

# NUQ3000M

5G ODU User Manual



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## 4. Router Mode

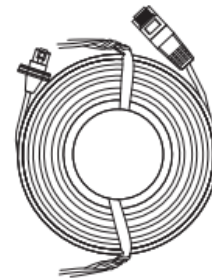
- 4.1 Enable Router Mode
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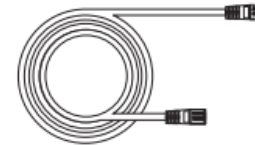
# 1.1 In the Box- Device and Accessories



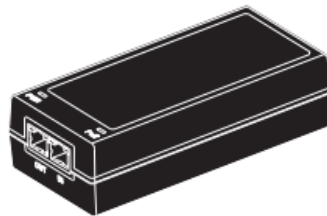
ODU Device



Flat Ethernet Cable



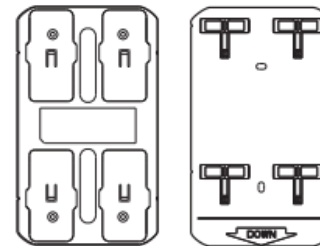
Ethernet Cable



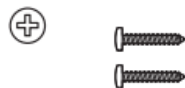
ODU PoE Injector



Power Cord for ODU



Window Mounting Kit  
(Mounting Bracket) (Gecko tape Plate)



Screw x 2

(For securing the flat cable onto the bottom side of the ODU)



Screw x 4

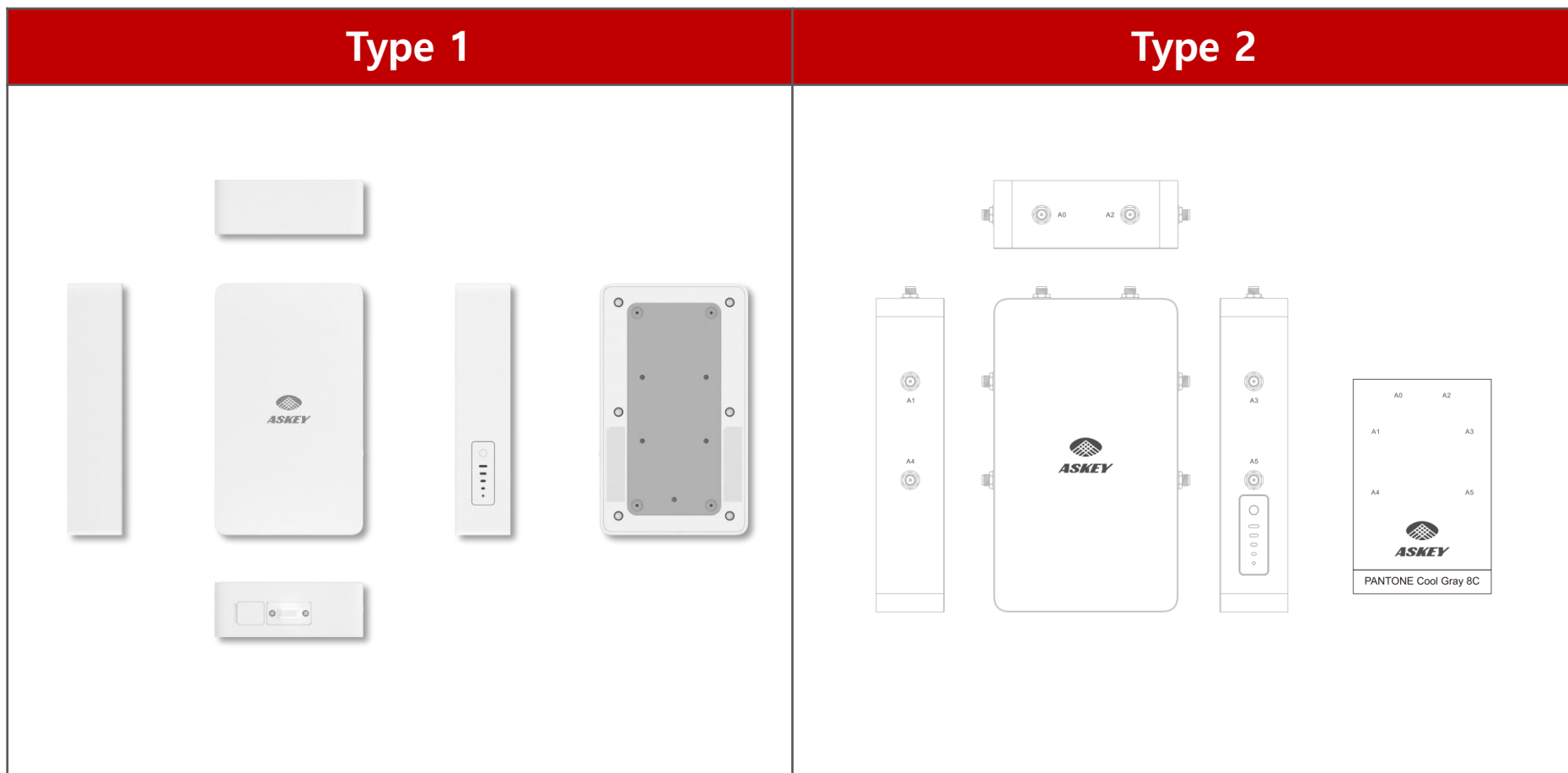
(For securing the Mounting Bracket with the ODU)



Stand



# 1.2 In the Box- Device



# 2.1 LED Indicators



INDICATOR	DESCRIPTION	POWER (LED#1)	SIGNAL STRENGTH (LED#2)	SIGNAL STRENGTH (LED#3)	SIGNAL STRENGTH (LED#4)	SIGNAL STRENGTH (LED#5)
Power	Power On \ HW Reset (press and hold for 9 sec)	Amber, Solid --> Green, Solid	Amber, Solid	Amber, Solid	Amber, Solid	Amber, Solid
	Power Off					
System	System Booting	Green, Blinking				
	System Error	Red, Solid				
	Reset to Default (WEB GUI)	Amber, Solid --> Blue, Blinking (3 sec) --> Green, Solid				
	HW Reset Key trigger Reset to Default (13sec)	Blue, Blinking --> Green, Solid				
Connection	4G Bad Signal	Green, Solid	Green, Solid			
	4G Poor Signal	Green, Solid	Green, Solid	Green, Solid		
	4G Fair Signal	Green, Solid	Green, Solid	Green, Solid	Green, Solid	
	4G Good Signal	Green, Solid	Green, Solid	Green, Solid	Green, Solid	Green, Solid
	5G Bad Signal	Green, Solid	Blue, Solid			
	5G Poor Signal	Green, Solid	Blue, Solid	Blue, Solid		
	5G Fair Signal	Green, Solid	Blue, Solid	Blue, Solid	Blue, Solid	
	5G Good Signal	Green, Solid	Blue, Solid	Blue, Solid	Blue, Solid	Blue, Solid
	4G/5G Searching	Green, Solid	Green, Blinking	Green, Blinking	Green, Blinking	Green, Blinking
	4G/5G Disconnected	Red, Solid	Red, Solid	Red, Solid	Red, Solid	Red, Solid
	SIM Not Ready	Green, Solid	Red, Blinking	Red, Blinking	Red, Blinking	Red, Blinking
Firmware Status	Upgrading	Red/Blue, Blinking				
BT	BT Connected	Green, Solid	Blue, Blinking (3 sec)	Blue, Blinking (3 sec)	Blue, Blinking (3 sec)	Blue, Blinking (3 sec)



## LED Behaviour

LED #5: 4G/5G Strength  
 LED #4: 4G/5G Strength  
 LED #3: 4G/5G Strength  
 LED #2: 4G/5G Strength  
 LED #1 : Power



# 2.2 Installation



**Step1.** Insert Nano SIM card into the ODU device.

**Step2.** Pick up the Flat Ethernet cable that has one end affixed with a thin plate (with 8 screw holes).

**Step3.** Secure it to the bottom side of the ODU (where the SIM card slot and Ethernet port are located) by tightening with 4 screws.

**Step4.** Cover the screw holes with the rubber plugs to prevent water splashes on the screws.

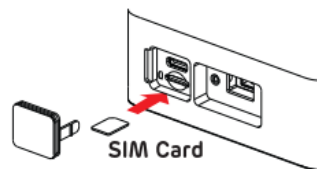
**Step5.** Connect the Ethernet Cable to ODU PoE Injector out-port and the Female connector of Flat Ethernet Cable.

## 1 Insert SIM

This step only applies for Nano SIM (4FF) supported SKU. eSIM SKU may skip this step.

1-1: Insert the Nano SIM card into the SIM Card Slot located in the bottom-left of ODU device

1-2: Place the waterproof cover

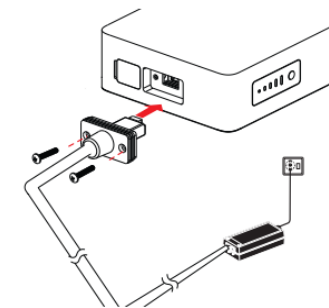


## 2 Connect Ethernet Cable and Power-on ODU

2-1: Pick the Flat Ethernet cable and connect its male RJ45 end (affixed with a waterproof cover) to the ODU Ethernet port at the bottom side, secure it by fasten the screws.

2-2: The other end of the flat cable will be connected to the ODU PoE Injector "OUT" port.

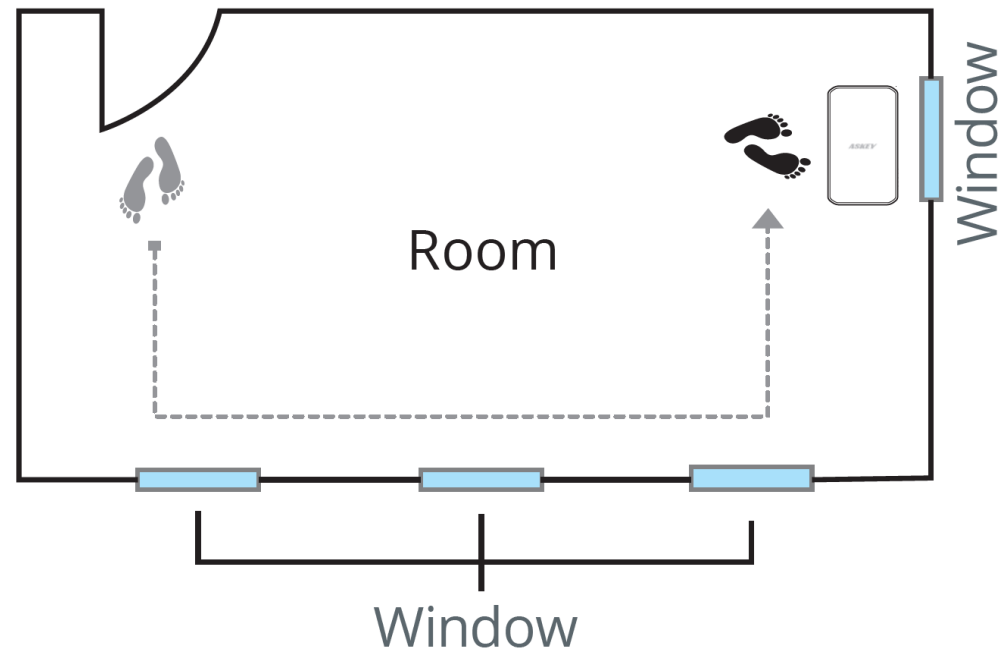
2-3: Using the second Ethernet Cable and connect to the PoE Injector "IN" port and the other end connect to the Laptop/PC Ethernet RJ45 Port or WAN port of the Router.



## 2.2 Installation



- Step6.** To locate the optimum spot, power-up the ODU and stand next to a window. Check the LED indicators on the ODU. The more LED indicators (Blue/Green color) are lit, the stronger the 5G/4G signal is in that premise.
- Step7.** Move the ODU to different spots, preferably all next to the windows to locate the optimum spot for the ODU installation. Repeat step6 - step7 until the optimum spot is located.
- Step8.** After locating the window with optimal signal. Clean the installation surface on the window (side facing outdoors), preferably with an alcohol wipe. Wait till the window surface has dried.



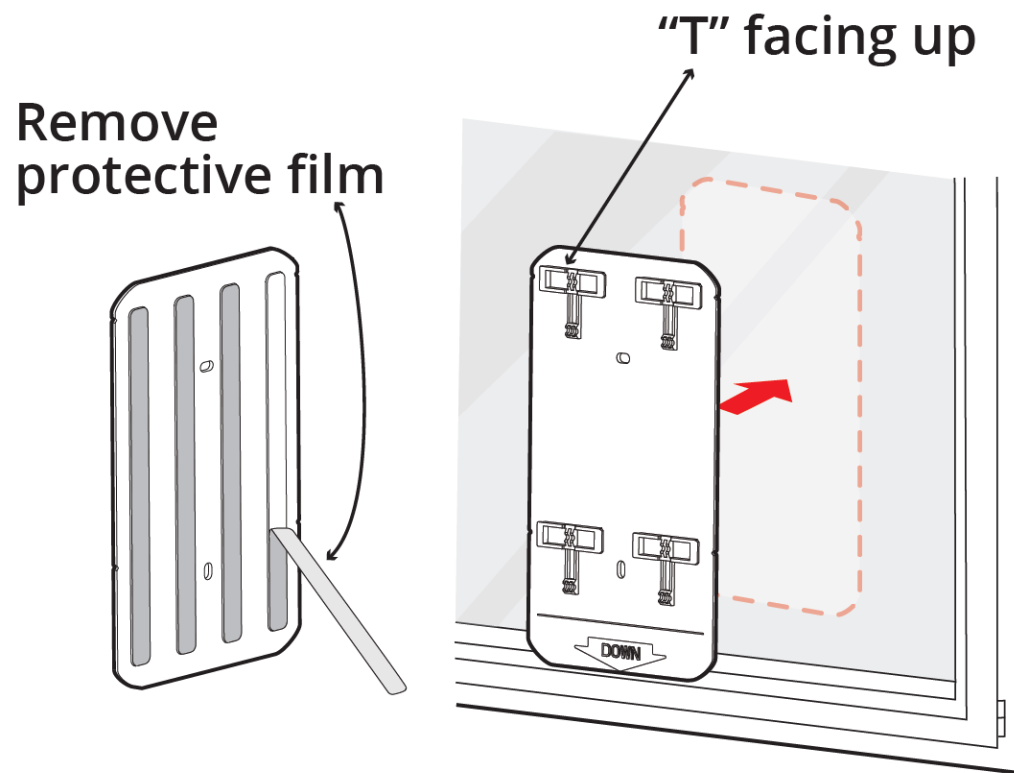
## 2.2 Installation



**Step9.** Remove the protective films on the Gecko tape Plate.

**Step10.** Position the Gecko tape Plate on the clean window surface with the "T" facing up.

**Step11.** Firmly press the entire surface of the Gecko tape Plate against the window.



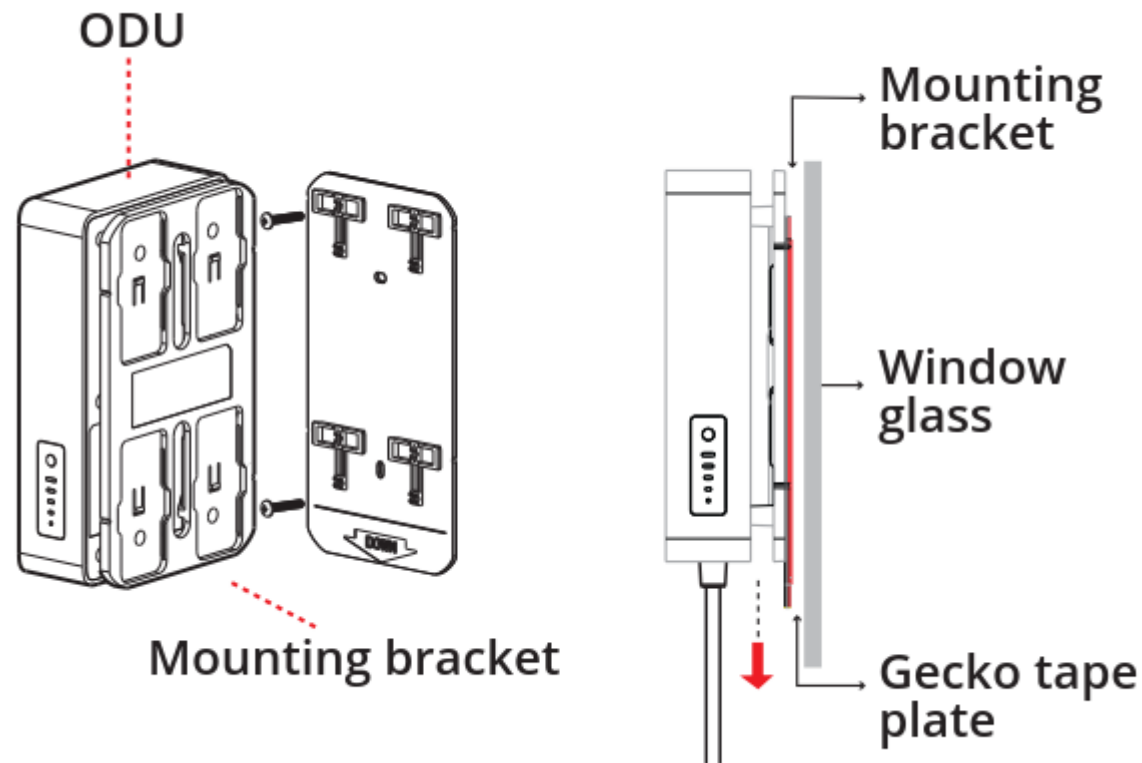
## 2.2 Installation



**Step12.** Assemble the ODU with the window-mounting bracket. Secure the window-mounting bracket to the back of the ODU by tightening 4 screws.

**Step13.** Mount the ODU onto the window mounting kit.

**Step14.** Lock the ODU with a gentle downward thrust till click.

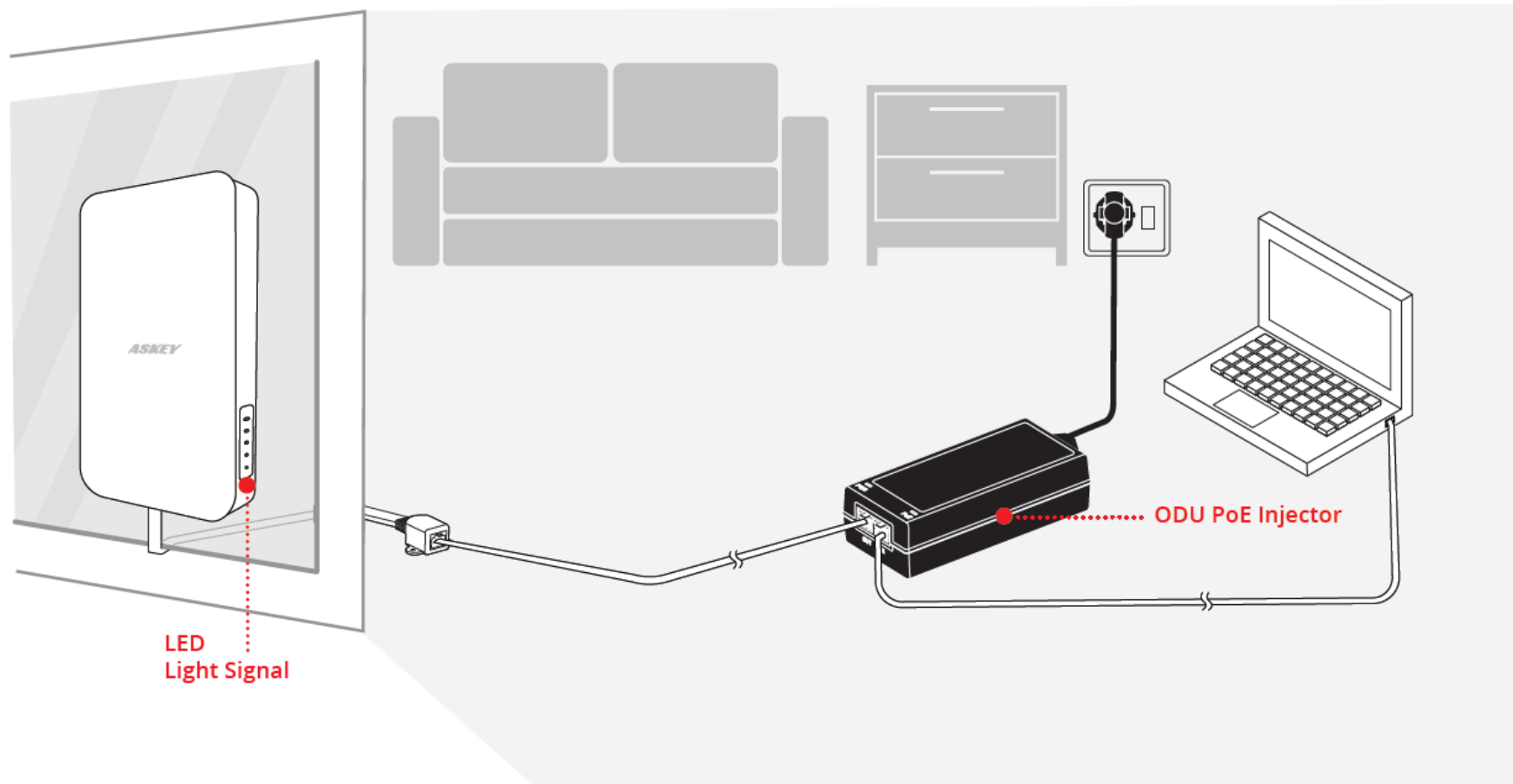


## 2.2 Installation



**Step15.** Power-up the ODU.

**Step16.** Internet access is available after connecting Ethernet cable between ODU PoE Injector in-port and the laptop.



## 2.3 Notice

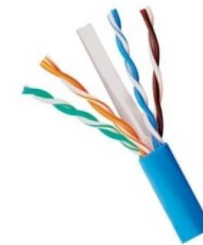


- Recommend to use Ethernet cable (RJ45) with **CAT-6** or above for better stability of PoE.

Type	Speed			
	(Mb/s)		(Gb/s)	
	10	100	1	10
CAT-5	⊙	⊙		
CAT-5e	⊙	⊙	⊙	
CAT-6	⊙	⊙	⊙	⊙
CAT-6a	⊙	⊙	⊙	⊙



Cat5e



Cat6



Cat6a

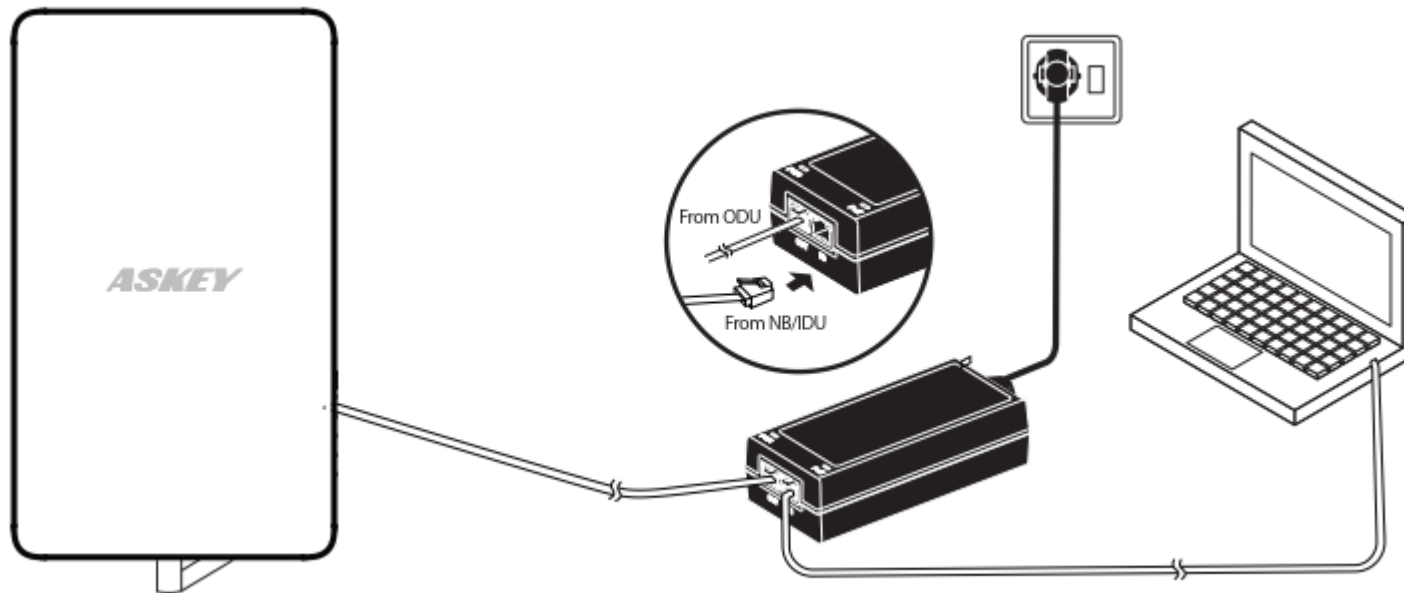


# 3.1 Connect Your Devices Wired



**Step1.** Connect the Ethernet cable to the LAN port on the PoE Injector

**Step2.** Connect the other end to your computer



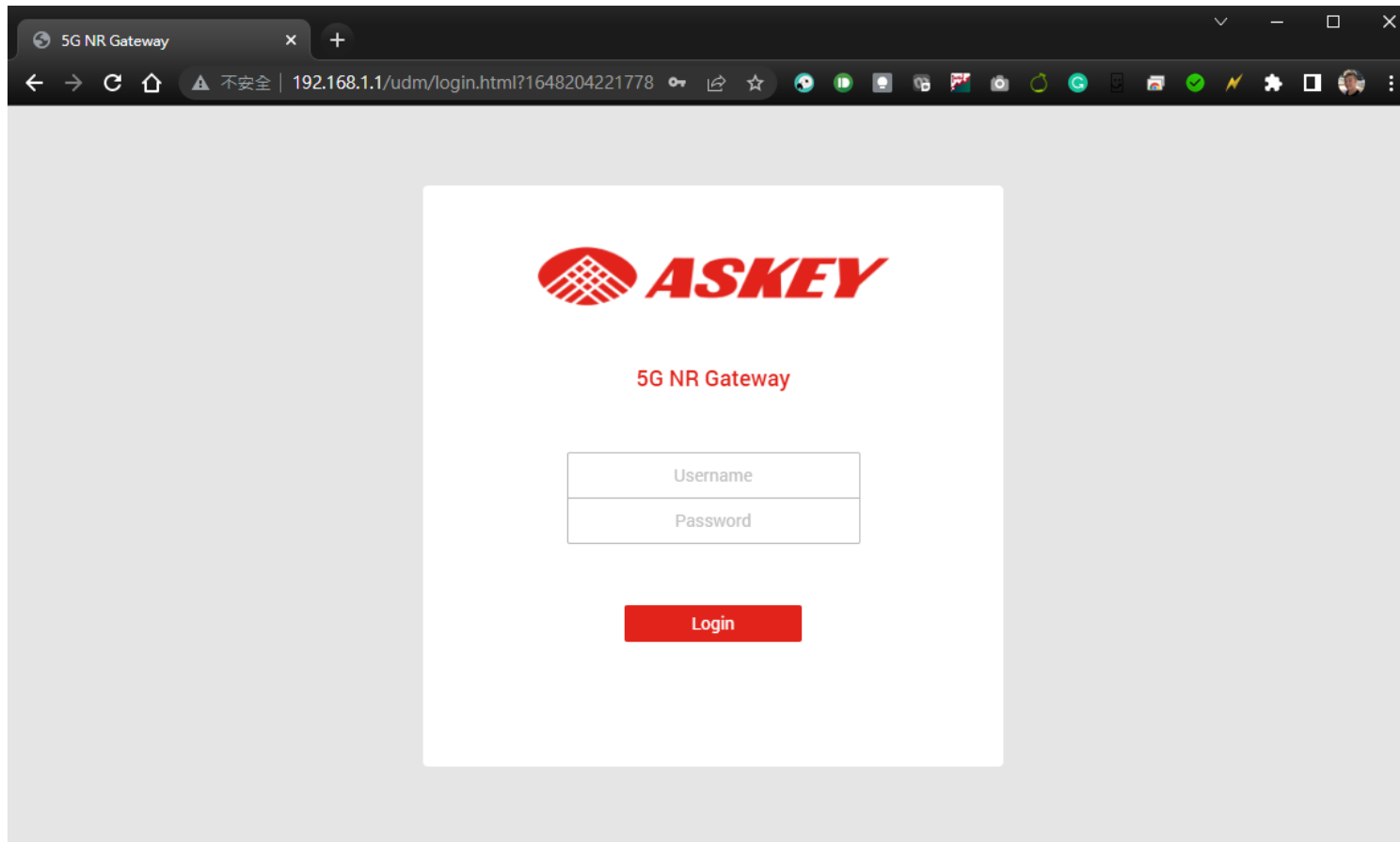
# 3.2 Web UI Login



**Step5.** Use a Web Browser to Access the ODU.

**Step6.** The browser goes to <http://192.168.1.1> and the login page displays.

**Step7.** Enter Username and Password.

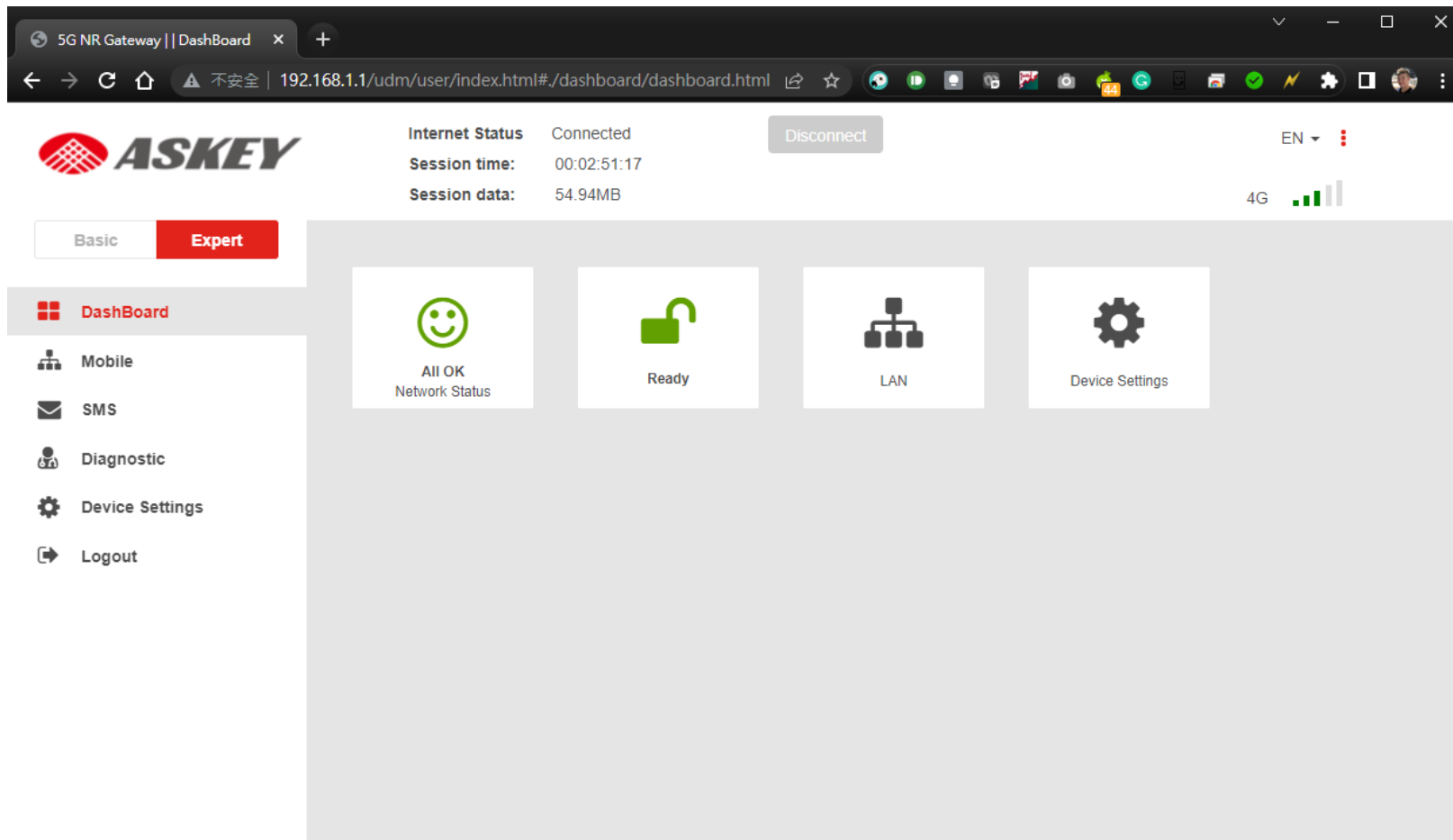


# 3.3 Dashboard



**Step1.** Login Web UI

**Step2.** When the network status is connected, it will show the smile face icon



# 3.4 Check Network Status



**Step1.** Navigate to Basic → Mobile → Status.

**Step2.** Check detailed information regarding Internet(v4), Internet(v6), LTE and System.

**Step3.** **LTE (4G):** Registration on 4G. **5G\_NR:** Registration on 5G.

The screenshot shows the ASKEY 5G NR Gateway Status page. The browser address bar displays "192.168.1.1/udm/user/index.html#/network/status.html". The page header includes the ASKEY logo, "Internet Status Connected", "Session time: 00:00:12:10", "Session data: 0.00MB", and a "Disconnect" button. The network status is shown as "4G" with a signal strength indicator. The left sidebar has "Mobile" selected, and "Status" is highlighted. The main content area shows "Information" with expandable sections for "Internet (v4)", "Internet (v6)", and "5G NR". The "5G NR" section is expanded, showing: Operator Name: Chungwa, SIM Status: Ready, Roaming Status: Home, Signal: [4G signal bars], and TECH Status: LTE (4G). Other sections include LAN and System Information.

The screenshot shows the ASKEY 5G NR Gateway Status page. The browser address bar displays "192.168.1.1/udm/user/index.html#/network/status.html". The page header includes the ASKEY logo, "Internet Status Connected", "Session time: 00:00:10:49", "Session data: 11.56MB", and a "Disconnect" button. The network status is shown as "5G" with a signal strength indicator. The left sidebar has "Mobile" selected, and "Status" is highlighted. The main content area shows "Information" with expandable sections for "Internet (v4)", "Internet (v6)", and "5G NR". The "5G NR" section is expanded, showing: Operator Name: FET, SIM Status: Ready, Roaming Status: Home, Signal: [5G signal bars], and TECH Status: 5G\_NSA (5G). Other sections include LAN and System Information.



# 3.5 Manage LTE settings



**Step1.** Navigate to Basic (or Expert) → Mobile → 4G/5G.

**Step2.** The SIM status, APN, and PIN related settings are here.

The screenshot shows a web browser window with the URL `192.168.1.1/udm/user/index.html#/network/lte.html`. The page header includes the ASKEY logo, Internet Status (Disconnected), Session time (00:00:27:52), Session data (0.00MB), and a language dropdown (EN). The left sidebar has tabs for Basic and Expert, with Expert selected. The main content area is titled "4G/5G Settings" and contains several sections:

- 4G/5G Status:** Internet Status (Disconnected) with a Connect button, and SIM Status (No SIM).
- Data and Network Settings:** Airplane Mode is inactive (toggle off), Data Roaming is inactive (toggle off), Auto APN is active (toggle on), and PDN Type (IPv4+v6).
- SIM:** PIN Protected Disable (toggle off).



# 3.5 Manage LTE settings



**Step3.** To Change APN (Access Point Name) Profile. Disable auto APN.

**Step4.** Add new APN manually, edit & save.

The screenshot shows the ASKEY 5G NR Gateway management interface. The browser address bar indicates the URL is 192.168.1.1/udm/user/index.html#/network/lte.html. The interface is divided into a sidebar with navigation options (Dashboard, Mobile, 4G/5G, SMS, Diagnostic, Device Settings, Logout) and a main content area. The main content area displays the 4G/5G Settings page, which includes sections for 4G/5G Status, Data and Network Settings, and SIM. The 4G/5G Status section shows Internet Status as Disconnected, Session time as 00:00:24:22, and Session data as 0.00MB. The Data and Network Settings section includes toggles for Airplane Mode (inactive), Data Roaming (inactive), and Auto APN (active). The PDN Type is set to IPv4+v6. A modal dialog is open over the Auto APN toggle, titled "No SIM". The dialog contains a toggle for "Auto APN is inactive" (currently off), input fields for APN, Username, and Password, and a dropdown menu for Authentication Type (set to None). A red box highlights the input fields, and a red arrow points to the "Save" button.



# 3.6 Network Selection



**Step1.** Navigate to Expert → Mobile → Network Configuration.

**Step2.** The default network mode is **Auto**. Select Manual to change the setting.

5G NR Gateway | Network Conf | x +

← → ↻ 🏠 ⚠ 不安全 | 192.168.1.1/udm/user/index.html#/network/search\_mode.html

**ASKEY** Internet Status: Disconnected Connect EN ▾

Session time: 00:00:03:37  
Session data: 0.00MB

Basic **Expert**

DashBoard

**Mobile**

- Status
- Traffic Query
- 4G/5G
- Profile Management
- Multi APN/Vlan
- LAN
- Network Configuration**
- Cell Lock
- GPS

SMS

Diagnostics

Device Settings

Logout

Network Configuration

Network Selection

Network Selection  Auto  Manual

Network Mode Auto (5G/4G) ▾

Search

Network search mode  Auto  Manual

Network Mode Auto (5G/4G) ▾ ⓘ

- Auto (5G/4G)
- 4G only
- 5G SA

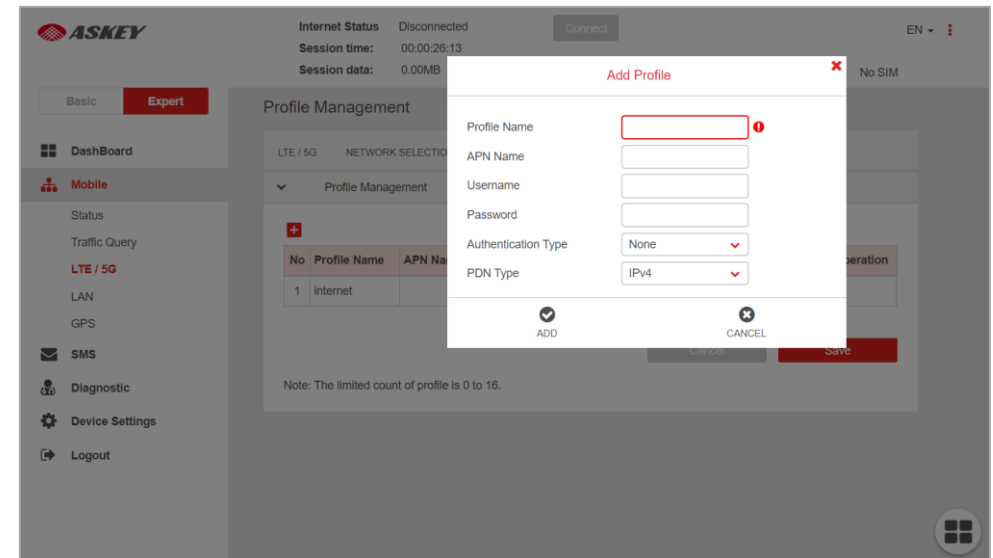
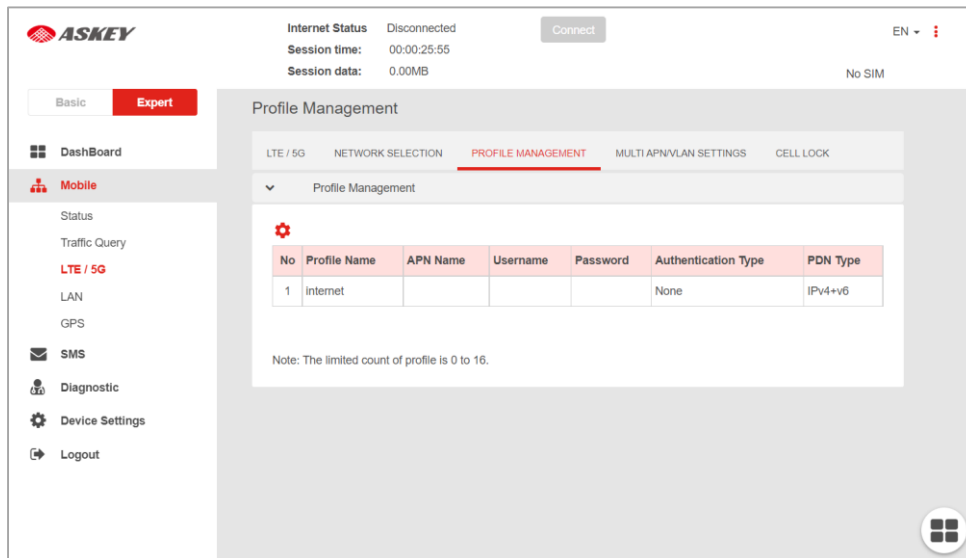


# 3.7 Profile Management



**Step1.** Navigate to Expert → Mobile → Profile Management.

**Step2.** Click "⚙️" to set the profile and Click "➕" to add profile.



# 3.8 Multi APN/Vlan Settings



**Step1.** Navigate to Expert → Mobile → Multi APN/Vlan Settings.

**Step2.** Click "⚙️" to set the Vlan and Click "➕" to add profile Vlan.

**Step3.** The limitation of Multi APN / Vlan are 8 groups.

The screenshot shows the ASKEY web interface. At the top, it displays 'Internet Status: Disconnected' with a 'Connect' button, 'Session time: 00:00:25:10', and 'Session data: 0.00MB'. The left sidebar has 'Expert' selected under 'Mobile'. The main content area is titled 'Multi APN/Vlan Settings' and has tabs for 'LTE / 5G', 'NETWORK SELECTION', 'PROFILE MANAGEMENT', 'MULTI APN/VLAN SETTINGS', and 'CELL LOCK'. A table with a gear icon above it shows one profile:

No	Profile Name	Vlan ID	Status
1	Internet	0	Disconnected

Below the table, a note states: 'Note: The limited count of multi-VLAN is 1 to 8.'

This screenshot shows the same ASKEY interface, but with a '+ ' icon at the top left of the table area. The table now has two rows:

No	Profile Name	Vlan ID	Enable	Operation
1	Internet	<input type="text" value="0"/>	Enable	
2	<input type="text" value="Please choose"/>	<input type="text"/>	<input type="checkbox"/>	<input type="button" value="🗑️"/>

At the bottom of the table area, there are 'Cancel' and 'Save' buttons. The same note about the 8-group limit is present.



# 3.9 Backup / Restore



**Step1.** Navigate to Expert → Device Settings → **Backup & Restore**.

**Step2-1.** To save the configuration. Firstly click **Backup**. Then click **Download**.

**Step2-2.** Click **Select file** to restore settings.

**Step2-3.** Click **Factory Reset** to load default setting. Click **Reboot** to restart the ODU.

5G NR Gateway | Backup & Restore

192.168.1.1/udm/user/index.html#/router/backup.html

**ASKEY** Internet Status: Disconnected  EN

Session time: 00:00:06:40  
Session data: 0.00MB No SIM

Basic **Expert**

- DashBoard
- Mobile
- SMS
- Diagnostic
- Device Settings**
  - Date & Time
  - Backup & Restore**
  - Firmware Update
  - LED Settings
  - System Log
  - Device Mode
  - Password
- Logout

### Backup & Restore Settings

**Backup**

Backup your current settings  **2-1**

**Restore**

Restore your settings from a file

No file selected **2-2**

**Factory Reset**

Reset your device to factory settings

Reboot device  **2-3**



# 3.10 Firmware Upgrade



**Step1.** Navigate to Expert / Device Settings / Firmware Update. Click **Select file**.

**Step2.** Open file "FOTA\_NUQ3000M\_STD\_VX.X.X\_XXXXXX.X.img" to update.

**Step3.** Click **Start firmware update**. Then check new firmware version is correct.

The screenshot displays the ASKEY 5G NR Gateway Firmware Update interface. The 'Firmware Update Settings' section is active, showing the 'Manual Update' tab. The 'Firmware version' is set to 'NUQ3000M\_STD\_V0.0.3\_220310.'. The 'Server Path' is 'https://avus46.askeycloudapi.com'. The 'Update from file' section has a 'Select file' button highlighted with a red box and the number 1. A file explorer window is open, showing the file 'FOTA\_NUQ3000M\_STD\_V0.0.3\_220310.0.img' selected, with the 'Open' button highlighted with a red box and the number 2. The 'Start firmware update' button is highlighted with a red box and the number 3.



# 3.11 LED Settings



**Step1.** Navigate to Expert / Device Settings / LED Settings.

**Step2.** Enable LED sleep.

The screenshot displays the ASKEY 5G NR Gateway web interface. The browser address bar shows the URL `192.168.1.1/udm/user/index.html#/router/led.html`. The page header includes the ASKEY logo and status information: Internet Status (Disconnected), Session time (00:00:20:25), and Session data (0.00MB). The left sidebar shows navigation options: Basic, Expert, Dashboard, Mobile, SMS, Diagnostic, Device Settings (highlighted), and Logout. The main content area is titled 'LED Settings' and contains a section for 'LED Indicator' with a toggle switch for 'LED sleep mode' currently set to 'inactive'. A callout box titled 'Manage LED Settings' is overlaid on the page, showing a detailed view of the 'LED Indicator' settings, where 'LED sleep is active' is shown with a red toggle switch.



# 4.1 Enable Router Mode



**Step1.** Navigate to Expert / Device Settings / Device Mode.

**Step2.** Select Router Mode, GUI shows NAT Forwarding.

The screenshot displays the ASKEY web interface. At the top, it shows 'Internet Status: Disconnected', 'Session time: 00:00:48:28', and 'Session data: 0.00MB'. A 'Connect' button is visible. The left sidebar contains navigation options: 'Basic', 'Expert', 'DashBoard', 'Mobile', 'SMS', 'NAT Forwarding' (highlighted with a red box and '2'), 'Parental Control', 'Diagnostic', 'Security', 'Device Settings', and 'Device Mode'. The main content area is titled 'Manage System Settings' and includes tabs for 'DATE & TIME', 'BACKUP & RESTORE', 'FIRMWARE UPDATE', 'LED SETTINGS', 'SYSTEM LOG', and 'DEVICE MODE' (highlighted with a red line). Under 'DEVICE MODE', there is a 'PASSWORD' field and a 'Settings' dropdown. The 'Mode' section shows two radio buttons: 'ODU mode' and 'Router mode' (highlighted with a red box and '1'). At the bottom right, there is a 'Cancel' button and a 'Save' button (highlighted with a red box and '1').



# 4.2 Set DDNS



**Step1.** Enable DDNS.

**Step2.** Select server, fill in Username or Email address and Password.

The screenshot shows the ASKEY router's web interface. At the top, the ASKEY logo is on the left, and the Internet Status is 'Disconnected' with a 'Connect' button. Below this, session time and data are shown. A navigation menu on the left includes 'Basic' and 'Expert' tabs, and a list of settings like 'DashBoard', 'Mobile', 'SMS', 'NAT Forwarding', 'DDNS', 'DMZ', 'UPnP', 'ALG', 'Virtual Servers', 'Parental Control', 'Diagnostic', 'Security', 'Device Settings', and 'Logout'. The 'DDNS' section is expanded, showing a toggle switch for 'DDNS is active' which is turned on. Below the toggle, there are fields for 'Server' (a dropdown menu with 'www.dyndns.com' selected), 'Host Name' (a dropdown menu with 'www.dyndns.com' and 'www.nolp.com' visible), 'Username or E-mail Address' (an empty text box with a red border and an information icon), and 'Password or DDNS Key' (an empty text box with a red border, an information icon, and an eye icon for toggling visibility). At the bottom of the settings area, there are 'Cancel' and 'Save' buttons.

# 4.3 Set DMZ



**Step1.** Enable DMZ.

**Step2.** Fill in DMZ host IP address.

**ASKEY** Internet Status: Disconnected Connect EN ⋮  
Session time: 00:00:53:16  
Session data: 0.00MB No SIM

Basic **Expert**

**Manage DMZ Settings**

IPv4 DMZ

DMZ is **active**

Client: Manually ⌵

DMZ Host IPv4 Address: 192.168.1.19 !

IPv6 DMZ

DMZ is **active**

Client: Manually ⌵

DMZ Host IPv6 Address:  !

Cancel Save



# 4.4 UPnP



## Step1. Enable UPnP.

The image shows the ASKEY router's web management interface. At the top left is the ASKEY logo. To its right, the 'Internet Status' is 'Disconnected' with a 'Connect' button. Below this, 'Session time' is '00:00:53:37' and 'Session data' is '0.00MB'. On the far right, there is a language dropdown set to 'EN' and a 'No SIM' indicator. A left sidebar contains navigation options: 'Basic' (selected), 'Expert', 'DashBoard', 'Mobile', 'SMS', 'NAT Forwarding' (highlighted), 'DDNS', 'DMZ', 'UPnP' (highlighted), 'ALG', 'Virtual Servers', 'Parental Control', 'Diagnostic', 'Security', 'Device Settings', and 'Logout'. The main content area is titled 'Manage UPnP Settings' and shows a dropdown menu for 'UPnP' with a sub-item 'UPnP is active' and a red toggle switch that is currently turned on. At the bottom right of the main area is a circular icon with a 2x2 grid. At the bottom of the interface are 'Cancel' and 'Save' buttons.



# 4.5 Set ALG



## Step1. Enable ALG.

**ASKEY** Internet Status: Disconnected Connect EN ⋮  
Session time: 00:00:53:49  
Session data: 0.00MB No SIM

Basic **Expert**

**NAT Forwarding**

- DDNS
- DMZ
- UPnP
- ALG**
- Virtual Servers
- Parental Control
- Diagnostic
- Security
- Device Settings
- Logout

### Manage ALG Settings

ALG


PPTP Pass-through is <b>active</b>	<input checked="" type="checkbox"/>
L2TP Pass-through is <b>active</b>	<input checked="" type="checkbox"/>
IPSec Pass-through is <b>active</b>	<input checked="" type="checkbox"/>
FTP ALG is <b>active</b>	<input checked="" type="checkbox"/>
TFTP ALG is <b>active</b>	<input checked="" type="checkbox"/>
RTSP ALG is <b>active</b>	<input checked="" type="checkbox"/>
SIP ALG is <b>active</b>	<input checked="" type="checkbox"/>

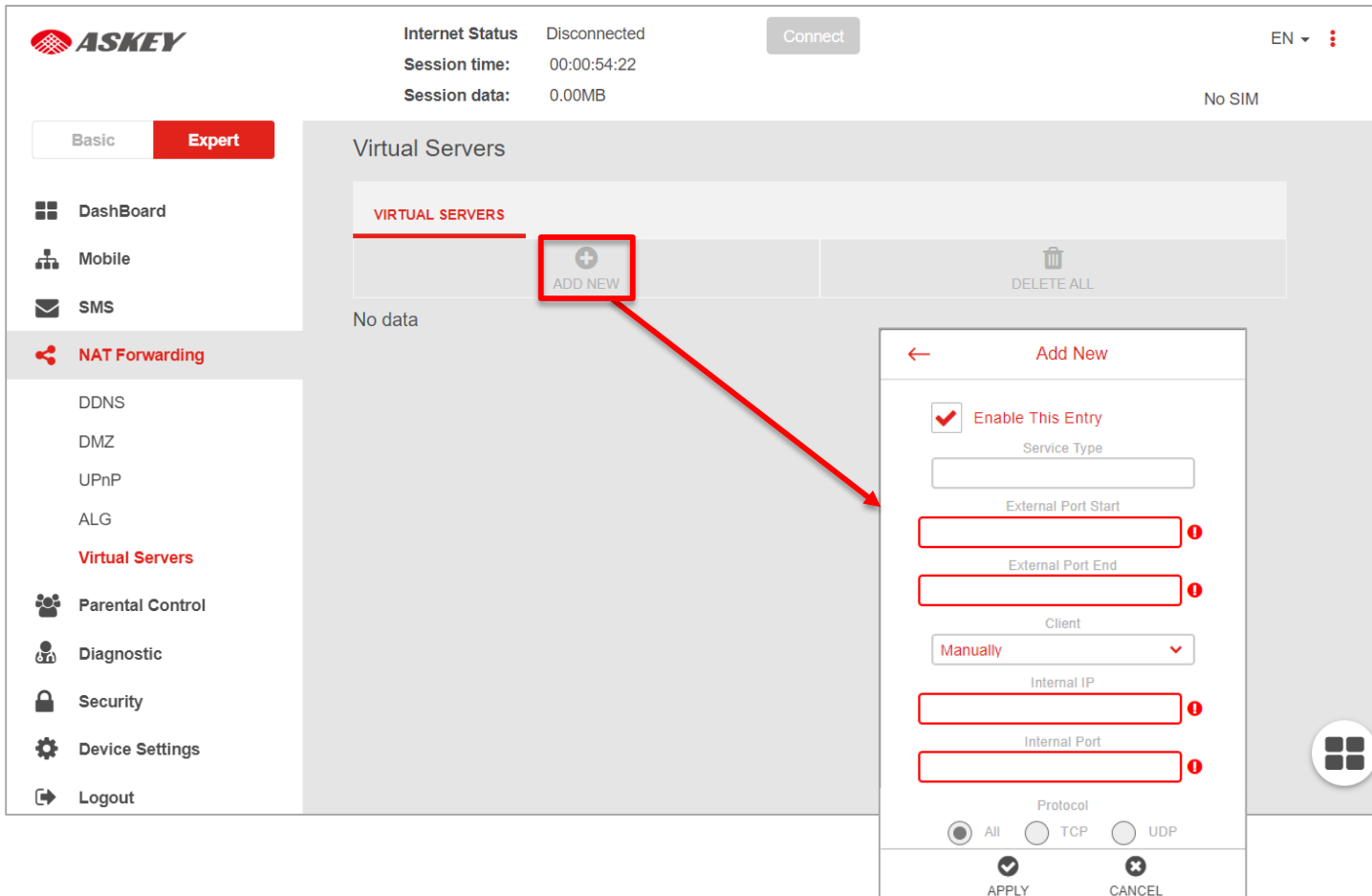
Cancel Save



# 4.6 Add Virtual Servers



**Step1.** Click "  " to add virtual server.



The screenshot displays the ASKEY router's web interface. At the top, it shows the ASKEY logo, Internet Status (Disconnected), Session time (00:00:54:22), and Session data (0.00MB). A 'Connect' button is visible. The left sidebar contains navigation options: Basic, Expert (selected), DashBoard, Mobile, SMS, NAT Forwarding, DDNS, DMZ, UPnP, ALG, Virtual Servers (highlighted), Parental Control, Diagnostic, Security, Device Settings, and Logout. The main content area is titled 'Virtual Servers' and shows a table with 'VIRTUAL SERVERS' and 'No data'. A red box highlights the 'ADD NEW' button, with a red arrow pointing to the 'Add New' dialog box. The dialog box includes a checked 'Enable This Entry' checkbox, a 'Service Type' field, 'External Port Start' and 'External Port End' fields, a 'Client' dropdown menu (set to 'Manually'), 'Internal IP' and 'Internal Port' fields, and 'Protocol' radio buttons (All, TCP, UDP). 'APPLY' and 'CANCEL' buttons are at the bottom.





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