

NDQ2300

5G Dongle User Manual



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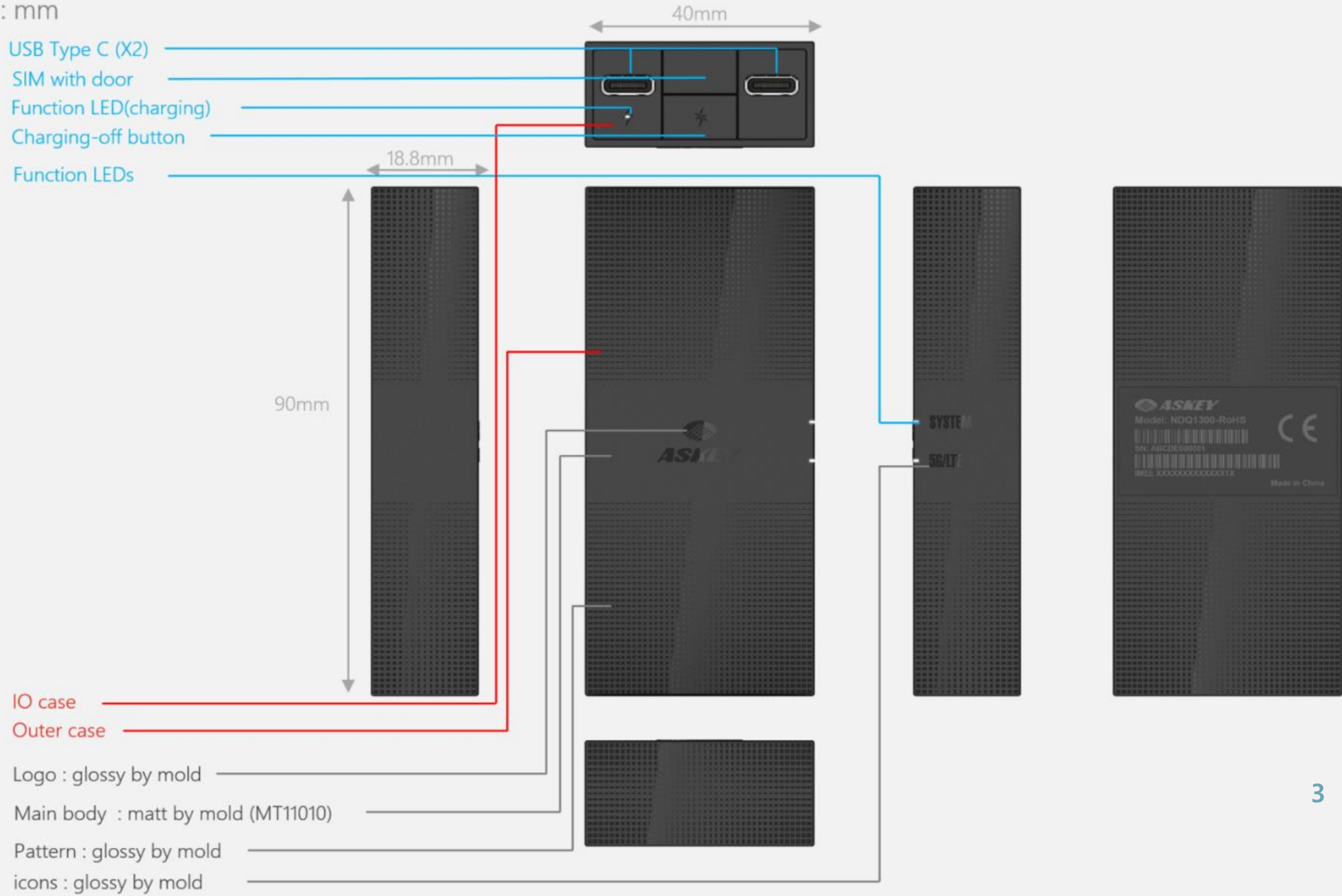
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1.1 In the Box- Device



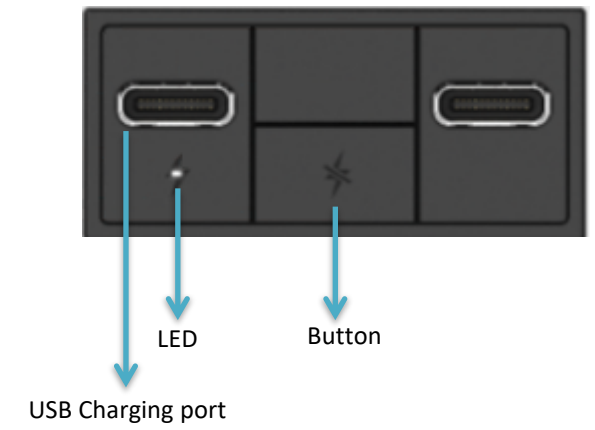
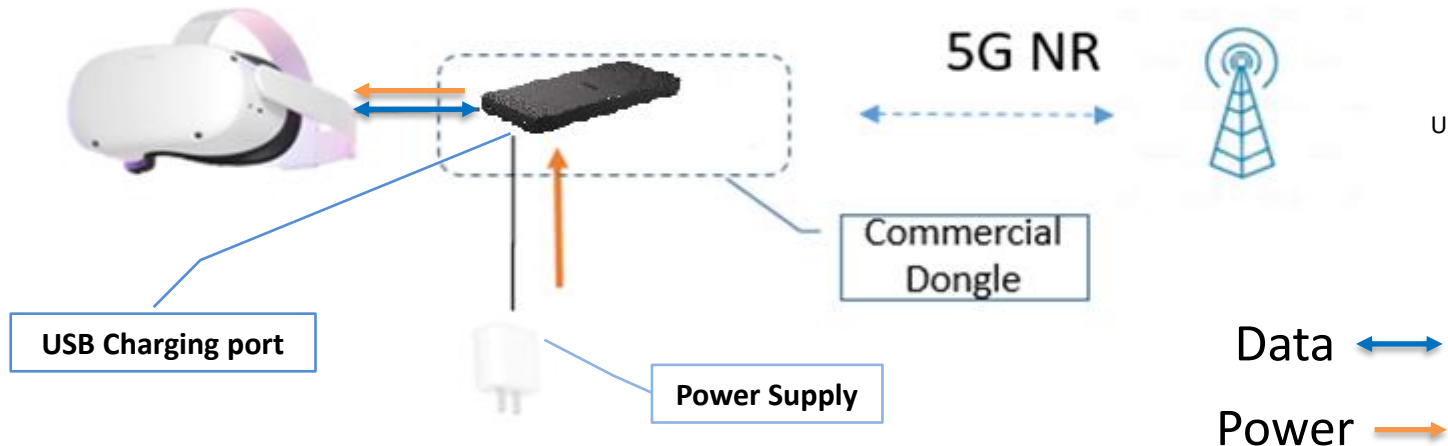
Unit : mm



1.2 In the Box- Charge



In some use cases, the HOST device uses USB type-C interface for charging, and the HOST device also needs to connect to the dongle via type-C. NDQ2300 support power switch to choose power source between HOST and external power adapter when the external power adapter is plugged in.



1. The dongle can get power from the power supply.
2. The device can be charged via the dongle.
3. The device can connect to the dongle via Type-C and share the network from the dongle.
4. The device can supply power to the dongle without power supply.
5. When the device stops charging, it needs to press the Button, the LED indicator is off, and then the power supply can be unplugged from the dongle.
6. Long Press Button longer then 10 seconds to reset factory configuration when the device unplugged power supply with USB charging port.
7. Reset the factory configuration device will restart.



2.1 Insert SIM card



Step1. Open the SIM card cover




















Step2. Push the SIM card and close the cover



2.2 LED Indicators



-  Red/Blue blinking back and forth
-  Green, Solid
-  Red, Solid
-  Red, Blinking
-  Yellow, Blinking
-  Green, Blinking
-  Blue, Solid
-  Purple, Solid
-  Blue, Blinking

INDCATOR	DESCRIPTION	RAT Status (LED#1)	Data Status (LED#2)	Charging Status (LED#3)
System	System Booting			
	System Error			
	SIM Not Ready			
	Upgrading			
Connection	4G/5G Disconnected			
	4G Connected			
	5G NSA Connected			
	5G SA Connected			
Charge	Charging			
	Not Charging			
Reset	Preparing To Reset			
	Reset Factory CFG			

Note: The Reset must take effect when it is not charging status.



2.3 Compatible HOST types



- ◆ NDQ2300 is an USB dongle that enables users to access internet via 5G/4G mobile network. It always works in USB device mode with RNDIS (version 5 or later) / ECM network device driver embedded.
- ◆ NDQ2300 can work with USB HOST devices that RNDIS (version 5 or later) / ECM network HOST driver can be supported, the operation system can be
 - Windows XP, 7, 8, 10 or later
 - Mac OS (High Sierra 10.13.6 or later, OS X Yosemite 10.10.5 or later)
 - Linux (Ubuntu 16.04 or later)
 - Android (Version 7 or later)

Please note, even the USB dongle can be enumerated as a network interface, if the HOST doesn't request IP for the interface, the HOST will not be able to access network via the dongle. It relies on the network design in HOST side. E.g. most Android smart phone can't work with USB dongle.

Please user to confirm it with HOST vendor.



3.1 Web UI Login



Step1. Insert the Dongle into the computer by USB and waiting device boot up.

Step2. Open browser and browse <http://my.usb> or <http://Subnet IP>

The image displays two side-by-side screenshots of the ASKEY web dashboard. Both screenshots show the ASKEY logo, 'Internet Status: Connected', 'Session time', and 'Session data'. The main content area has 'Basic' selected and shows 'All OK Network Status' and 'Ready'. The left screenshot shows the URL 'http://my.usb/user/index.html#./dashboard/dashboard.html' in the browser address bar, and the right screenshot shows the URL 'http://192.168.32.1/user/index.html#./dashboard/dashboard.html'. The browser tabs are labeled '5G USB Dongle | DashBo...'. The dashboard includes a navigation menu with 'DashBoard', 'Mobile', and 'Logout' options.



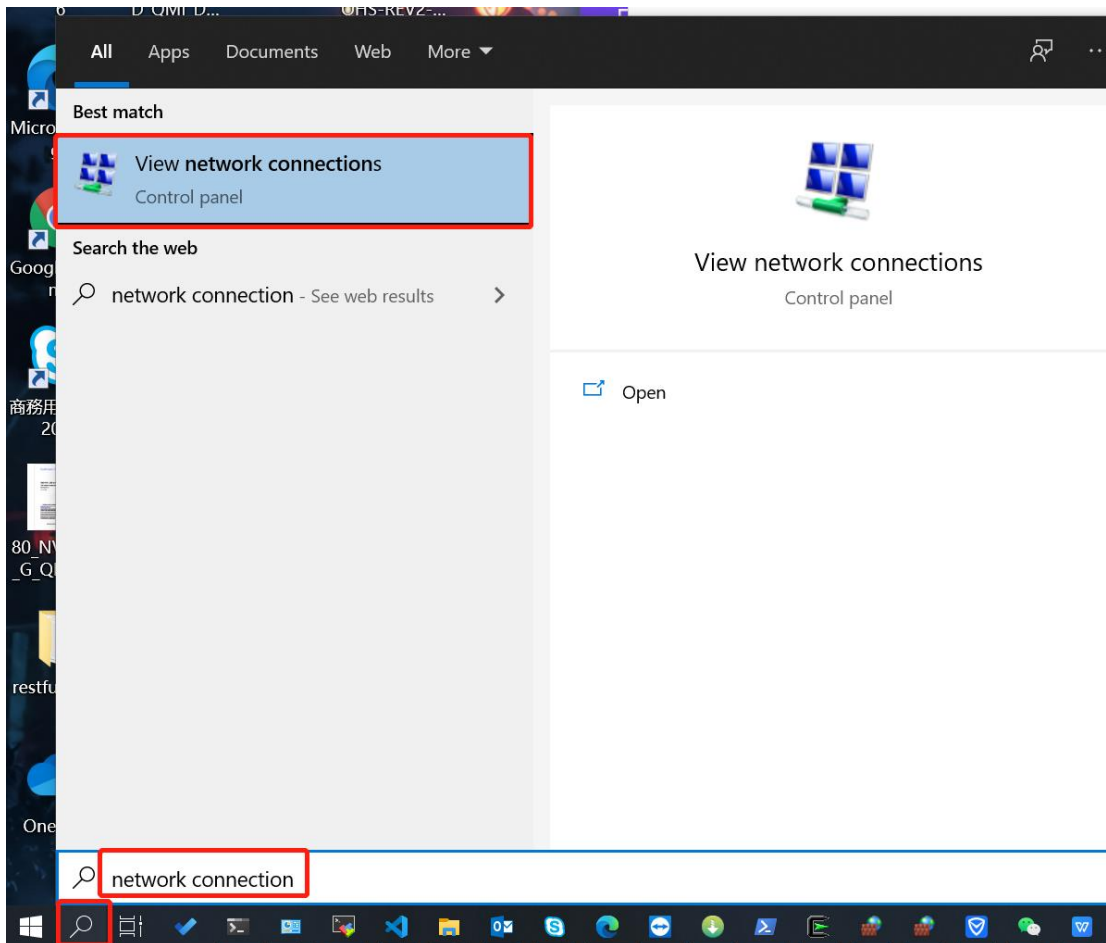
3.1 Web UI Login



Note: If <http://my.usb> can't access, please follow below steps to try to login web UI.

Step1. Insert the Dongle into the computer by USB and waiting device boot up.

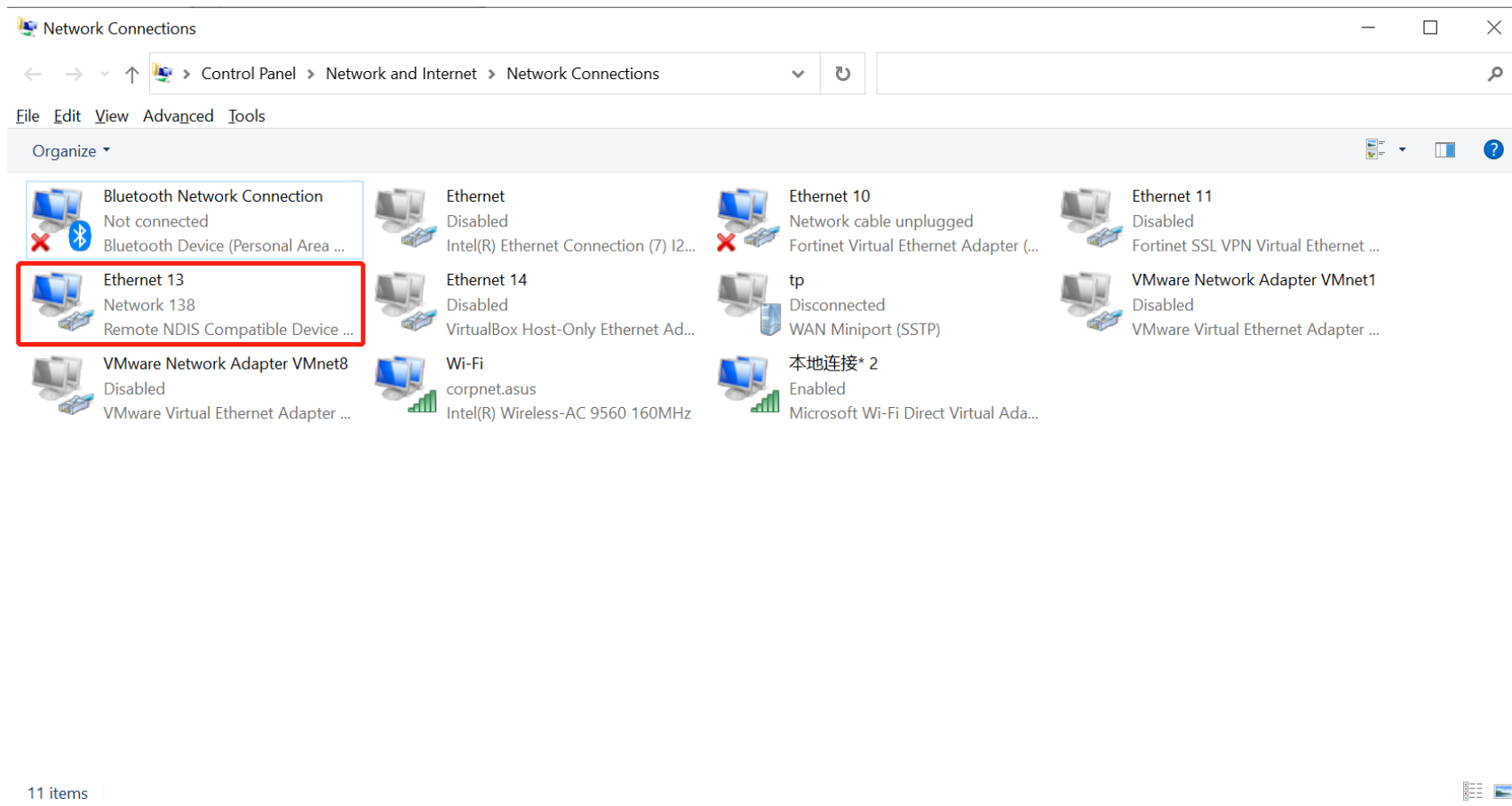
Step2. On PC side, search and run **View network connections** application.



3.1 Web UI Login



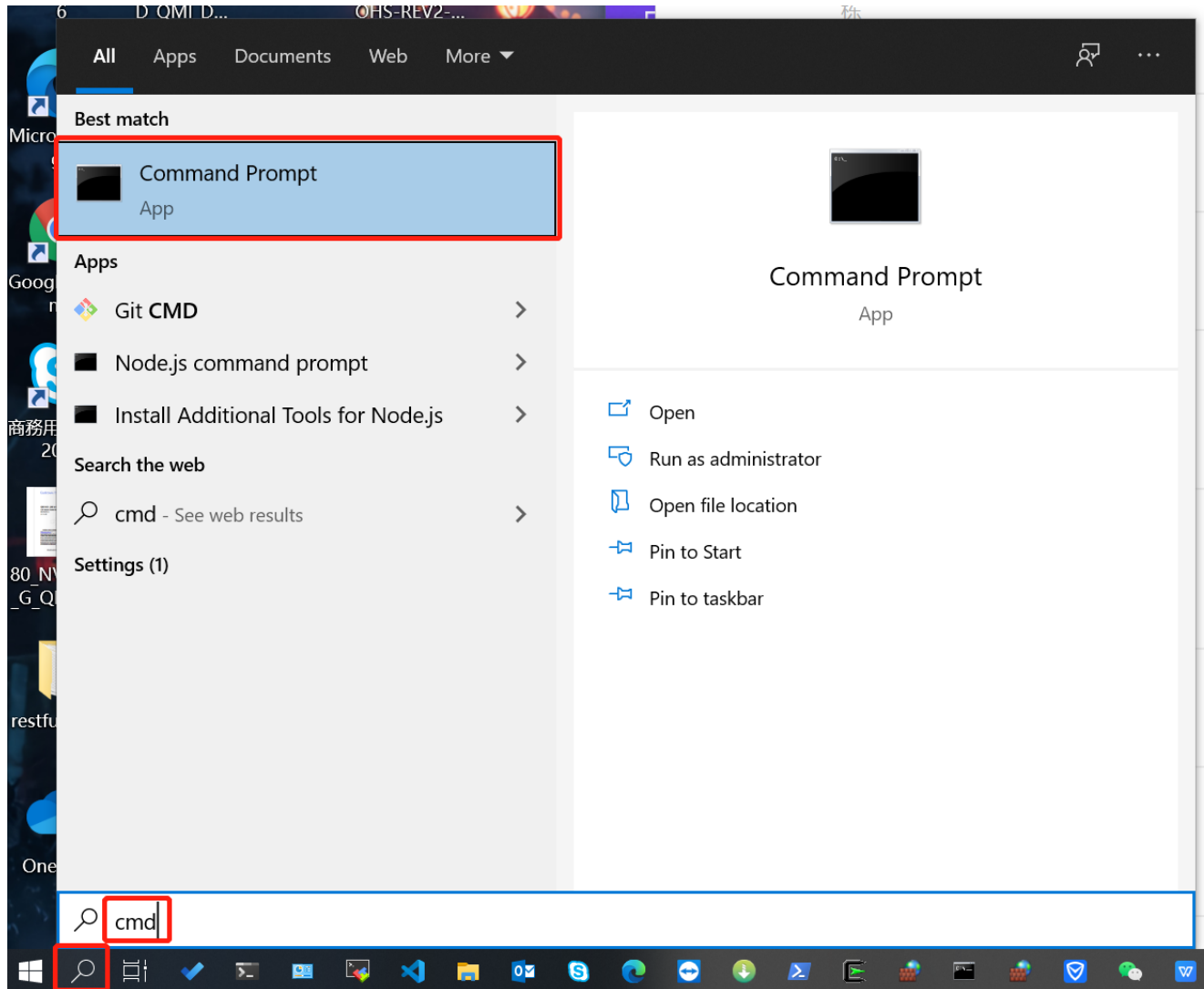
Step3. Find the Ethernet type “**Remote NDIS Compatible Device**”, and remember its number (e.g. **Ethernet 13**).



3.1 Web UI Login



Step4. On PC side, search and run **cmd** application.



3.1 Web UI Login



Step5. In cmd application , type **ipconfig**.

Step6. Check the IP of "**Ethernet 13**" (e.g. **10.18.11.25**).

```
Command Prompt
Microsoft Windows [Version 10.0.19042.685]
(c) 2020 Microsoft Corporation. All rights reserved.
C:\Users\hayden_xuan>ipconfig

Windows IP Configuration

Ethernet adapter Ethernet 13:

    Connection-specific DNS Suffix  . : my.usb
    IPv6 Address. . . . . : 240e:47c:3090:164:8d34:c1b0:489d:f8f3
    Temporary IPv6 Address. . . . . : 240e:47c:3090:164:6060:4df7:3bec:cffa
    Link-local IPv6 Address . . . . . : fe80::8d34:c1b0:489d:f8f3%70
    IPv4 Address. . . . . : 10.18.11.24
    Subnet Mask . . . . . : 255.255.255.240
    Default Gateway . . . . . : fe80::9018:22ff:fefe:e63%70
                               10.18.11.25

Wireless LAN adapter Local Area Connection* 1:

    Media State . . . . . : Media disconnected
    Connection-specific DNS Suffix  . :

Ethernet adapter Ethernet 10:

    Media State . . . . . : Media disconnected
    Connection-specific DNS Suffix  . :

Wireless LAN adapter Wi-Fi:
```

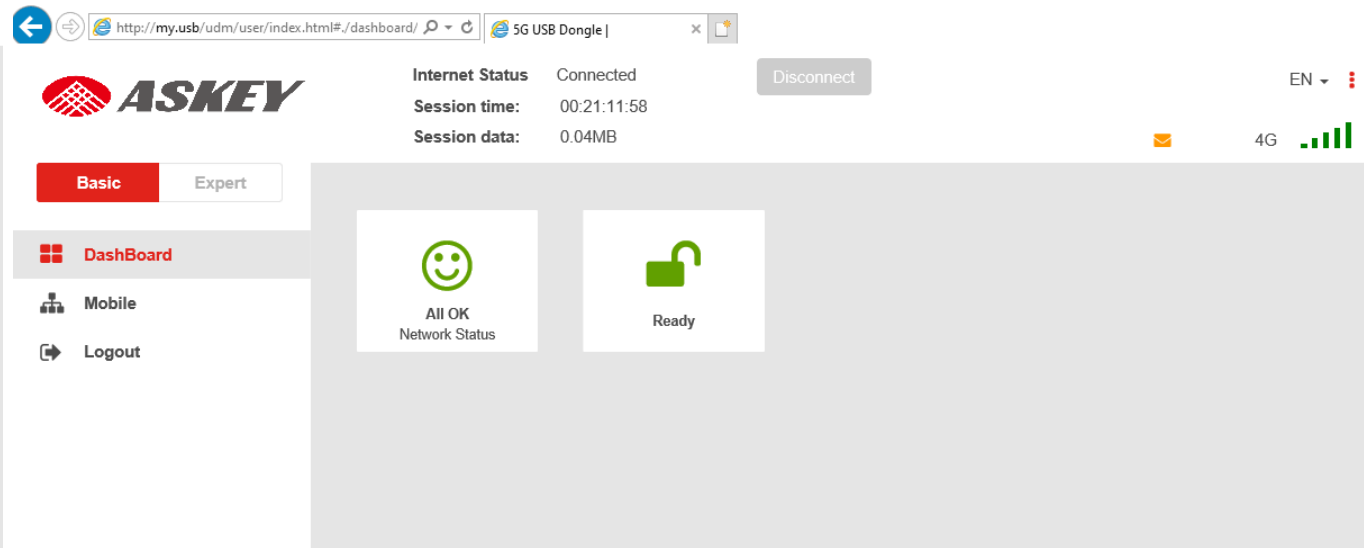
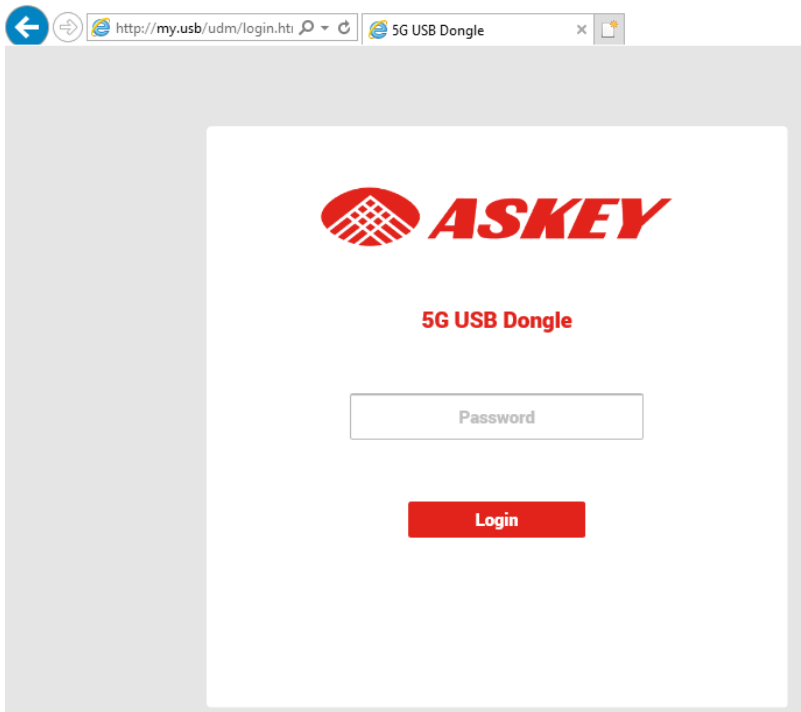


3.1 Web UI Login



Step7. Open browser and browse <http://my.usb> or <http://GatewayIP>

Step8. Enter the username and password to login.



3.2 Home



Step1. Login Web UI.

Step2. See the Network status, Connection time, Data statistics.

The screenshot shows the ASKEY dashboard interface. At the top, there is a browser address bar with the URL `http://my.usb/udm/user/index.html#./da` and a tab titled "5G USB Dongle | DashBo...". The ASKEY logo is prominently displayed on the left. Below the logo, there are two tabs: "Basic" (selected) and "Expert". A sidebar on the left contains navigation options: "DashBoard", "Mobile", and "Logout". The main content area features a "Disconnect" button and a table of network statistics:

Internet Status	Connected
Session time:	00:00:38:51
Session data:	1.51MB

Below the table, there are two status indicators: "All OK Network Status" (with a smiley face icon) and "Ready" (with a padlock icon). The top right corner shows a language dropdown set to "EN", a signal strength indicator for 5G, and a battery level icon.



3.3 Check Network Status



Step1. Navigate to Basic → Mobile → Status.

Step2. See detailed information regarding Internet(v4), Internet(v6), 5G NR, LAN and System Information.

Step3. **LTE (4G):** Registration on 4G. **5G_SA or 5G_NSA:** Registration on 5G.

ASKEY

Internet Status: Connected [Disconnect]

Session time: 00:00:40:35

Session data: 1.66MB

EN [Settings]

5G [Signal]

Basic | Expert

Dashboard

Mobile

Status

4G/5G

Logout

Information

- Internet (v4)
- Internet (v6)
- 5G NR
 - Operator Name: UNICOM
 - SIM Status: Ready
 - Roaming Status: Home
 - Signal: [Signal]
 - TECH Status: 5G_SA (5G)
- LAN
 - MAC Address: 11:22:33:44:55:66
 - IP Address: 192.168.32.1
 - Subnet Mask: 255.255.255.0
 - DHCP Server: On



3.4 View Data Usage



Navigate to Expert → Mobile → Traffic Query.

The screenshot shows the ASKEY mobile management interface. At the top, the status bar indicates 'Internet Status: Connected', 'Session time: 00:00:41:38', and 'Session data: 1.70MB'. A 'Disconnect' button is visible. The interface has two tabs: 'Basic' and 'Expert', with 'Expert' selected. The left sidebar contains a menu with 'Mobile' selected, and 'Traffic Query' highlighted in red. The main content area is titled 'Manage Traffic' and contains two expandable sections: 'Monthly usage' and 'Current usage'. Both sections are highlighted with a red border. The 'Monthly usage' section shows: Upload (1.22MB), Download (1.72MB), and Total Traffic (2.94MB). The 'Current usage' section shows: Query Range (2022-07-19 10:31:57), Upload (1.22MB), Download (1.72MB), and Total Traffic (2.94MB). The bottom right corner shows a home icon and the number '16'.

Category	Item	Value
Monthly usage	Upload	1.22MB
	Download	1.72MB
	Total Traffic	2.94MB
Current usage	Query Range	2022-07-19 10:31:57
	Upload	1.22MB
	Download	1.72MB
	Total Traffic	2.94MB



3.5 Manage 4G/5G settings



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

Step2. View the 4G/5G Status, Data and Network Setting and PIN Protected setting here.

The screenshot shows the ASKEY user interface for managing 4G/5G settings. At the top, the ASKEY logo is on the left, and the Internet Status is 'Connected' with a 'Disconnect' button. Session time is 00:00:44:55 and session data is 1.92MB. The page has two tabs: 'Basic' and 'Expert', with 'Expert' selected. A sidebar on the left contains navigation options: Dashboard, Mobile (selected), Status, Traffic Query, 4G/5G (selected), Profile Management, LAN, IPv6, Network Configuration, SMS new, NAT Forwarding, and Diagnostic. The main content area is titled '4G/5G Settings' and contains several expandable sections: '4G/5G Status' (Internet Status: Connected, SIM Status: Ready), 'Data and Network Settings' (Airplane Mode: inactive, Data Roaming: inactive, Auto APN: active, PDN Type: IPv4+v6), and 'SIM'. A 'Disconnect' button is present next to the Internet Status.



3.5 Manage 4G/5G settings



Step1. Support enable or disable Airplane Mode and Data Roaming.

Step2. Click the save button that if configuration is configured.

The screenshot displays the ASKEY mobile management interface. At the top left is the ASKEY logo. To its right, the 'Internet Status' is 'Connected' with a 'Disconnect' button. Below this, 'Session time' is 00:00:25:13 and 'Session data' is 0.66MB. A yellow envelope icon is visible on the right. The left sidebar contains a menu with 'Basic' and 'Expert' tabs, and a list of navigation items including 'DashBoard', 'Mobile', 'Status', 'Traffic Query', '4G/5G', 'Profile Management', 'LAN', 'IPv6', 'Network Configuration', 'SMS new', 'NAT Forwarding', 'Diagnostic', 'Security', 'Device Settings', and 'Logout'. The main content area is titled '4G/5G Settings' and contains several sections: '4G/5G Status' with 'Internet Status' (Connected) and 'SIM Status' (Ready); 'Data and Network Settings' with 'Airplane Mode is inactive' and 'Data Roaming is inactive' (both with toggle switches), 'Auto APN is active' (with a toggle switch), and 'PDN Type' (set to IPv4+v6); and a 'SIM' section. At the bottom, there are 'Cancel' and 'Save' buttons. A red box highlights the 'Airplane Mode' and 'Data Roaming' settings, and another red box highlights the 'Save' button.

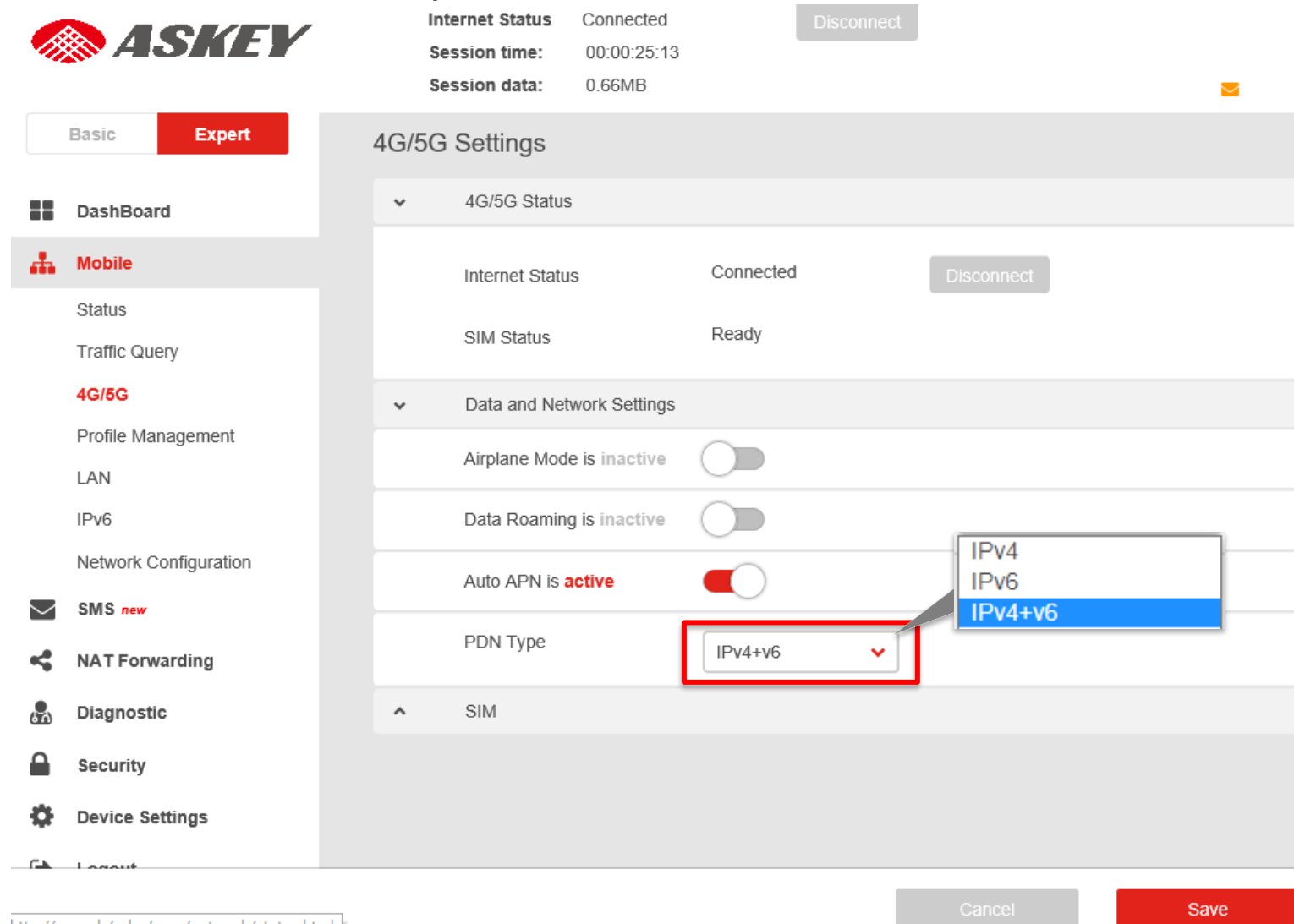


3.5 Manage 4G/5G settings



Step1. To Change PDN Type for IPv4, IPv6 and IPv4+IPv6.

Step2. The default PDN Type is IPv4+IPv6.



The screenshot shows the ASKEY mobile settings interface. At the top, the ASKEY logo is on the left, and the Internet Status is 'Connected' with a 'Disconnect' button. Below this, session time is '00:00:25:13' and session data is '0.66MB'. The main content area is titled '4G/5G Settings' and has two tabs: 'Basic' and 'Expert' (selected). The left sidebar contains a menu with items like 'Dashboard', 'Mobile', 'Status', 'Traffic Query', '4G/5G', 'Profile Management', 'LAN', 'IPv6', 'Network Configuration', 'SMS new', 'NAT Forwarding', 'Diagnostic', 'Security', 'Device Settings', and 'Logout'. The '4G/5G Settings' section is expanded to show '4G/5G Status' (Internet Status: Connected, SIM Status: Ready) and 'Data and Network Settings' (Airplane Mode, Data Roaming, Auto APN). The 'PDN Type' dropdown menu is open, showing options: IPv4, IPv6, and IPv4+v6 (highlighted in blue). A red box highlights the 'IPv4+v6' option in the dropdown. At the bottom, there are 'Cancel' and 'Save' buttons.



3.5 Manage 4G/5G settings



Step1. To Change APN (Access Point Name) Profile. Disable auto APN.

Step2. The APN list manually is at **Expert -> Mobile -> profile Management**.

ASKEY

Internet Status: Connected Disconnect
Session time: 00:00:25:13
Session data: 0.66MB

Basic **Expert**

Mobile

4G/5G Settings

4G/5G Status

Internet Status: Connected
SIM Status: Ready

Data and Network Settings

Airplane Mode is inactive

Data Roaming is inactive

Auto APN is active

PDN Type: IPv4+v6

SIM

Profile Name: APN_NAME_CUM
APN: 3gnet
Username:
Password:
PDN Type: IPv4+v6
Authentication Type: None

Cancel Save



3.5 Manage 4G/5G settings



Add new APN.

Step 1: Profile Management

No	Profile Name	APN Name	Username	Password	Authentication Type	PDN Type
1	APN_NAME_CUNET	3gnet			None	IPv4+v6

Note: The limited count of profile is 1 to 16.

Step 2: Add Profile

Profile Name: ProfileTest
APN Name: APNTest
Username:
Password:
Authentication Type: None
PDN Type: IPv4

Step 3: Profile Management

No	Profile Name	APN Name	Username	Password	Authentication Type	PDN Type	Operation
1	APN_NAME_CUNET	3gnet			None	IPv4+v6	
2	ProfileTest	APNTest			None	IPv4	

Note: The limited count of profile is 1 to 16.

Step 4: 4G/5G Settings

Profile Name: ProfileTest
APN: APN_NAME_CUNET
3gnet
Username:
Password:



3.5 Manage 4G/5G settings



Delete custom define APN.

Step1. Select other APN on Expert -> Mobile -> 4G/5G -> Profile Name.

Step2. Delete APN select on Expert -> Mobile -> Profile Management

Internet Status: Connected
Session time: 00:02:05:31
Session data: 7.71MB

Basic Expert

Auto APN is inactive

Profile Name: APN_NAME_CUN 1

APN: 3gnet

Username:

Password:

PDN Type: IPv4+v6

Authentication Type: None

Cancel Save

Note: If the APN is using that can't edit and delete.

Internet Status: Connected
Session time: 00:02:07:31
Session data: 7.78MB

Basic Expert

Profile Management 2

Profile Management

No	Profile Name	APN Name	Username	Password	Authentication Type	PDN Type	Operation
1	APN_NAME_CUNET	3gnet			None	IPv4+v6	
2	ProfileTest	APNTest			None	IPv4	

Cancel Save



3.5 Manage 4G/5G settings



SIM Management.

Step. Enable PIN Protected and Enter sim pin password then click the save button.

Note: 'Remember SIM PIN' is default selected that means this device reboot and sim card reset plug that it will auto unlock.

The screenshot shows the ASKEY mobile settings interface. At the top left is the ASKEY logo. To its right, the 'Internet Status' is 'Connected' with a 'Disconnect' button. Below this, 'Session time' is '00:04:00:00' and 'Session data' is '0.03MB'. On the far right, there's a language dropdown set to 'EN' and a signal strength indicator showing '5G'. A left sidebar contains navigation options: 'Basic' (selected), 'Expert', 'DashBoard', 'Mobile' (highlighted), 'Status', 'Traffic Query', '4G/5G', 'Profile Management', 'LAN', 'IPv6', 'Network Configuration', and 'SMS new'. The main content area shows several settings: 'Data Roaming is inactive' (toggle off), 'Auto APN is active' (toggle on), 'PDN Type' (dropdown set to 'IPv4+v6'), a collapsed 'SIM' section, 'PIN Protected Enable' (toggle on, highlighted with a red box), and 'PIN' (input field with dots, a 'Remember SIM PIN' checkbox which is checked and highlighted with a red box, and a 'Retry: 3' indicator). At the bottom, there are 'Cancel' and 'Save' buttons, with the 'Save' button highlighted by a red box. A home icon is visible in the bottom right corner.



3.6 Network Selection



Step1. Navigate to Expert → Mobile → Network Configuration.

Step2. The default network mode is **Auto**.

Step3. Drop-down box to select the network mode: **Auto, 4G, 5G(SA), 5G(NSA)**.

Step4. Click Apply to apply the setting.

ASKEY Internet Status Connected Disconnect
Session time: 00:04:27:41
Session data: 0.09MB

Network Configuration

Network Selection

Network Selection Auto Manual

Network Mode Auto (5G/4G) ▼ ⓘ

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

Search

Cancel Save



3.6 Network Selection



Step1. Select Manual to change the setting.

Step2. Click Search to start search network.

Step3. Select a valid network from the scan results and click **SAVE**.

ASKEY Internet Status: Connected [Disconnect] Session time: 00:04:25:32 Session data: 0.07MB

Mobile

- Status
- Traffic Query
- 4G/5G
- Profile Management
- LAN
- IPv6
- Network Configuration**
- SMS *new*
- NAT Forwarding
- Diagnostic
- Security

Network Configuration

Network Selection

Network Selection: Auto Manual

Network PLMNID: mcc: 0 mnc: 0

Network Mode: Auto (5G/4G) [i]

[Search]

Network name		
UNICOM	4G/5G	Available <input checked="" type="radio"/>
CT	4G/5G	Available <input type="radio"/>

[Cancel] [Save]



3.7 Manage LAN and IPv6 Settings



Step1. Navigate to Expert → Mobile → LAN

Step2. Change LAN IP Address and Subnet Mask at Basic.

Step3. Change DHCP Service Configuration at Advanced.

The screenshot shows the ASKEY mobile management interface. At the top, the ASKEY logo is on the left, and the Internet Status is 'Connected' with a 'Disconnect' button. Below this, session time is '00:04:34:41' and session data is '0.14MB'. The main navigation menu on the left includes Dashboard, Mobile, LAN, IPv6, Network Configuration, SMS, NAT Forwarding, Diagnostic, Security, and Device Settings. The 'Mobile' section is expanded, and the 'LAN' sub-section is selected. The 'Manage LAN Settings' page is shown with two tabs: 'Basic' and 'Advanced'. The 'Basic' tab is active, showing fields for MAC Address (11:22:33:44:55:66), IP Address (192.168.32.1), and Subnet Mask (255.255.255.0). The 'Advanced' tab is also visible, showing a toggle for 'DHCP is active' (currently on), and fields for IP Address Pool (192.168.32.100 - 150), Address Lease Time (24 Hours), Primary DNS, and Secondary DNS. At the bottom, there are 'Cancel' and 'Save' buttons.

Note: If LAN IP Address is changed that browser must be use correct IP Address to access when it use <http://Subnet IP>.



3.7 Manage LAN and IPv6 Settings



Step1. Navigate to Expert → Mobile → IPv6

Step2. Change IPv6 Configuration and then click the save button.

The screenshot displays the ASKEY network management dashboard. At the top, the ASKEY logo is on the left, and the Internet Status is 'Connected' with a 'Disconnect' button. Below this, session time is '00:04:35:17' and session data is '0.15MB'. The main navigation menu on the left includes 'DashBoard', 'Mobile' (selected), 'Status', 'Traffic Query', '4G/5G', 'Profile Management', 'LAN', 'IPv6' (highlighted), 'Network Configuration', 'SMS new', 'NAT Forwarding', 'Diagnostic', 'Security', 'Device Settings', and 'Logout'. The 'Manage IPv6 Settings' panel is open, showing 'IPv6 Settings' with a toggle for 'IPv6 is active' (turned on). Below this is 'WAN DHCP Settings' with 'DNS Address' set to 'Get dynamically from ISP', 'Primary DNS' as '2408:8888:0:8888::8', and 'Secondary DNS' as '2408:8899:0:8899::8'. The 'Lan Settings' section shows 'Prefix Delegation is active' (turned on), 'IPv6 Address Type' set to 'SLAAC+DHCPv6' (selected), and 'Life Time' set to '600 minutes'. At the bottom, there are 'Cancel' and 'Save' buttons.



3.8 SMS- Edit new message



Step1. Navigate to Expert → SMS → Inbox/Drafts/Outbox → New Message.

Step2. Enter phone number & Content. Click **Save to Drafts** or **Send**.

ASKEY

Internet Status: Connected Disconnect

Session time: 00:05:50:04

Session data: 0.63MB

Basic **Expert**

Dashboard

Mobile

SMS

Inbox

Drafts

Outbox

NAT Forwarding

Diagnostic

Security

SMS

New Message

Phone Number: 18603011973

Content: hello:)

14/1530

Save to Drafts Send



3.8 SMS- Inbox



Step1. Navigate to Expert → SMS → Inbox.

Step2. Click the new message and view this. IF need to reply then edit the text box and click the Send button.

ASKEY Internet status: Connected Disconnect
Session time: 00:05:26:40
Session data: 0.51MB

Basic **Expert**

SMS

Inbox

SMS Inbox : 1 (Capacity: 3/500) New Message Delete

State	Phone	Content	Time	
<input checked="" type="checkbox"/>	18603011973	Hello:)	19/07/2022 15:16:00	<input type="checkbox"/>

< > 1-1 of 1

Session data: 0.52MB

Basic **Expert**

SMS

Inbox

SMS Inbox : 2 (Capacity: 6/500) New Message Delete

State	Phone	Content	Time	
<input type="checkbox"/>	18603011973	hi:)	19/07/2022 15:18:44	<input type="checkbox"/>
<input type="checkbox"/>	18603011973	Hello:)	19/07/2022 15:16:00	<input type="checkbox"/>

< > 1-2 of 2

SMS

Inbox

From: 18603011973

Hello:)

Reply: 18603011973

hi:)

4/1530

Cancel Send

Dashboard
Mobile
SMS
Inbox
Drafts
Outbox
NAT Forwarding
Diagnostic
Device Settings
Logout 5G

Dashboard
Mobile
SMS
Inbox
Drafts
Outbox
NAT Forwarding
Diagnostic



3.8 SMS- Drafts



Step1. Navigate to Expert → SMS → Draft.

Step2. Click and Edit.

The interface shows the 'SMS' section in 'Expert' mode. The left sidebar contains navigation options: Dashboard, Mobile, SMS (selected), NAT Forwarding, Diagnostic, Security, and Device Settings. The main content area is titled 'SMS' and has a 'Drafts' dropdown menu highlighted with a red box containing the number '1'. Below this, it shows 'SMS Drafts : 1' with 'New Message' and 'Delete' buttons. A table lists the draft:

Phone	Content	Time	
18603011973	Hello.)	19/07/2022 15:15:54	<input type="checkbox"/>

Navigation arrows and '1-1 of 1' are shown below the table. The second screenshot shows the 'Edit Draft' form with the 'Drafts' dropdown highlighted with a red box containing the number '2'. The form includes a 'To' field with '18603011973', an 'Edited on' timestamp of '19/07/2022 15:15:54', and a text input area containing 'Hello.)' and 'Edit text to here.'. A character count '27/1530' is visible at the bottom right of the text area. At the bottom of the form are 'Cancel', 'Save', and 'Send' buttons.



3.8 SMS- Sent Items



Navigate to Expert → SMS → Outbox.

Basic **Expert**

- Dashboard
- Mobile
- SMS**
 - Inbox
 - Drafts
 - Outbox**
- NAT Forwarding
- Diagnostic
- Security

SMS

Outbox

SMS Outbox : 3 (Capacity: 5/500) New Message Delete

State	Phone	Content	Time	
	123456789	For show send failed state.	19/07/2022 15:48:25	<input type="checkbox"/>
	18603011973	hi:)	19/07/2022 15:18:43	<input type="checkbox"/>
	18603011973	Hello:)	19/07/2022 15:15:59	<input type="checkbox"/>

< > 1-3 of 3



3.9 NAT Forwarding



Step1. Navigate to Expert → NAT Forwarding. **This feature applies only to route mode.**

Step2. The DDNS, DNZ UPnP ALG and Virtual are Servers setting here.

The screenshots show the following settings:

- Manage DDNS Settings:** DDNS is inactive.
- Manage DMZ Settings:** IPv4 DMZ is active. Client: [Nicky_Li] 36:b0:a8:ef:83. DMZ Host IPv4 Address: 192.168.32.150. IPv6 DMZ is active.
- Manage ALG Settings:** PPTP Pass-through is active, L2TP Pass-through is active, IPSec Pass-through is active, FTP ALG is active, TFTP ALG is active, RTSP ALG is active, SIP ALG is active.
- Manage UPnP Settings:** UPnP is inactive.
- Internet Status:** Connected. Session time: 00:07:03:28. Session data: 1.08MB.
- Sidebar:** NAT Forwarding is selected. Sub-items include DDNS (highlighted), DMZ, UPnP, ALG, and Virtual Servers.



3.9 NAT Forwarding



Step1. Navigate to Basic (or Expert) → Network → NAT Forwarding

Step2. Manage Port forwarding Feature, **This feature applies only to route mode.**



Internet Status Connected
Session time: 00:07:05:01
Session data: 1.10MB

Disconnect

EN ▾

5G

Basic

Expert

Dashboard

Mobile

SMS

NAT Forwarding

DDNS

DMZ

UPnP

ALG

Virtual Servers

Diagnostic

Security

Virtual Servers

VIRTUAL SERVERS

ADD NEW

DELETE ALL

No data



3.8 NAT Forwarding



Step1. Add a NAT forwarding entry. **This feature applies only to route mode.**

Step2. Enter parameter, Click **Apply** to apply the setting.

ASKEY Internet Status: Connected Disconnect EN ⋮
Session time: 00:07:05:01
Session data: 1.10MB 5G 📶

Basic **Expert**

- Dashboard
- Mobile
- SMS
- NAT Forwarding**
- DDNS
- DMZ
- UPnP
- ALG
- Virtual Servers**
- Diagnostic
- Security

Virtual Servers

VIRTUAL SERVERS

ADD NEW

No data

Add New

- Enable This Entry
- Service Type: list1
- External Port Start: 5001
- External Port End: 5009
- Client: [Nicky_Li] 36:b0:a8:ef:83:ac, 19
- Internal IP: 192.168.32.150
- Internal Port: 5001
- Protocol: All TCP UDP

APPLY CANCEL



3.9 NAT Forwarding



Step1. Delete one or all NAT forwarding entry. **This feature applies only to route mode.**

ASKEY internet status Connected Disconnect EN ▾
Session time: 00:07:09:58
Session data: 1.15MB 4G

Basic Expert

- Dashboard
- Mobile
- SMS
- NAT Forwarding**
- DDNS
- DMZ
- UPnP
- ALG
- Virtual Servers

Virtual Servers

VIRTUAL SERVERS

ADD NEW DELETE ALL

list1	External Port: 5001-5009 Internal IP: 192.168.32.150 Internal Port: 5001 Protocol: ALL	REMOVE EDIT
list2	External Port: 80-80 Internal IP: 192.168.32.150 Internal Port: 80 Protocol: ALL	REMOVE EDIT



3.9 NAT Forwarding



Step1. Edit a NAT forwarding entry. **This feature applies only to route mode.**

Step2. Modify parameter, Click **Apply** to apply the setting.

ASKEY

Internet Status: Connected Disconnect

Session time: 00:07:09:58

Session data: 1.15MB

EN ▾

4G

Basic **Expert**

DashBoard

Mobile

SMS

NAT Forwarding

DDNS

DMZ

UPnP

ALG

Virtual Servers

VIRTUAL SERVERS

ADD NEW

DELETE ALL

Virtual Server Name	External Port	Internal IP	Internal Port	Protocol	Actions
list1	5001-5009	192.168.32.150	5001	ALL	REMOVE EDIT
list2	80-80	192.168.32.150	80	ALL	REMOVE EDIT

Edit

Enable This Entry

Service Type: list1

External Port Start: 6001

External Port End: 6009

Client: [Nicky_Li] 36:b0:a8:ef:83:ac, 19 ▾

Internal IP: 192.168.32.150

Internal Port: 5001

Protocol: All TCP UDP



3.10 Diagnostic



Step1. Navigate to Expert → Diagnostic.

Step2. Choose ping method with IPv4 or IPv6.

Step3. Test Ping or Traceroute IP Address or Domain name.

Basic **Expert**

Manage Diagnostic Setting

▼ Ping & Traceroute

Diagnostic Tool Ping Traceroute

Ping Method IPv4 IPv6

IP Address/Domain Name

Results

```
PING 8.8.8.8 (8.8.8.8): 56 data bytes
64 bytes from 8.8.8.8: seq=0 ttl=249 time=88.279 ms
64 bytes from 8.8.8.8: seq=1 ttl=249 time=47.298 ms
64 bytes from 8.8.8.8: seq=2 ttl=249 time=160.658 ms

--- 8.8.8.8 ping statistics ---
3 packets transmitted, 3 packets received, 0% packet loss
round-trip min/avg/max = 47.298/98.745/160.658 ms
```

Basic **Expert**

Manage Diagnostic Setting

▼ Ping & Traceroute

Diagnostic Tool Ping Traceroute

Ping Method IPv4 IPv6

IP Address/Domain Name

Results

```
8 * 2408:8000:2:78b:: (2408:8000:2:78b::) 32.222 ms
9 2408:8000:2:6c4:: (2408:8000:2:6c4::) 38.122 ms
2408:8000:2:8060::1 (2408:8000:2:8060::1) 22.813 ms
10 2001:4860:1:1::23ca (2001:4860:1:1::23ca) 49.146 ms
23.436 ms
11 2001:4860:0:e06::1 (2001:4860:0:e06::1) 28.891 ms
2001:4860::12:0:994f (2001:4860::12:0:994f) 25.557 ms
12 2001:4860:0:1::6b81 (2001:4860:0:1::6b81) 25.150 ms
2001:4860:0:1::7cd (2001:4860:0:1::7cd) 34.671 ms
13 dns.google (2001:4860:4860::8888) 39.079 ms
20.867 ms
```



3.11 Security



Step1. Navigate to Expert → Security. **This feature applies only to route mode.**

Step2. To enable or disable Firewall.

ASKEY

Internet Status: Connected Disconnect
Session time: 00:07:59:49
Session data: 1.44MB

Basic **Expert**

Dashboard
Mobile
SMS
NAT Forwarding
Diagnostic
Security
Device Settings
Logout

Manage Firewall Settings

Firewall

- SPI Firewall is **active**
- DoS Protection is **active**
- WAN Block Web is **active**
- WAN Block Ping is **active**
- LAN Block Ping is **inactive**

Cancel **Save**



3.12 Device Settings - Date & Time



Step1. Navigate to Expert → Device Settings → Data & Time.

Step2. Configure the **time zone** and **NTP Server** and **Daylight Saving Time**.

Note. Daylight saving time regional time difference of one hour can enable daylight saving time.

ASKEY

Internet Status: Connected Disconnect
Session time: 00:08:12:10
Session data: 1.49MB

Basic **Expert**

Device Settings

- Dashboard
- Mobile
- SMS
- NAT Forwarding
- Diagnostic
- Security
- Device Settings**
 - Date & Time**
 - Backup & Restore
 - Firmware Update
 - System Log

Date & Time Settings

Settings

Mode: Automatically SNTP

Current Time: Jul 19 2022 18:02:16

Time Zone: China, Hong Kong, Singapore, Taiwan, Russia Time

NTP Server 1: 0.openwrt.pool.ntp.org

NTP Server 2: 1.openwrt.pool.ntp.org

NTP Server 3: 2.openwrt.pool.ntp.org

Enable Daylight Saving Time:

Time Zone Dropdown List:

- Greenwich Mean Time
- Central Time
- Eastern Time
- Mountain Time
- Pacific Time
- Hawaii Time
- Alaska Time
- Atlantic Time
- Eastern European Time
- Central European Time
- Western European Time
- China, Hong Kong, Singapore, Taiwan, Russia Time**
- Japan, Korea Time



3.12 Device Settings - Backup / Restore



Step1. Navigate to Expert → Device Settings → Backup/Restore.

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

Step3. Click **Select file** to restore settings.

Step4. Click **Restore** to display the confirmation dialog box.

Step5. Click **Yes** to restart Dongle and apply the backup.

The screenshot displays the ASKEY web interface. At the top left is the ASKEY logo. To its right, the Internet Status is 'Connected' with a 'Disconnect' button. Below this, the Session time is '00:08:44:40' and Session data is '0.07MB'. The main navigation menu on the left includes Dashboard, Mobile, SMS, NAT Forwarding, Diagnostic, Security, and Device Settings. The 'Device Settings' menu is expanded, showing 'Backup & Restore' as the selected option, marked with a red '1'. The 'Backup & Restore Settings' panel is open, showing three sections: 'Backup' (marked with a red '2'), 'Restore' (marked with a red '4'), and 'Factory Reset'. In the 'Backup' section, the 'Backup' and 'Download' buttons are highlighted with a red box. In the 'Restore' section, the 'Select file' button is highlighted with a red box and labeled with a red '3', and the 'Restore' button is highlighted with a red box. A confirmation dialog box is open on the right, titled 'Information', with a red header. It contains the text: 'Are you sure you want to use this file to restore your device settings? If you press yes, the update will begin.' Below this is a 'Warning' section: 'During the update period, please do not disconnect the network or turn off the device power, it may cause the device to be unable to use.' At the bottom of the dialog, the 'Yes' button is highlighted with a red box and labeled with a red '5', and the 'Cancel' button is also visible.



3.12 Device Settings - Backup / Restore



Step1. Click **Factory Restore** to display the confirmation dialog box.

Step2. Click **Yes** to load default setting. The Dongle will restart automatically.



Internet Status Connected Disconnect
Session time: 00:08:44:40
Session data: 0.07MB

Basic **Expert**

- Dashboard
- Mobile
- SMS
- NAT Forwarding
- Diagnostic
- Security
- Device Settings**
 - Date & Time
 - Backup & Restore**
 - Firmware Update
 - System Log

Backup & Restore Settings

Backup

Backup your current settings

Backup

Download

Restore

Restore your settings from a file

Select file

XAPConfig.zip

Restore

Factory Reset

Reset your device to factory settings

Factory Reset

Reboot device

Reboot

Information

Are you sure you want to restore the factory default value? If you press yes, it will start updating.

Warning
During the update period, please do not disconnect the network or turn off the device power, it may cause **the device to be unable to use.**



3.12 Device Settings - Firmware Upgrade



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

Step2. Open file "FOTA_NDQ2300_STD_VX.X.X_XXXXXX.X.img" to update.

Step3. Click **Start firmware update**. Then the Dongle updated to new firmware version.



Internet status: Disconnected
Session time: 00:00:02:21
Session data: 0.00MB

Connect

Basic

Expert

DashBoard

Mobile

SMS

NAT Forwarding

Diagnostic

Security

Device Settings

Date & Time

Backup & Restore

Firmware Update

Firmware Update Settings

Manual Update

Firmware version : NDQ2300_STD_V2.1.5.0_220525.

Server Path

Update from file

Select file

Start firmware update

Information

Select Yes to proceed the upgrade.

Warning

Do not power off the device until the update is complete. Device will restart after a new firmware is installed. .

Yes Cancel



3.12 Device Settings - Firmware Upgrade



Step1. Click **Check for new versions** to wait for version detection results.

Step2. Having the updated firmware version, click **Yes** to download new firmware.

The screenshot shows the ASKEY device settings interface. At the top left is the ASKEY logo. To the right, it displays 'Internet Status: Disconnected' with a 'Connect' button, 'Session time: 00:00:10:00', and 'Session data: 0.00MB'. Below this is a language dropdown set to 'EN'. The left sidebar contains navigation options: 'Basic' and 'Expert' (selected), 'DashBoard', 'Mobile', 'SMS', 'NAT Forwarding', 'Diagnostic', 'Security', and 'Device Settings' (selected). Under 'Device Settings', there are options for 'Date & Time', 'Backup & Restore', and 'Firmware Update'. The main content area is titled 'Firmware Update Settings' and is divided into two sections: 'Manual Update' and 'Automatic Update'. In the 'Manual Update' section, the 'Firmware version' is 'NDQ2300_STD_V2.1.5.0_220525.', the 'Server Path' is 'https://avus46.askeycloudapi.com', and there is a 'Check for update' button highlighted with a red box. Below this, there is an 'Update from file' section with a 'Select file' button and a file named 'FOTA_NDQ2300_STD_V2.1.4.0_220525.1_user_a.img', and a 'Start firmware update' button. In the 'Automatic Update' section, it shows 'Automatic Update is inactive' with a toggle switch. An 'Information' dialog box is open, displaying the message 'New version (2.0) is discovered! Do you want to update?' with 'Yes' and 'Close' buttons. The 'Yes' button is highlighted with a red box.



3.12 Device Settings - Firmware Upgrade



Step1. Please wait for the new firmware download to complete then into the update page, meanwhile the LED#1 is red/blue blinking back and forth.

Step2. When the device upgraded finish and the browser of web jump to the login page.

In the update, please wait patiently.

During the update period, please do not disconnect the network or turn off the device power, it may cause the device to be unable to use



3.12 Device Settings - System Log



Step1. Navigate to Expert → Device Settings → System Log.

Step2. Views Logs or Delete all logs.

ASKEY

Internet Status: Connected Disconnect

Session time: 00:00:15:38

Session data: 0.09MB

Basic **Expert**

- DashBoard
- Mobile
- SMS
- NAT Forwarding
- Diagnostic
- Security
- Device Settings**
 - Date & Time
 - Backup & Restore
 - Firmware Update
 - System Log**
 - Device Mode
 - Password

Manage System Log Settings

SETTINGS

Interface: All Log Filter Show All Log

DELETE ALL

SYSTEM
Date: 1980-01-06 Time: 00:01:20
Description: admin Login Success 192.168.32.150
WAN
Date: 1980-01-06 Time: 08:09:22
Description: LTE IPv4 10.163.75.225 Connected
WAN
Date: 1980-01-06 Time: 08:09:25
Description: LTE IPv6 2408:8456:3040:c859:91aa:223:3e96:e14c C...
WAN
Date: 1980-01-06 Time: 08:09:25
Description: LTE IPv4 Disconnected



3.12 Device Settings - Device Mode



Note1. Support switching network type for IP pass through mode or Router mode.

When IP pass through mode is configured, the IP allocated by network will be assigned to HOST.

When Router mode is configured, local IP 192.168.32.x will be assigned to HOST.

Note2. The network type is the Router mode by default.

Note3. When device set to IP pass through mode, NAT Forwarding and Security functions are hidden and the gateway address is not 192.168.32.1. Please check the new gateway address or use the domain address 'http://my.usb' to access the device's web.

ASKEY

Internet Status: Connected Disconnect

Session time: 00:00:43:16

Session data: 0.48MB

Basic **Expert**

DashBoard

Mobile

SMS

Diagnostic

Device Settings

Date & Time

Backup & Restore

Firmware Update

System Log

Device Mode

Password

Logout

Device Mode Switch

Settings

Mode IP passthrough mode Router mode

Cancel Save

http://10.2.79.68/udm/user/router/date_time.html



3.12 Device Settings - Password



Change the login password for web access.

The screenshot displays the ASKEY web interface. At the top left is the ASKEY logo. To its right, the 'Internet Status' is 'Connected', 'Session time' is '00:00:44:19', and 'Session data' is '0.50MB'. A 'Disconnect' button is located to the right of these status indicators. Below the status bar, there are two tabs: 'Basic' and 'Expert', with 'Expert' being the active tab. On the left side, there is a navigation menu with icons and labels: 'DashBoard', 'Mobile', 'SMS', 'Diagnostic', 'Device Settings' (highlighted in red), 'Date & Time', 'Backup & Restore', 'Firmware Update', 'System Log', 'Device Mode', 'Password', and 'Logout'. The main content area is titled 'Manage Password' and contains a 'Settings' section. This section has three password input fields: 'Current password', 'New password', and 'Confirm new password'. Each field contains several dots representing masked characters. To the right of the 'Current password' field is a checkbox labeled 'Show Password'. A red rectangular box highlights the three password input fields. At the bottom of the page, there are two buttons: 'Cancel' and 'Save'. The 'Save' button is highlighted with a red rectangular box.





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