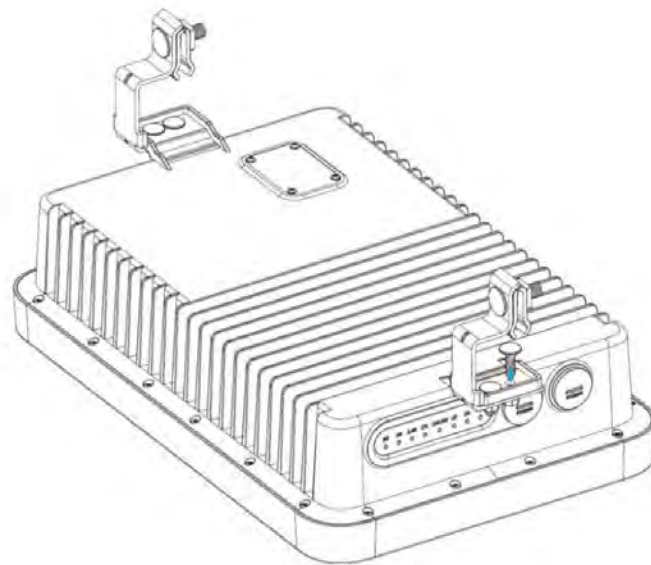
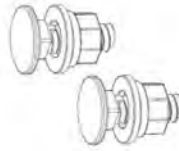
| Feature                   | Function      | Detail                                                                                                                                      |
|---------------------------|---------------|---------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Hardware Interface</b> | Coax RF       | 75ohm F-type Female RF connector. Attenuation and Slope control with JXP type plug-in.                                                      |
|                           |               | DOCSIS 4.0 FDD Compliant, Full Band Capture, Backward compatible with DOCSIS 3.1 Switchable diplexer support D4 FDD UHS and D3.1 HS/MS band |
|                           | LAN           | 1x 1Gbps RJ-45 Ethernet with PoE+ PSE, 1 x SFP+                                                                                             |
|                           | Wireless      | 4x4 2.4Ghz, 4x4 5Ghz WiFi 7 (802.11b/g/n/ac/ax/be)                                                                                          |
|                           | LEDs          | PWR, DS, US, Online, MNG, 2G, 5G                                                                                                            |
|                           | GPS           | GNSS L1                                                                                                                                     |
|                           | Power         | Support 45V~90VAC input from coaxial cable. Max 48W without PoE+, 80W with PoE+.                                                            |
|                           | Chassis       | IP67 strand mount                                                                                                                           |
| <b>D4.0 FDD UHS Band</b>  | RF Downstream | Frequency Range : 468-1794MHz Edge to edge                                                                                                  |
|                           |               | Bonded Channels : Up to 5x OFDM + 32x SCQAM Channels                                                                                        |
|                           | RF Upstream   | Frequency Range : 5-85, 108-396MHz Edge to edge                                                                                             |
|                           |               | Bonded Channels : Up to 7x OFDMA + 8x SCQAM US Channels                                                                                     |
| <b>D3.1 HS Band</b>       | RF Downstream | Frequency Range : 258-1218MHz Edge to edge                                                                                                  |
|                           |               | Bonded Channels : Up to 5x OFDM + 32x SCQAM Channels                                                                                        |
|                           | RF Upstream   | Frequency Range : 5-204MHz Edge to edge                                                                                                     |
|                           |               | Bonded Channels : Up to 2x OFDMA + 8x SCQAM US Channels                                                                                     |
| <b>D3.1 MS Band</b>       | RF Downstream | Frequency Range : 108-1218MHz Edge to edge                                                                                                  |
|                           |               | Bonded Channels : Up to 5x OFDM + 32x SCQAM Channels                                                                                        |
|                           | RF Upstream   | Frequency Range : 5-85MHz Edge to edge                                                                                                      |
|                           |               | Bonded Channels : Up to 2x OFDMA + 8x SCQAM US Channels                                                                                     |

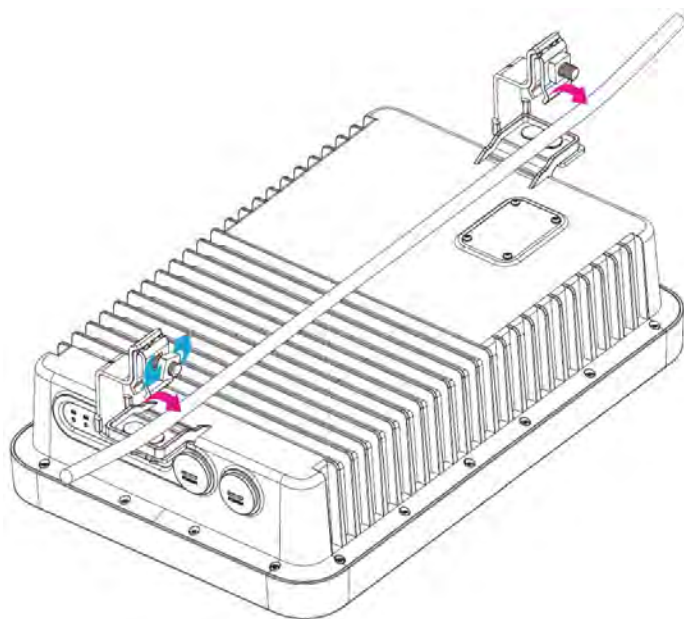
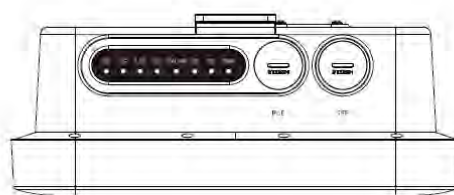
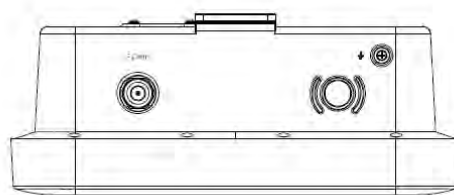
## Installing the TCG400-o

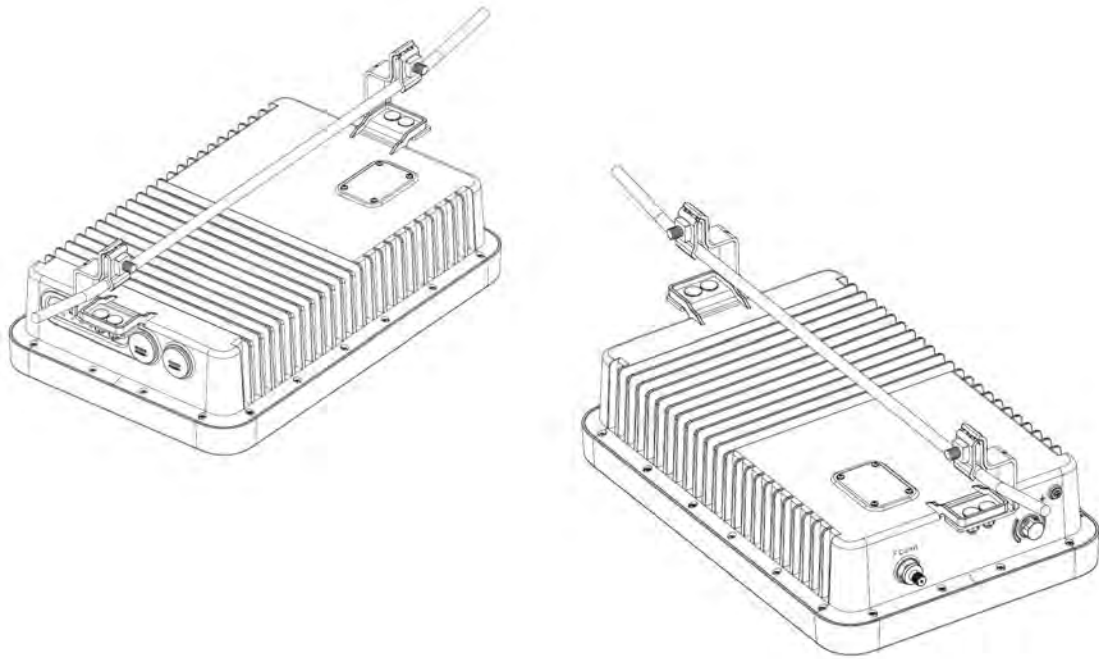
BRACKETX2 SET



SCREWSX2 SET







## Powering the TCG400-o

45 to 90 VAC POC is used when the TCG400-o is mounted on a cable strand and powered via an F-type coaxial cable connected to the HFC cable plant.



## Technician Accessing/Configure TCG400-o

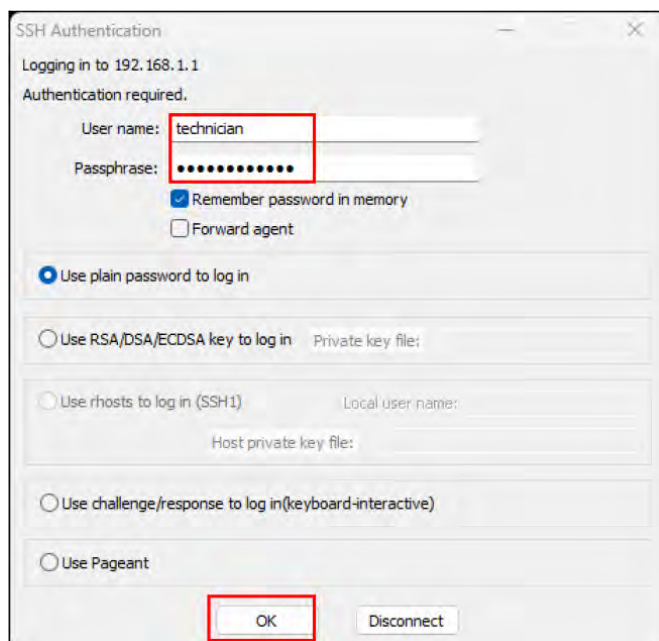
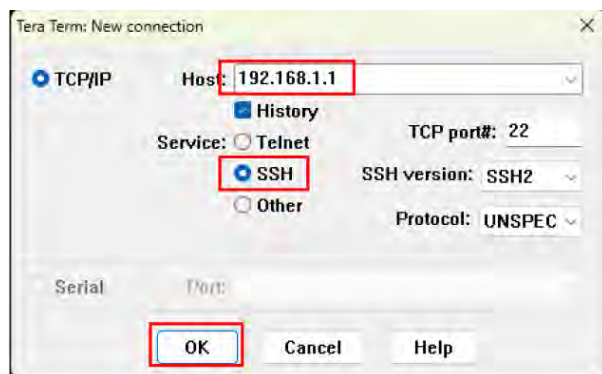
### Preparing the Administrative Computer

Use an administrative computer to configure basic operational parameters for the CHS3320N

#### 1. Collect required equipment:

- An administrative computer (notebook computer) with an Ethernet port
- An Ethernet cable
- A Telnet or SSH (secure shell) client program installed on the administrative computer (for CLI access).
- Setup Network Connection properties with DHCP.

#### 2. SSH 192.168.1.1, Account/Password: technician / askey\*sample

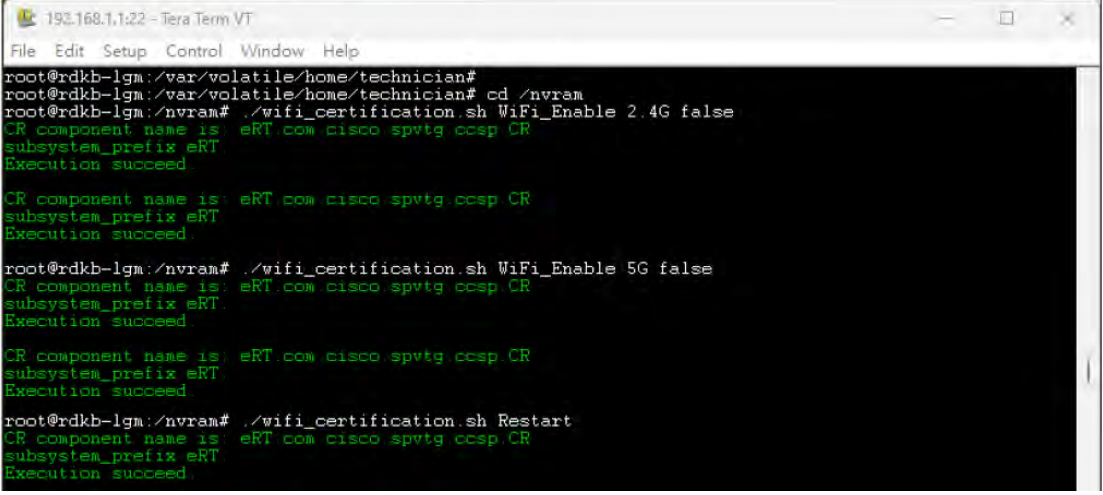


3. Enable WiFi 2.4 or 5G with below command:

`./wifi_certification.sh WiFi_Enable 2.4G true`

`./wifi_certification.sh WiFi_Enable 5G true`

`./wifi_certification.sh Restart`



```
193.168.1.1:22 - Tera Term VT
File Edit Setup Control Window Help
root@rdkb-lgm:/var/volatile/home/technician#
root@rdkb-lgm:/var/volatile/home/technician# cd /nvram
root@rdkb-lgm:/nvram# ./wifi_certification.sh WiFi_Enable 2.4G false
CR component name is: eRT.ccm.cisco.spvtg.ccsp.CR
subsystem_prefix eRT
Execution succeed.

CR component name is: eRT.ccm.cisco.spvtg.ccsp.CR
subsystem_prefix eRT
Execution succeed.

root@rdkb-lgm:/nvram# ./wifi_certification.sh WiFi_Enable 5G false
CR component name is: eRT.ccm.cisco.spvtg.ccsp.CR
subsystem_prefix eRT
Execution succeed.

CR component name is: eRT.ccm.cisco.spvtg.ccsp.CR
subsystem_prefix eRT
Execution succeed.

root@rdkb-lgm:/nvram# ./wifi_certification.sh Restart
CR component name is: eRT.ccm.cisco.spvtg.ccsp.CR
subsystem_prefix eRT
Execution succeed.
```

4. Setup 2.4G & 5G SSID/Password as below command.

`./wifi_certification.sh SSID 2.4G 2G_test`

`./wifi_certification.sh Security 2.4G Personal 12345678`

`./wifi_certification.sh SSID 5G 5G_test`

`./wifi_certification.sh Security 5G Personal 12345678`

`./wifi_certification.sh Restart`

## Real operation mode

After installing the device, observe the LED indicator as in following order:  
 PWR steady **Blue** >> DS steady **Blue** >> US steady **Blue** >> ONLINE steady **Blue**  
 >> CTL Steady **Blue**

\*Once the CTL signal is showing steady blue which means the device is fully controlled by Central Management System and setting completed



| Icon   | LED's color and behavior   | Meaning                      |
|--------|----------------------------|------------------------------|
| 6G     | Blinking <b>Blue</b> Light | 6G WIFI data transmit        |
|        | Steady <b>Blue</b> Light   | 6G WIFI Functional ON        |
|        | Light OFF                  | 6G WIFI Functional OFF       |
| 5G     | Blinking <b>Blue</b> Light | 5G WIFI data transmit        |
|        | Steady <b>Blue</b> Light   | 5G WIFI Functional ON        |
|        | Light OFF                  | 5G WIFI Functional OFF       |
| 2.4G   | Blinking <b>Blue</b> Light | 2.4G WIFI data transmit      |
|        | Steady <b>Blue</b> Light   | 2.4G WIFI Functional ON      |
|        | Light OFF                  | 2.4G WIFI Functional OFF     |
| CTL    | Steady <b>Blue</b> Light   | AMP control                  |
|        | Steady <b>Red</b> Light    | AMP out of control           |
|        | Light OFF                  | Ethernet not link            |
| ONLINE | Blinking <b>Blue</b> Light | Provisioning                 |
|        | Steady <b>Blue</b> Light   | Operational                  |
|        | Light OFF                  | Functional OFF               |
| US     | Blinking <b>Blue</b> Light | UpStream Ranging             |
|        | Steady <b>Blue</b> Light   | UpStream Ranging Complete    |
|        | Light OFF                  | Functional OFF               |
| DS     | Blinking <b>Blue</b> Light | DownStream Scanning          |
|        | Steady <b>Blue</b> Light   | DownStream Scanning Complete |
|        | Light OFF                  | Functional OFF               |
| PWR    | Steady <b>Blue</b> Light   | Power ON                     |
|        | Light OFF                  | Power OFF                    |

## Regulatory Statement

### **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.

### **IMPORTANT NOTE:**

#### **FCC Radiation Exposure Statement:**

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 26cm between the radiator & your body.