CBSD Outdoor Small Cell

T99B226

All product specifications are subject to change without notice

1. Introduction

A compact, high output power, resilient CBRS (Citizens Broadband Radio Service) complied LTE Small Cell is presented in Fig1.1. The device is water and dust-proof (IP65) and can be pole mounted, which makes it suitable to be deployed in a dense factory area, both indoors and outdoors.

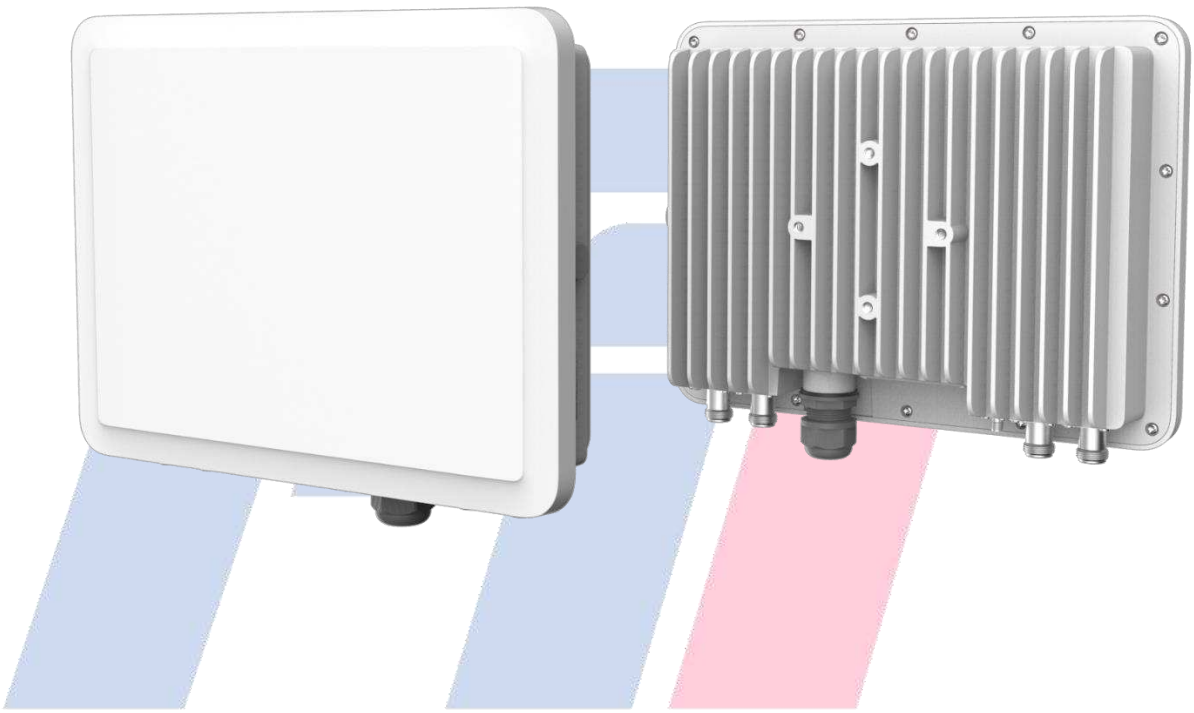


Figure 1.1 T99B226 overview

The LTE CA technology deployed in this outdoor small cell is complied with specification defined by IEEE 3GPP Alliance. The small cell has four LTE and one GPS antenna ports and is powered through 56 VDC PoE. Its LTE interface operates in CBRS band and supports SAS, Spectrum Access System. By using GPS Timing synchronization, handover between various small cells can be achieved. This is essential for scenarios that need quick switches between base stations, such as AGV (Automatic Guide Vehicle) for factory automation.

2. HW installation guide and specifications

This section describes HW overview of the Outdoor Small Cell-T99B226

Connectors and Interfaces

As shown below in fig 2.1, T99B226 consists of four N-type cable connectors (LTE antenna #1,2,3,4) on the bottom side of the device for LTE antennas and an ethernet RJ45 port for power. There are four bolt holes on the back side of the device so that it can be pole mounted onto a factory pole by using a mounting bracket. The SMA connector on the back side of the device can be used to connect to GPS antenna and provide 3.3V DC power to it.

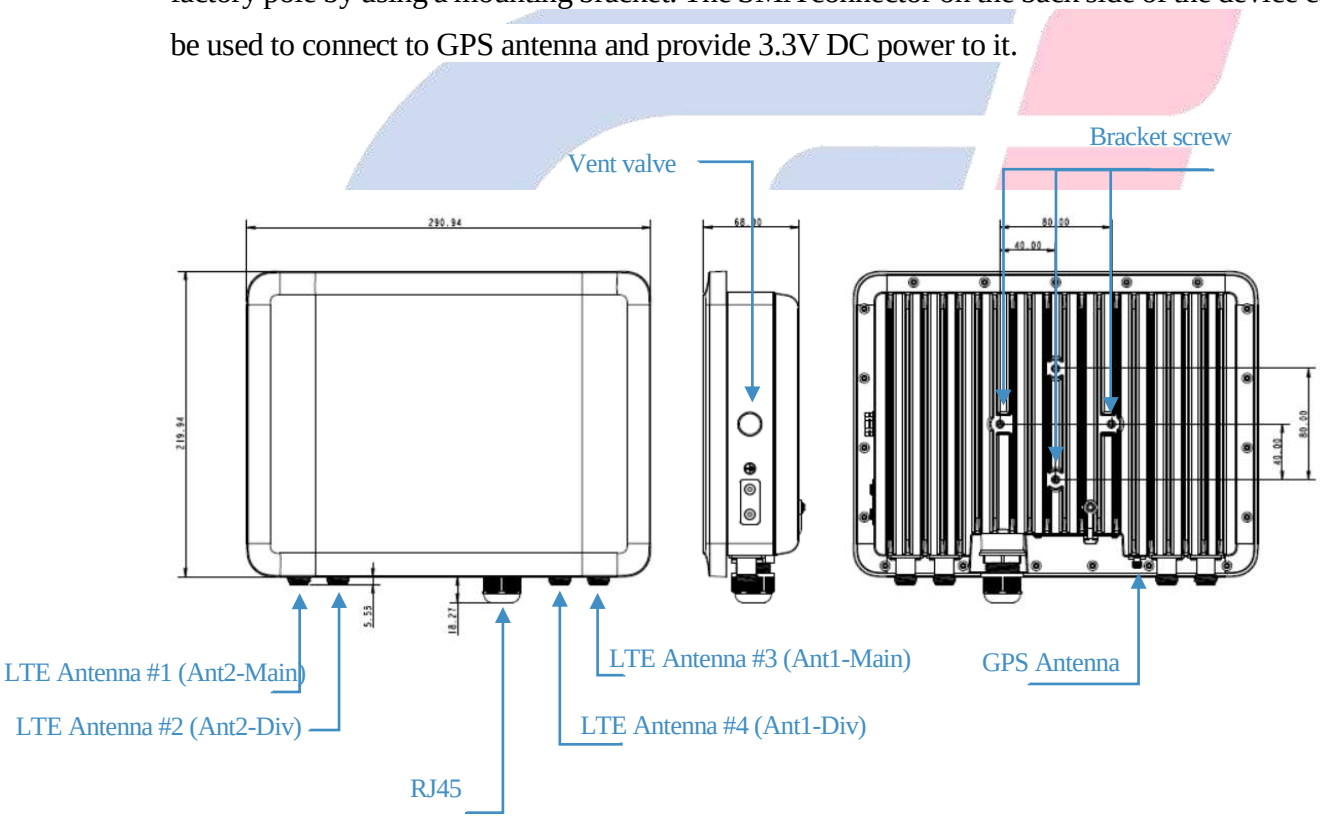


Figure 2.1 T99B226 Ports and Connectors

Cable routing and installation guide

While installing, the device should have a clear view towards potential user transmitters and not obstructed by nearby trees or buildings. Once you pick an ideal installation spot, place the mast bracket and wrap it around the mast, clamp the bracket and device together by tightening screws through bolt holes on the back of device and the bracket.

LTE antenna wires need to be pulled from the N-Type connectors on device along four bracket arms to four antennas on each corner as shown in figure2.2 and the running wires can be fixed onto bracket arms using bracket ties. It is the best practice to keep antenna rods perpendicular to bracket branches and make sure four antennas are evenly distributed in four corners.

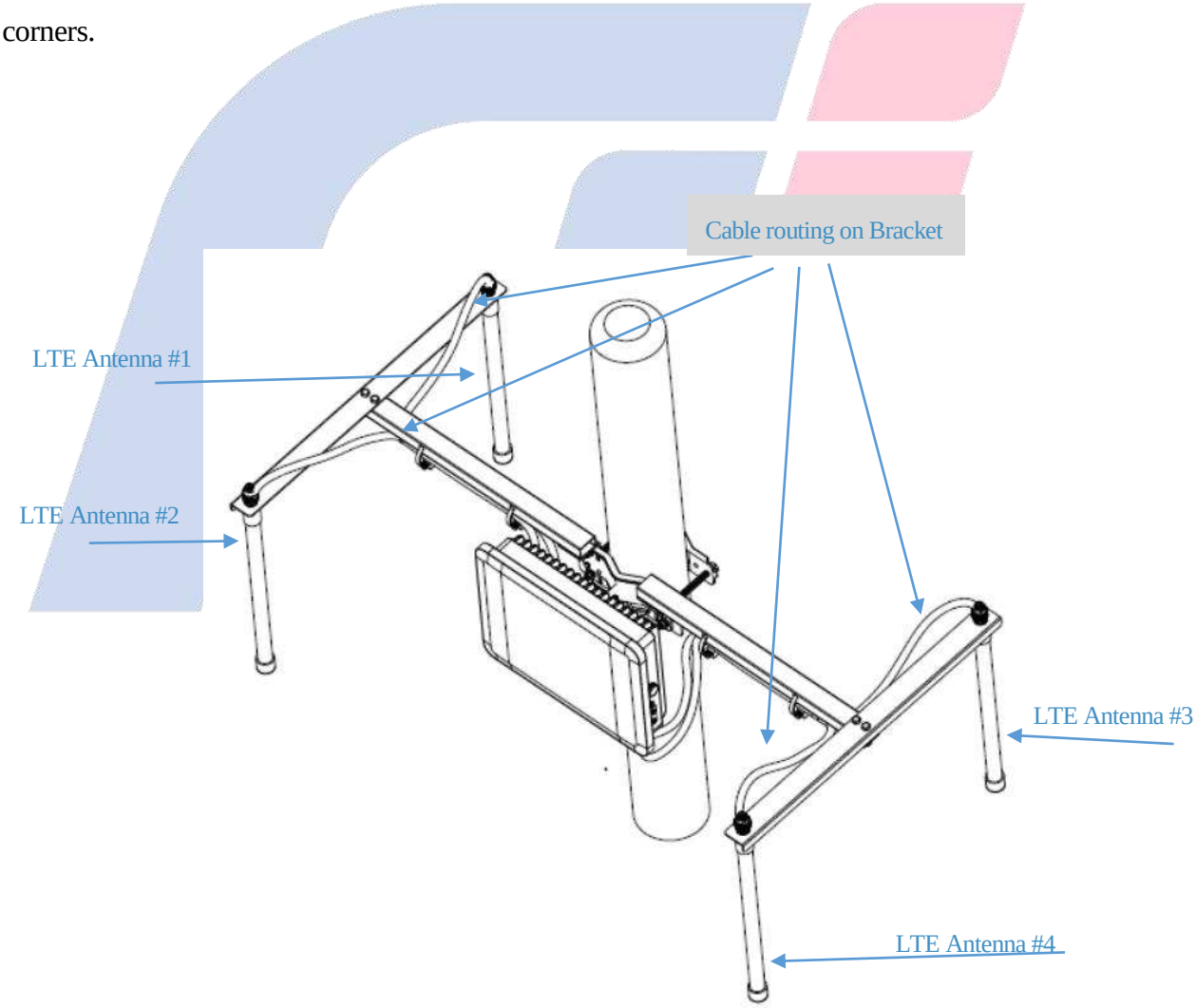


Figure 2.2 T99B226 cables top view

Moreover, the GPS antenna needs to be positioned at a place where GPS reception is solid, and the wire connecting GPS antenna to the device needs to be attached to the pole to ensure the stability of the connection during non-ideal weather conditions. Power for T99B226 is provided by connecting the power to a POE (power on Ethernet) adapter and through the waterproof ethernet cable to the ethernet port next to the antenna ports as shown in fig2.3. For the same reasons, the wires need to be attached to the pole firmly and the waterproof ethernet port is complied with IP65 regulations which makes it resilient to outdoors conditions.

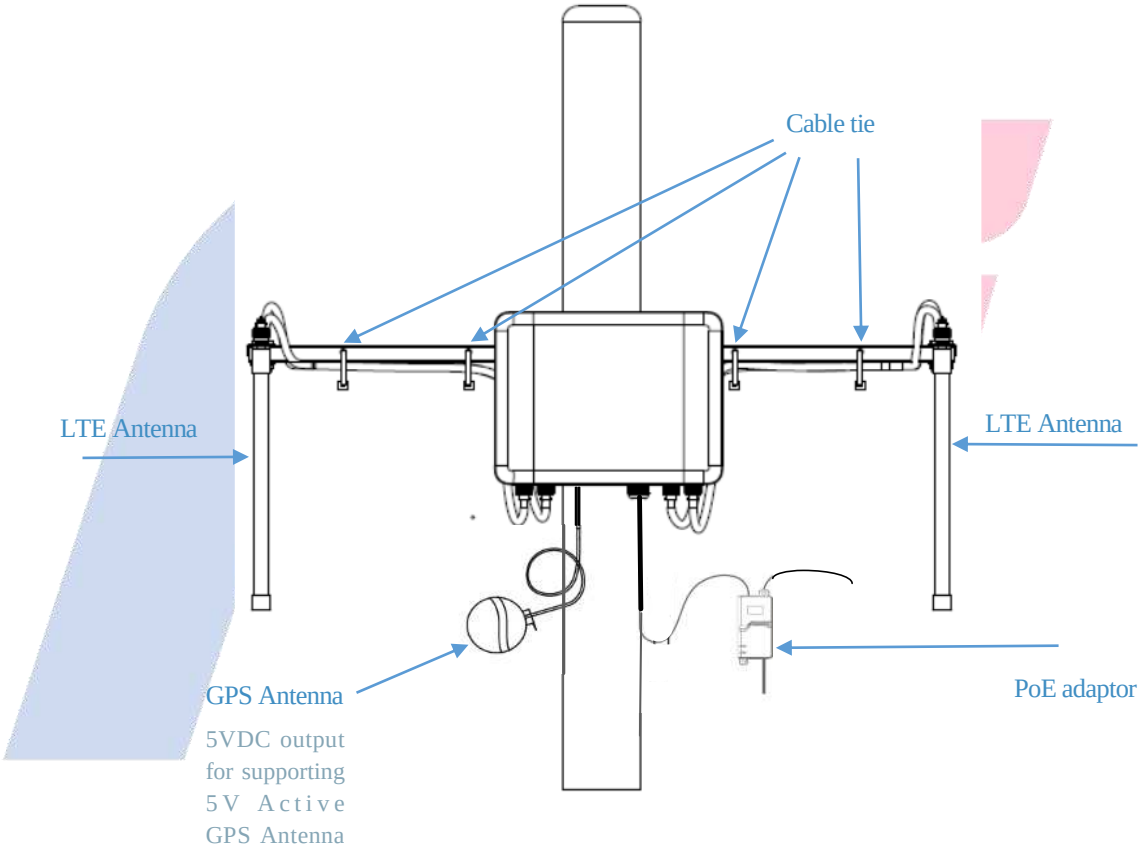
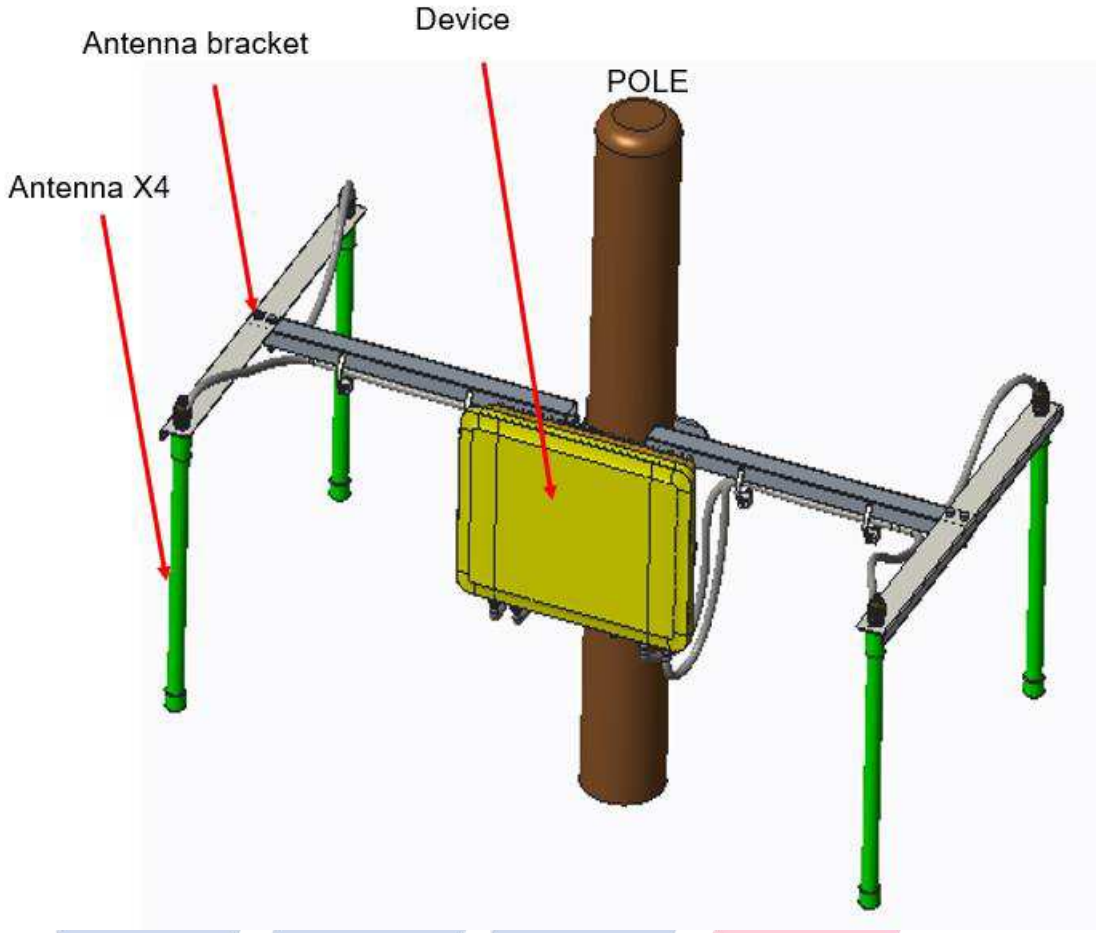


Figure 2.3 T99B226 assemble front view

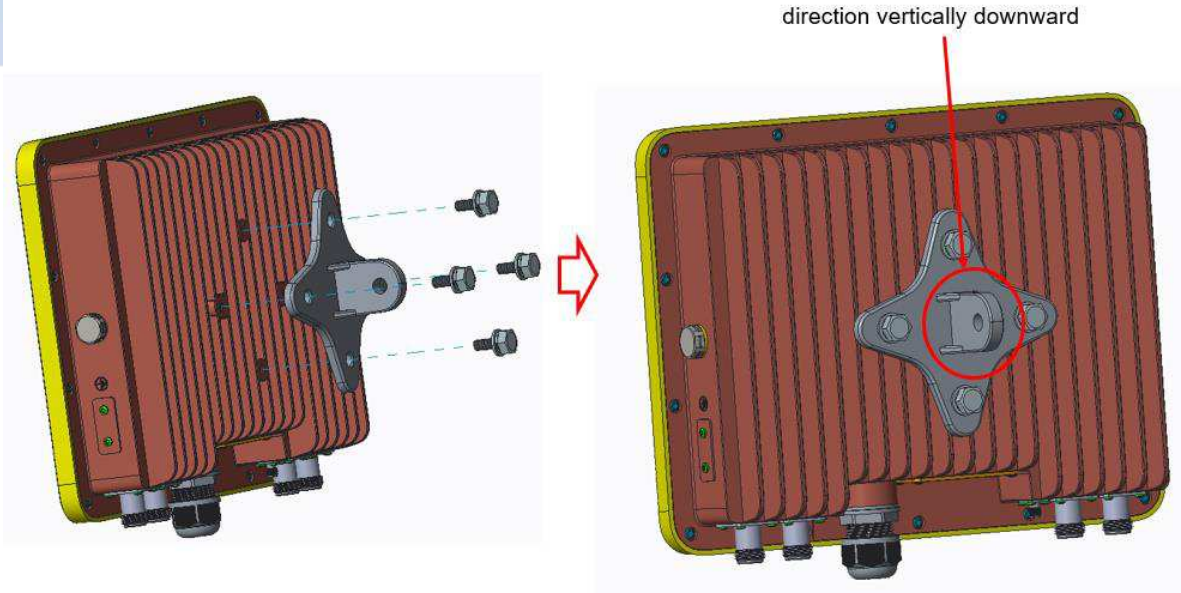
Installation bracket guide.

Total overview:



Assembly Step1: Bracket base and housing assemble:

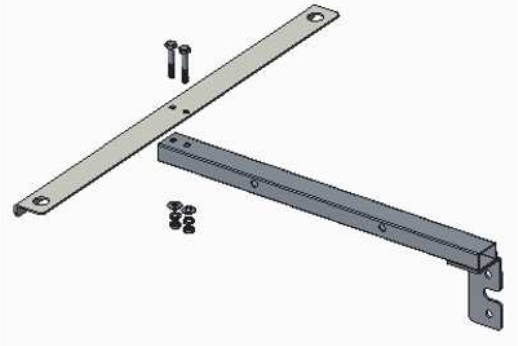
1.The bracket base is first assembled in the housing, using 4pcs M6 X 15screw with a torque of 50-70kgf cm.
2.Note: the bracket base setting direction vertically downward.



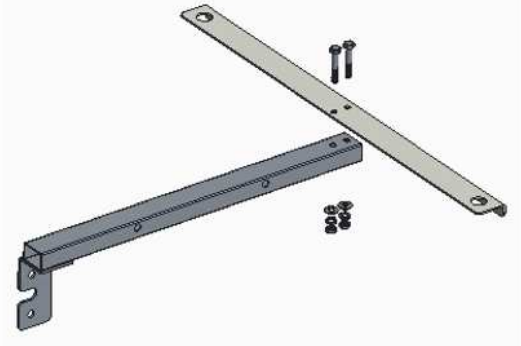
Assembly Step3: Antenna holder assemble:

1. Assembled Left and Right Holder, using 4pcs M6 X 35screw with a torque of 50-70kgf cm.

LEFT-HOLDER-ASM

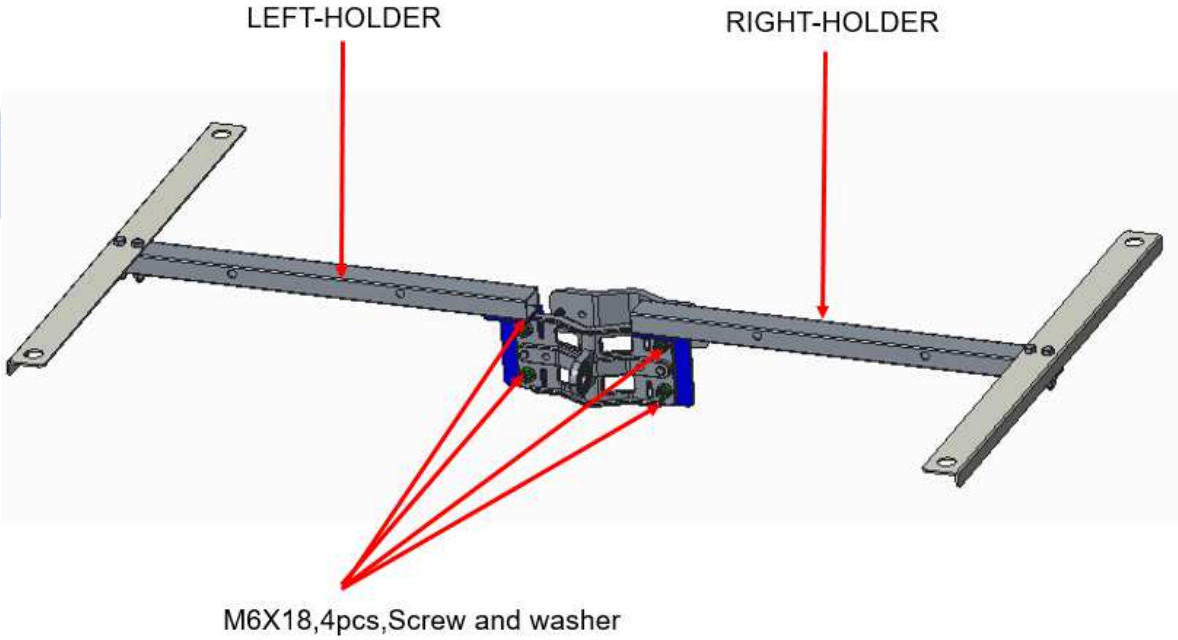


RIGHT-HOLDER-ASM



Assembly Step4: Antenna holder and bracket assemble:

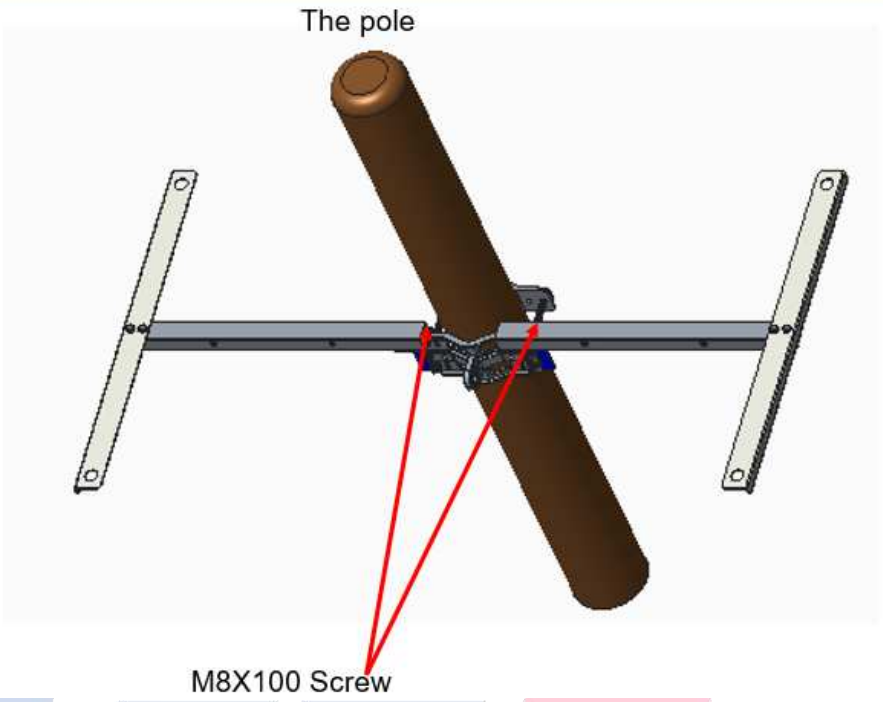
1. Assembled Left and Right Holder on bracket base, using 4pcs M6 X 18screw with a torque of 50-70kgf cm.



M6X18,4pcs,Screw and washer

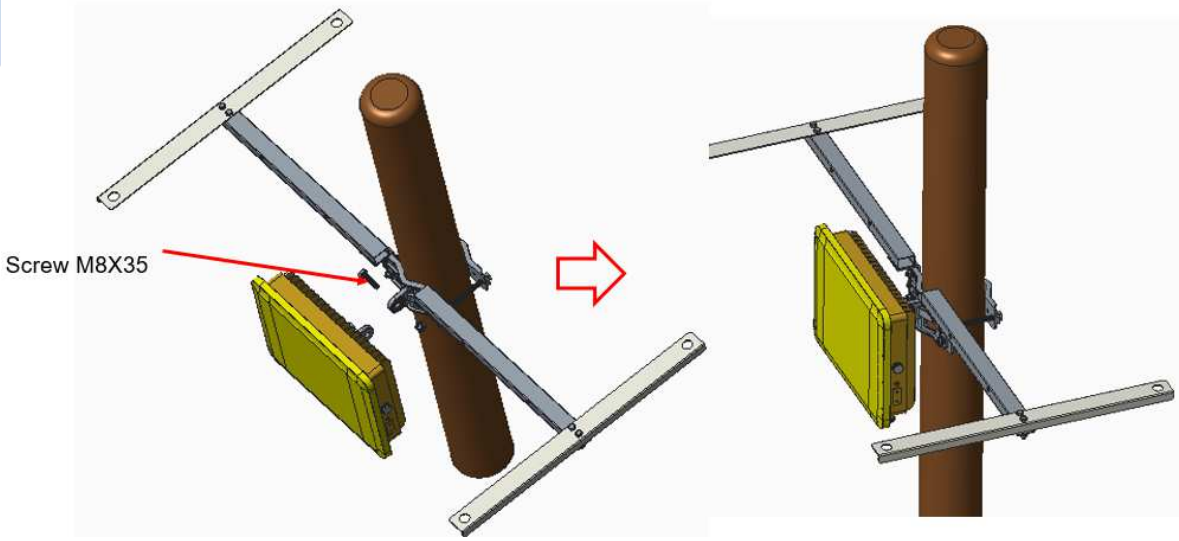
Assembly Step5: Fix the bracket on pole:

1. Assembled bracket base on the pole, using 4pcs M8 X 100screw with a torque of 150-170kgf cm. The pole diameter range is from 40- 100mm.



Assembly Step6: Assemble Device on bracket:

1.Assemble the device on bracket M8X35 using 1pcs M8 X 35 screw and washer with a torque of 150-170kgf cm.



Assembly Step7: Assemble Antenna on antenna holder:

1. Assemble antenna and cable by N type connector.
2. Using the cable tie to fixed the cable on holder

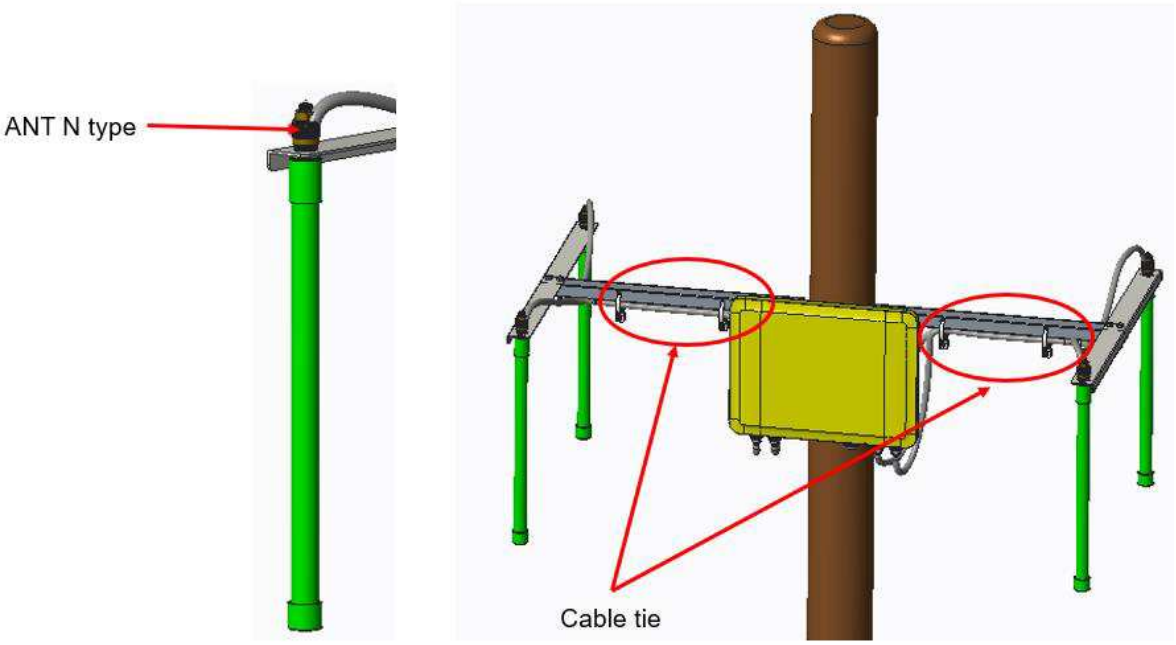


Table 1. Product Specifications

Specification	Description
LTE	
Frequency/Band	▪ 3550~3700MHz /Band 48
TX Power	▪ +24 dBm/port
RX Sensitivity	▪ -95 dBm
CA Support	▪ YES (2CA)
Duplex technique	▪ LTE TDD
Compute & Storage	
Main chip	▪ FSM9955+FTR8900*2
Flash/ Memory	▪ 8GB eMMC/ 16Gb DDR3
Antenna Interface	
LTE Antenna Connector	▪ Four extendable N type RF antenna ports (7.47dBi omni-directional antenna)
GPS Antenna Connector	▪ One extendable SMA type RF antenna port (supply 5V for active GPS antenna)
WAN Interface	
Ethernet	▪ 100/1000 Base-T Ethernet RJ45
GPS	
GPS	▪ With 5 VDC output for active GPS antenna and built-in 1575.42 MHz, GPS & GLONASS module
Power	
Power Input	▪ PoE (42.5-57 VDC)
Power Consumption	▪ Maximum 30 watts
Antenna	
LTE	▪ 7.47 dBi Omni- directional antenna or 13.2 dBi directional antenna.
GPS	▪ 5 VDC active GPS antenna
Physical Specifications	
Mounting	▪ Pole mount
Housing Material	▪ Aluminum, plastic
IP Rating	▪ IP65
Operation Humidity	▪ 20% ~ 90%

Operation Temperature	▪ -40 ~ 50 ℃
Net Weight	▪ 2.5 kg
Dimension	▪ 287 × 216 × 68 mm
Reliability	
MTBF	▪ 20 years at room temperature
Operating System	
Firmware	▪ **Base on Linux with kernel 3.14 ask software**

3. Private Network Solution

This outdoor unit (ODU) T99B226 receives data from user equipment (UE), then relay it to a backend server (EPC) and routed to an application server for information processing.

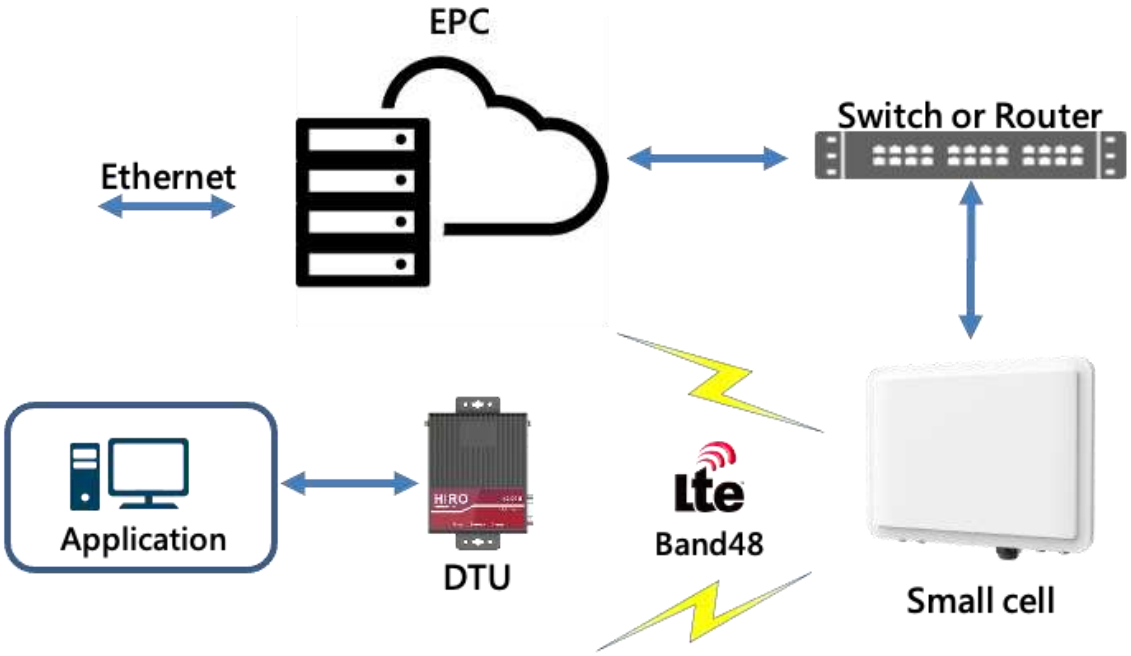


Figure 3. CBRS Network Topology

3.1 Configuration Overview

Users can configure Small Cell parameters through the local Ethernet port of the Small Cell. Please use a computer with a browser installed to configure the gateway. It is recommended to use Google chrome or Firefox browser for Small Cell configuration management to obtain the best display experience. Please connect the Ethernet port of the computer with a network cable, the length should not exceed 100m, the network cable too long may cause the communication between the computer and the gateway abnormal.

The factory default login address of the Small Cell management page is **https://192.168.168.157**. Please set your computer under subnet 192.168.168.0/24 to access the webpage. If the configuration page cannot be accessed normally, please contact your computer network administrator to check the IP address of your computer. If you still cannot open the management page correctly, please contact the technician of Foxconn Industrial Internet incorporated company.

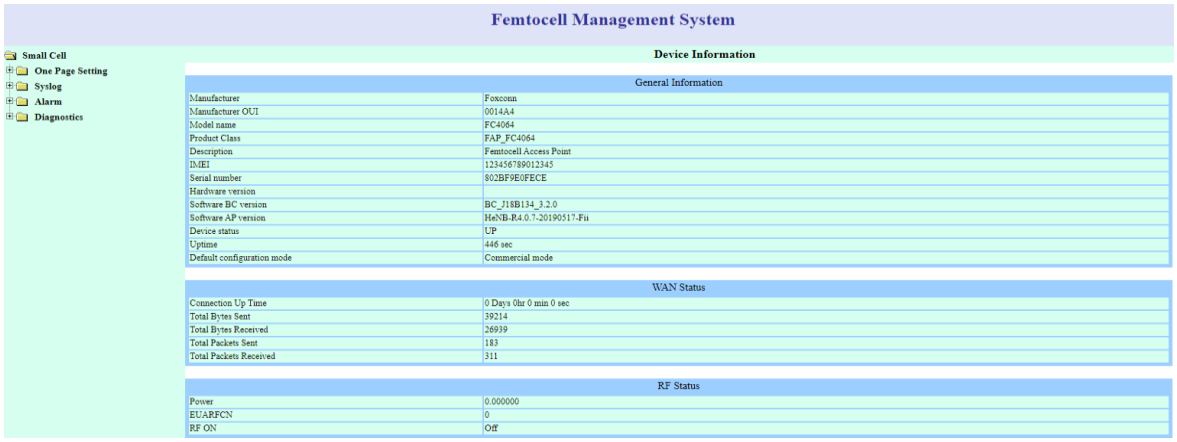


Figure 4. T99B226 Configuration Overview

3.1.1 Basic Setting

The Small Cell contains one 10/100mbps Ethernet interfaces. The factory default setting is WAN. The Ethernet port should be configured according to the actual requirements when used for the first time. Click “One Page Settings” -> “Basic Settings” to enter the gateway network configuration, including WAN Configuration and HeMS Configuration.

➢ WAN Configuration

WAN mode, including two modes --DHCP/ static IP, the specific functions are explained as follows:

1） DHCP: The Small Cell will automatically get the IP address from the superior route, please contact your IT administrator to get the address. Note: the IP address will be automatically changed each time the gateway is restarted in this mode.

2） Static IP: the gateway WAN port address should be set by the user. Please contact your IT administrator for the corresponding information.

a. IP address: enter the IP address information provided by the superior route.

b. Subnet mask: enter the subnet mask provided by the parent route.

c. Gateway: enter the gateway IP address for the superior route.

After confirming that the information input is correct, click the corresponding application button to change the network configuration.

➢ HeMS Configuration

The Small Cell has a HeMS configuration function, this function enables the Small Cell to communicate with Auto Configuration Server (ACS). If you do configure this setting properly your

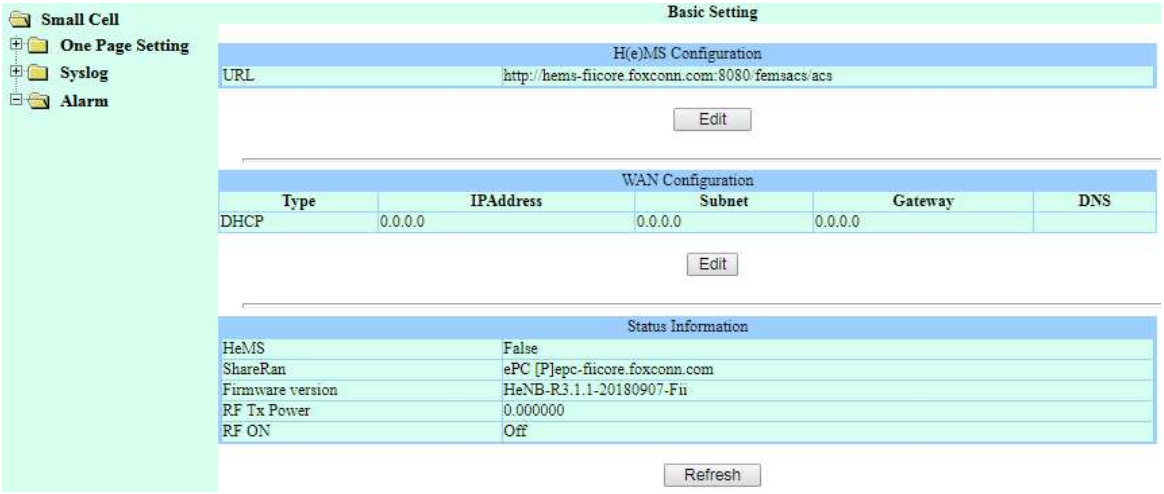


Figure 5. Basic Configuration Setting

Small Cell will lack the ability to communicate with configuration/fault management portion the EPC and must rely on you to manually configuring the device.

1) Ensure that you have reserved a static IP inside of the network with IT and installed all the necessary software for EPC.
2) Point the Small Cell to the established IP of the EPC. Example IP: 192.168.1.222:8080/femsacs/acs

3.1.2 Advanced Setting

Configure Cell Information, REM Settings and ShareRan settings, Navigate to "One Page Setting -> Advanced Settings. However, if the basic Settings page has been configured properly this section should be auto configured by the Auto Configuration Sever (ACS).

3.1.2.1 Cell Configuration

1) Cell Identity – unique identifier to identify Small Cell. Value cannot be assigned to another
2) small cell in the same network
3) TxPowerMax – Maximum power level of the small cell. Sets the LTE max coverage radius.
4) TxPowerMin – Minimum power level of the small cell. Sets the minimum LTE coverage radius.
5) DL_EARFCN_List – Specify the downlink Radio Frequency Channel Number for two RF card. In your use case you are using Band 48. This mean the frequency range is from 3550MHz~3700MHz. It is important to note here that you do not want to set multiple small

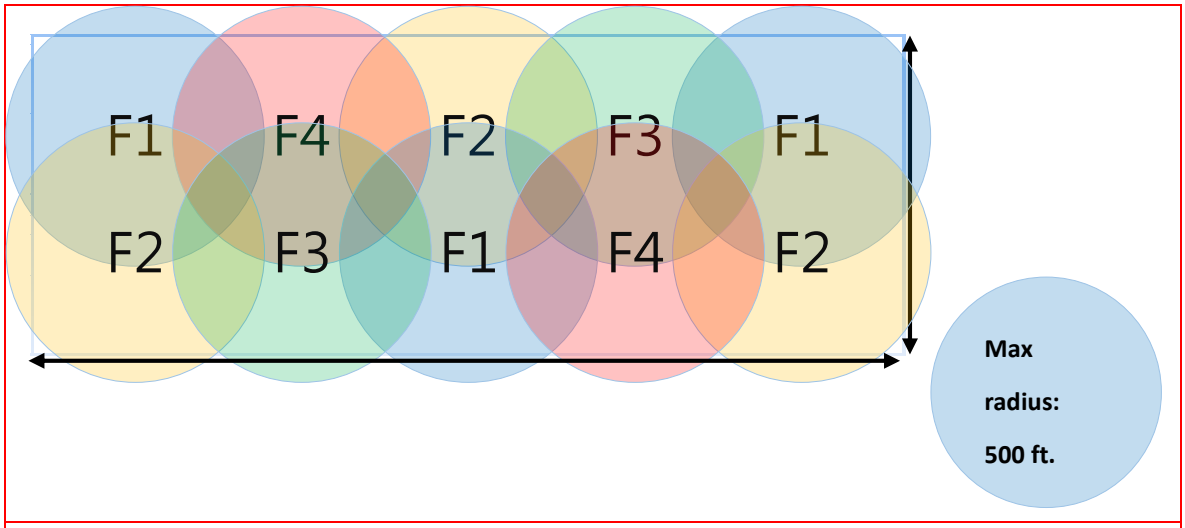


Figure 6. Small Cell radiation overlap

cells within in rage of each other to the same frequency as this will cause interference as shown in figure.

6) UL_EARFCN_List – Specify the uplink Radio Frequency Channel Number for two RF card.
7) ULDLMode – Indicates the TDD subframe configuration. The supported values are mode 1 and 2. Specify value 1 will obtain higher uplink bandwidth and lower downbandwidth.

3.1.2.2 Rem Configuration

Algorithm used for handover function. Select band to listen for macro cell for time sync multiple

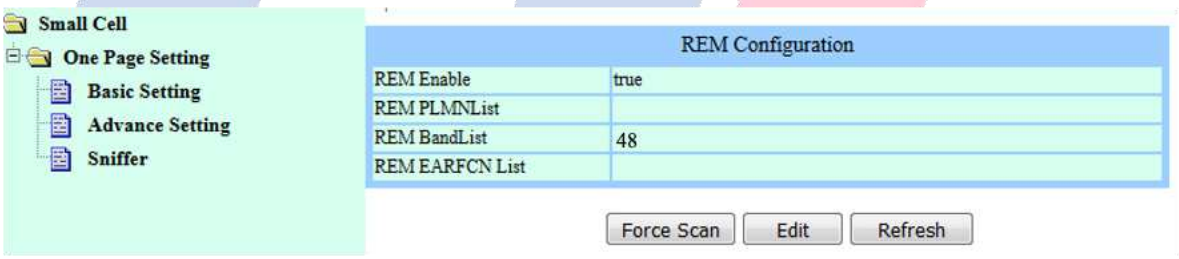


Figure 7. REM Configuration

small cells.

1) REM Enable – Boolean value to toggle function on and off
2) REM Band List – A band that is being broadcast from a microcell in your area which your small cell can listen to for the time sync function. For example, band 48
3) REM EARFCN – Absolute Radio Frequency Channel Number. Select a list of frequency Channel numbers that are both supported in your area and by the band that was selected above. Leaving this section blank will greatly increase the time to find an available Macro cell. (approximately 2 hours)

3.1.2.3 Gateway Configuration

The Small Cell needs to be in constant contact with the EPC via an inform method. This inform method carries with it connection information, configuration options and general Small Cell data. When the small cell needs to make a configuration change or status check the small cell need to update the EPC. When the Small Cell needs to check in with the EPC the Small Cell checks the ShareRan configuration option to find the address.

1) IPAddress: The Gateway IP address is to set to the static IP of the EPC. Ex: 192.168.1.222
2) PLMNList: Public land Mobile Network is used by the User Equipment (UE) to select which small cell it will connect with.

3.2 Sniffer

Using the configuration options from the REM configuration set described in section 3.1.2.2. The Small Cell will sniff for available EARFCN. It is strongly recommended that you choose an EARFCN with a RSRP > - 95 dBm. If you are unable to find an EARFCN with this requirement, consider adjusting the location of the Small Cell and pressing force scan again.

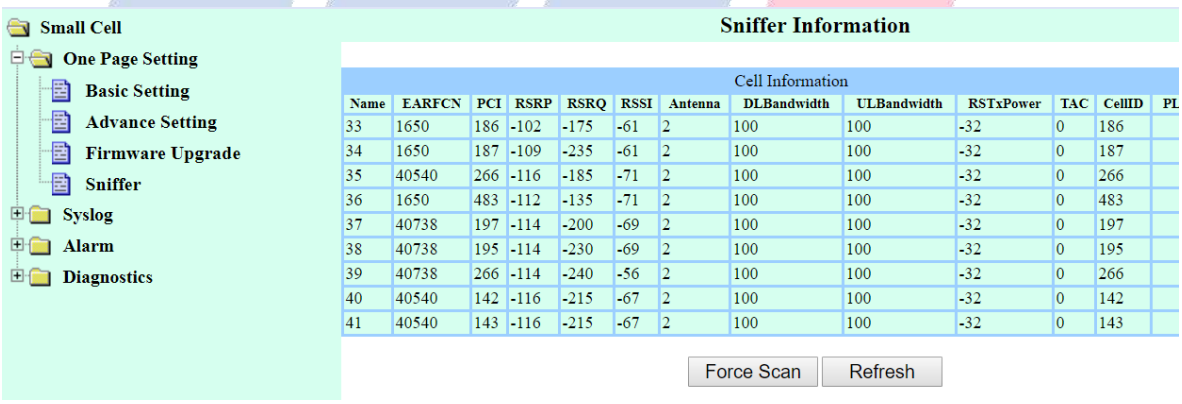


Figure 8. Sniffer

3.3 Syslog

The Small cell records all events that take place while it is powered on. These events can be triggered by you or by a running process. They help you keep track of what has happened and to troubleshoot problems. Listed below are two of the most commonly seen error messages and their definitions:

1) **[DNS] IP is not up:** Small Cell is unable to obtain IP address from DHCP server.

2) **[ENB] veMmeReadyGet: primary ePC not ready**: EPC needs to be restarted or shareRan configuration is incorrect (see section 3.3.3)

3.4 Alarm

As shown in the figure below, the small cell raises an alarm when there is an internal problem that interferes with the small cell being able to complete its normal function. The small cell will indicate there is an issued by flashing a red waring light where the LED is labeled status.

1.) Current: display area for all the current issues occurring on the small cell.

2.) History: display area for all the previously triggered issues on the small cell.

3.5 Diagnostic

UE: List of currently connected pieces of user equipment (UE) and the UE's current settings.

4. Warranty and compliance

The T99B226 Small Cell comes with a 5-year limited hardware warranty.

- **ITU**

  3GPP: 3GPP E-UTLA Release 9

- **IEEE**

IEEE 802.3u	100Base Ethernet
IEEE 802.3ab	Gigabit Ethernet

- **Others**

Outdoor Rating	IP65
Safety	UL (Optional)
FCC	Part 96

5. Frequently Asked Questions

This chapter provides answers to common questions about your CBSD Outdoor Small Cell. (Also see Troubleshooting.)

The chapter covers the following topics:

• Why can’t my device connect to the CBSD Outdoor Small Cell? Ethernet PHY detection failed

• How is setting to Connect to HeMS?

• How is Setting of Update File Server?

• How can check the fault record?

• How can check the performance statistic?

• How can setup the Security Management?

Why can't my device connect to the CBSD Outdoor Small Cell?

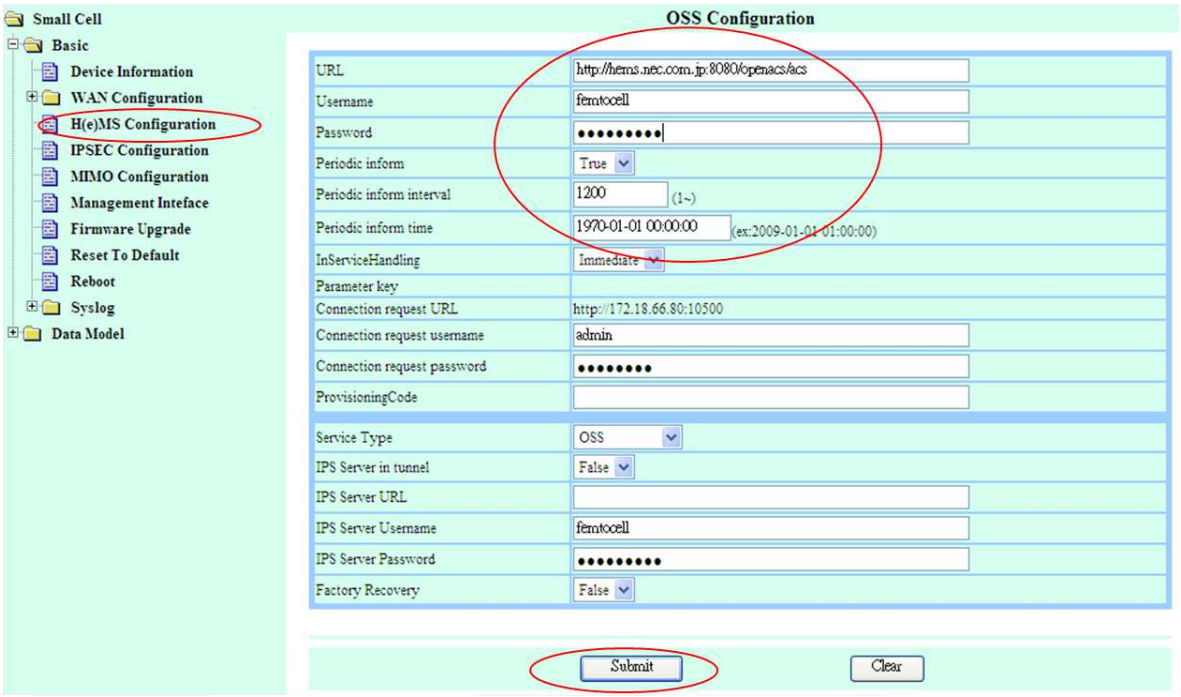
If you are experiencing problems connecting to the CBSD Outdoor Small Cell, try the following suggestions:

1. Try manually power cycle HeNB

2. After step1 for 3 times, if the situation still exist, call service center, and replace the HeNB

How is setting to Connect to HeMS?

Get into "H(e)MS configuration" page, set the URL, username and password of the serving HeMS. After HeMS configured, press "Submit".



How is Setting of Update File Server?

Go to data model path "Device.FAP.PerfMgmt.Config.1." and et the upload server information to this object

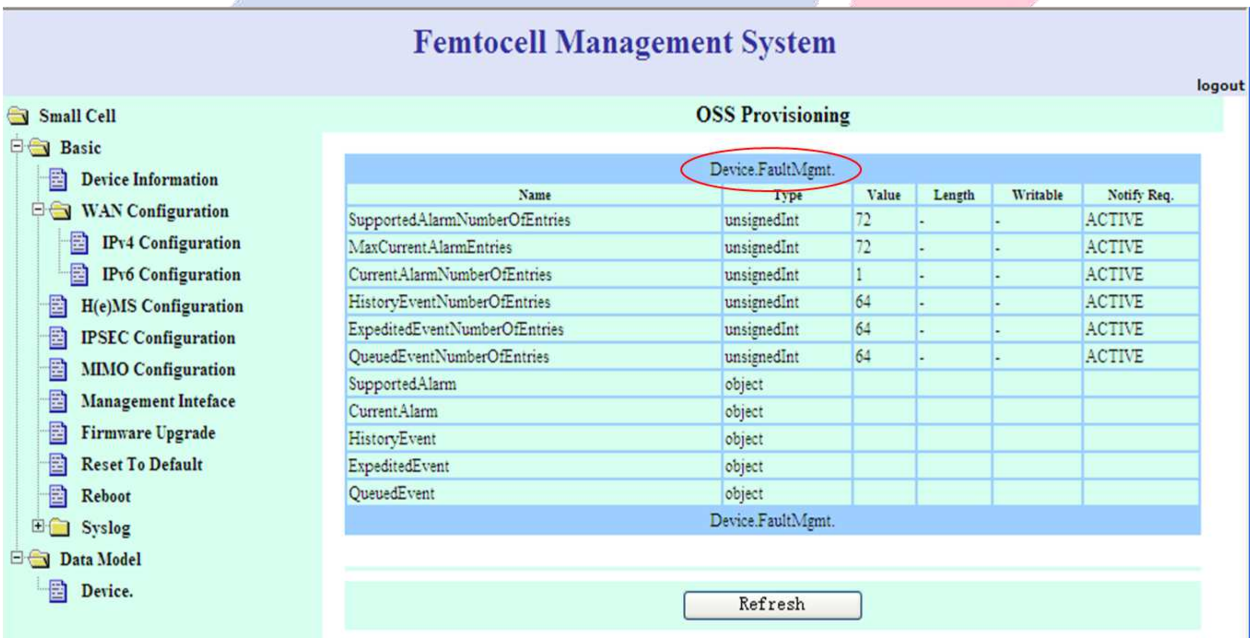
- URL
- Username
- Password

OSS Provisioning					
Device.FAP.PerfMgmt.Config.1.					
Name	Type	Value	Length	Writable	Notify Req.
Enable	boolean	true	-	W	ACTIVE
Alias	string		64	W	ACTIVE
URL	string	ftp://ftp.nec.com.jp/pm_upload/	256	W	ACTIVE
Username	string	femrocell	256	W	ACTIVE
Password	string		256	W	ACTIVE
PeriodicUploadInterval	unsignedInt	86400	-	W	ACTIVE
PeriodicUploadTime	dateTime	1970-01-01T00:00:00Z	-	W	ACTIVE
Device.FAP.PerfMgmt.Config.1.					

Refresh

How can check the fault record?

Path is "Device.FaultMgmt."



Device.FaultMgmt.					
Name	Type	Value	Length	Writable	Notify Req.
SupportedAlarmNumberOfEntries	unsignedInt	72	-	-	ACTIVE
MaxCurrentAlarmEntries	unsignedInt	72	-	-	ACTIVE
CurrentAlarmNumberOfEntries	unsignedInt	1	-	-	ACTIVE
HistoryEventNumberOfEntries	unsignedInt	64	-	-	ACTIVE
ExpeditedEventNumberOfEntries	unsignedInt	64	-	-	ACTIVE
QueuedEventNumberOfEntries	unsignedInt	64	-	-	ACTIVE
SupportedAlarm	object				
CurrentAlarm	object				
HistoryEvent	object				
ExpeditedEvent	object				
QueuedEvent	object				
Device.FaultMgmt.					

Figure 1Fault Management - 1

Change Reporting mechanism.

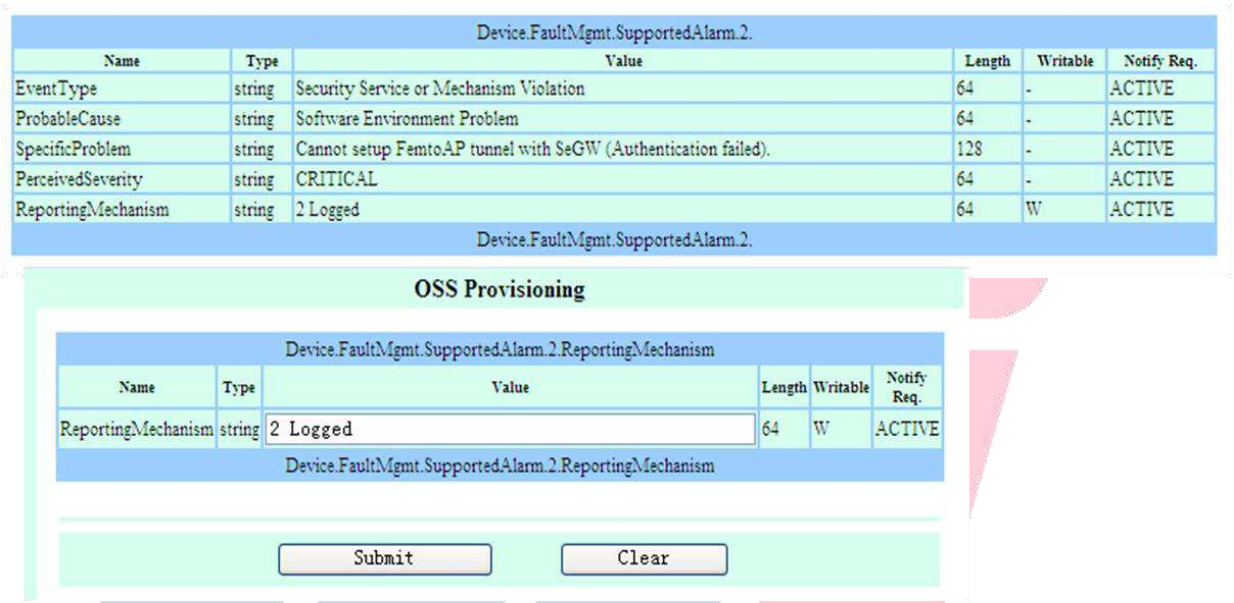
Edit Device.FaultMgmt.SupportedAlarm.{i}.ReportingMechanism

Indicates the reporting mechanism setting of the alarm.

Enumeration of:

- 0 Expedited (The device inserts the alarm into the FaultMgmt.ExpeditedEvent.{i}. table and the FaultMgmt.ExpeditedEvent.{i}. table. Actively notify HeMS of the alarm event.)

- 1 Queued (The device inserts the alarm into the FaultMgmt.QueuedEvent.{i}. table and the FaultMgmt.QueuedEvent.{i}. table. Passively notify HeMS of the alarm event.)
- 2 Logged (The device inserts the alarm into the FaultMgmt.HistoryEvent.{i}. table. Dose not notify HeMS of the alarm event.)
- 3 Disabled (The device ignores the alarm) .



Device.FaultMgmt.SupportedAlarm.2.

Name	Type	Value	Length	Writable	Notify Req.
EventType	string	Security Service or Mechanism Violation	64	-	ACTIVE
ProbableCause	string	Software Environment Problem	64	-	ACTIVE
SpecificProblem	string	Cannot setup FemtoAP tunnel with SeGW (Authentication failed).	128	-	ACTIVE
PerceivedSeverity	string	CRITICAL	64	-	ACTIVE
ReportingMechanism	string	2 Logged	64	W	ACTIVE

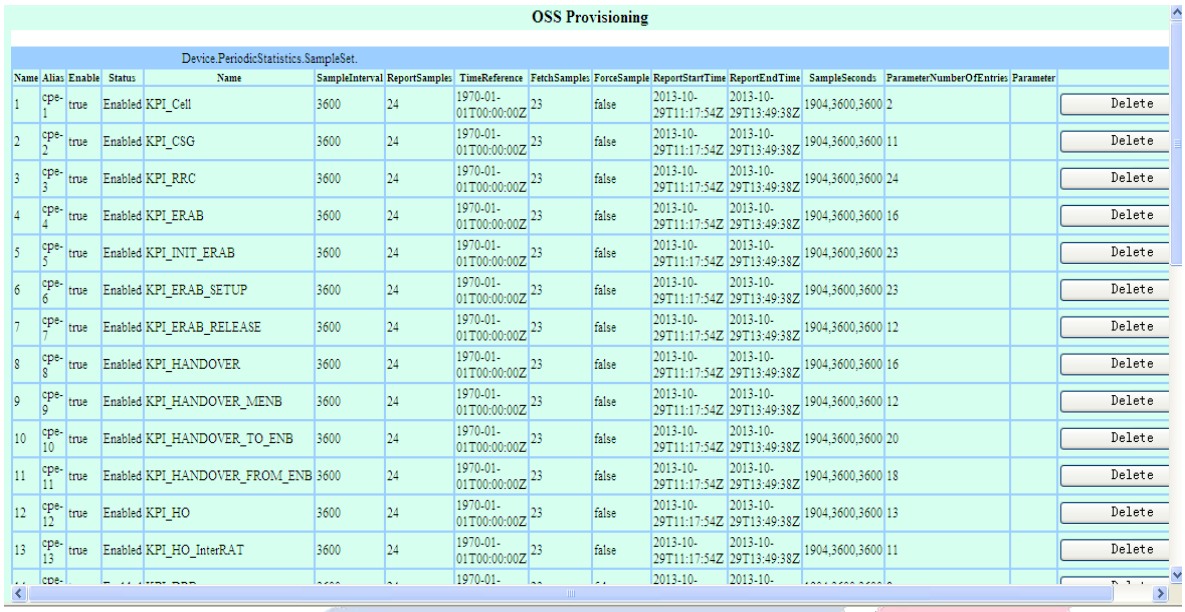
Device.FaultMgmt.SupportedAlarm.2.

Figure 2 Fault Management - 3

How can check the performance statistic?

The periodic statistic calculates each value of parameters in each sample set and accumulates the reports.

By default all KPIs are included in the sample sets.



OSS Provisioning

Device.PeriodicStatistics.SampleSet.

Name	Alias	Enable	Status	Name	SampleInterval	ReportSamples	TimeReference	FetchSamples	ForceSample	ReportStartTime	ReportEndTime	SampleSeconds	ParameterNumberOfEntries	Parameter	
1	cpe-1	true	Enabled	KPI_Cell	3600	24	1970-01-01T00:00:00Z	23	false	2013-10-29T11:17:54Z	2013-10-29T13:49:38Z	1904,3600,3600	2		Delete
2	cpe-2	true	Enabled	KPI_CSG	3600	24	1970-01-01T00:00:00Z	23	false	2013-10-29T11:17:54Z	2013-10-29T13:49:38Z	1904,3600,3600	11		Delete
3	cpe-3	true	Enabled	KPI_RRC	3600	24	1970-01-01T00:00:00Z	23	false	2013-10-29T11:17:54Z	2013-10-29T13:49:38Z	1904,3600,3600	24		Delete
4	cpe-4	true	Enabled	KPI_ERAB	3600	24	1970-01-01T00:00:00Z	23	false	2013-10-29T11:17:54Z	2013-10-29T13:49:38Z	1904,3600,3600	16		Delete
5	cpe-5	true	Enabled	KPI_INIT_ERAB	3600	24	1970-01-01T00:00:00Z	23	false	2013-10-29T11:17:54Z	2013-10-29T13:49:38Z	1904,3600,3600	23		Delete
6	cpe-6	true	Enabled	KPI_ERAB_SETUP	3600	24	1970-01-01T00:00:00Z	23	false	2013-10-29T11:17:54Z	2013-10-29T13:49:38Z	1904,3600,3600	23		Delete
7	cpe-7	true	Enabled	KPI_ERAB_RELEASE	3600	24	1970-01-01T00:00:00Z	23	false	2013-10-29T11:17:54Z	2013-10-29T13:49:38Z	1904,3600,3600	12		Delete
8	cpe-8	true	Enabled	KPI_HANDOVER	3600	24	1970-01-01T00:00:00Z	23	false	2013-10-29T11:17:54Z	2013-10-29T13:49:38Z	1904,3600,3600	16		Delete
9	cpe-9	true	Enabled	KPI_HANDOVER_MENB	3600	24	1970-01-01T00:00:00Z	23	false	2013-10-29T11:17:54Z	2013-10-29T13:49:38Z	1904,3600,3600	12		Delete
10	cpe-10	true	Enabled	KPI_HANDOVER_TO_ENB	3600	24	1970-01-01T00:00:00Z	23	false	2013-10-29T11:17:54Z	2013-10-29T13:49:38Z	1904,3600,3600	20		Delete
11	cpe-11	true	Enabled	KPI_HANDOVER_FROM_ENB	3600	24	1970-01-01T00:00:00Z	23	false	2013-10-29T11:17:54Z	2013-10-29T13:49:38Z	1904,3600,3600	18		Delete
12	cpe-12	true	Enabled	KPI_HO	3600	24	1970-01-01T00:00:00Z	23	false	2013-10-29T11:17:54Z	2013-10-29T13:49:38Z	1904,3600,3600	13		Delete
13	cpe-13	true	Enabled	KPI_HO_InterRAT	3600	24	1970-01-01T00:00:00Z	23	false	2013-10-29T11:17:54Z	2013-10-29T13:49:38Z	1904,3600,3600	11		Delete

Sample Set

OSS Provisioning

Device.PeriodicStatistics.SampleSet.6.

Name	Type	Value	Length	Writable	Notify Req.
Alias	string	cpe-6	64	W	PASSIVE
Enable	boolean	true	-	W	ACTIVE
Status	string	Enabled	32	-	ACTIVE
Name	string	KPI_ERAB_SETUP	128	W	ACTIVE
SampleInterval	unsignedInt	3600	-	W	ACTIVE
ReportSamples	unsignedInt	24	-	W	ACTIVE
TimeReference	dateTime	1970-01-01T00:00:00Z	-	W	ACTIVE
FetchSamples	unsignedInt	23	-	W	ACTIVE
ForceSample	boolean	false	-	W	ACTIVE
ReportStartTime	dateTime	2013-10-29T11:17:54Z	-	-	ACTIVE
ReportEndTime	dateTime	2013-10-29T13:49:38Z	-	-	ACTIVE
SampleSeconds	string	1904,3600,3600	256	-	PASSIVE
ParameterNumberOfEntries	unsignedInt	23	-	-	ACTIVE
Parameter	object			W	

Device.PeriodicStatistics.SampleSet.6.

Refresh

How can setup the Security Management?

SeGW Configuration

Device.Services.FAPService.1.FAPControl.LTE.Gateway.

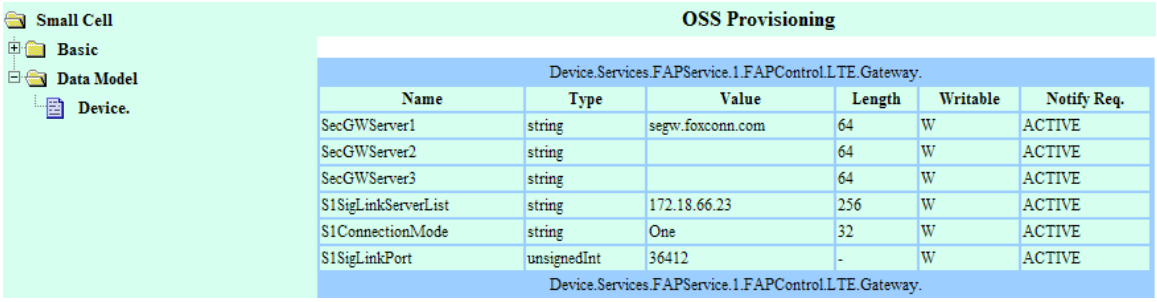


Figure 3SeGW Configuration

Enable/Disable tunnel

Device.Services.FAPService.CellConfig.LTE.Tunnel.1.Enable

- Set to “true” to enable tunnel with SeGW
- Set to “false” to disable tunnel with SeGW

After setting changed, please reboot to take effect.

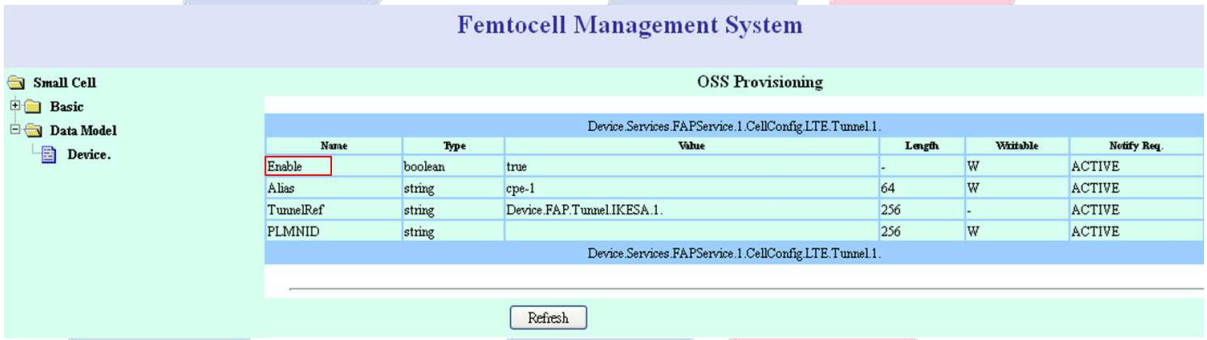


Figure 4Enable/Disable Tunnel

Tunnel Crypto Configuration

Device.FAP.Tunnel.CryptoProfile.1

Currently support configuration includes –

- IKERekeyLifetime
- IPSecRekeyLifetimeBytes
- IPSecRekeyLifetimeTime
- DPDTimer

6. Troubleshooting

This chapter provides suggestions for troubleshooting problems that might arise when you are using your mobile router. The chapter covers the following topics:

• RF detection failed

• Ethernet interface link down

• Software fault

• System resource is overloaded

• DHCP servers connection failed

• DNS resolution failed

RF detection failed

To check and try following step:

1. 1. Try manually power cycle HeNB
2. After step1 for 3 times, if the situation still exist, call service center, and replace the HeNB

Ethernet interface link down

To check and try following step:

1. Please check if ethernet cable on HeNB side or uplink router side is loose
2. Change another ethernet cable
3. Checking Home Router Settings.
4. Checking SBM Networking Settings.
5. Replace HeNB.

Software fault

To check and try following step:

1. long press push button for 10 seconds, and release the push button, wait HeNB boot up

System resource is overloaded

To check and try following step:

1. long press push button for 10 seconds, and release the push button, wait HeNB boot up

DHCP servers connection failed

To check and try following step:

1. Please check if ethernet cable on HeNB side or uplink router side is loose
2. reboot HeNB
3. reboot uplink router
4. long press push button for 10 seconds, and release the push button, wait HeNB boot up

DNS resolution failed

To check and try following step:

1. Check uplink router whether the internet connection is ok
2. reboot HeNB
3. long press push button for 10 seconds, and release the push button, wait HeNB boot up

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:

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 52cm between the radiator & your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

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

Professional installation instruction

Please be advised that due to the unique function supplied by this product, the device is intended for use with our interactive entertainment software and licensed third-party only. The product will be distributed through controlled distribution channel and installed by trained professional and will not be sold directly to the general public through retail store.

1. Installation personal

   This product is designed for specific application and needs to be installed by a qualified personal who has RF and related rule knowledge. The general user shall not attempt to install or change the setting.

2. Installation location

   The product shall be installed at a location where the radiating antenna can be kept 52cm from nearby person in normal operation condition to meet regulatory RF exposure requirement.

3. External antenna

   Use only the antennas which have been approved by the manufactuer. The non-approved antenna(s) may produce unwanted spurious or excessive RF transmitting power which may lead to the violation of FCC/IC limit and is prohibited.

   Authorized antenna for used:
   PN: 361.01399.005
   Antenna type: monopole.
   Antenna gain:7.47dBi

4. Installation procedure

   Please refer to user's manual for the detail.

5. Warning

   Please carefully select the installation position and make sure that the final output power does not exceed the limit set force in relevant rules. The violation of the rule could lead to serious federal penalty.