

Quick Start **Guide**

4G WiFi M2M Router
NTC-140W Series













Quick start guide

This quick start guide is designed to get you up and running quickly with your new NTC-140W Series router. More advanced set up instructions are provided in the user guide which can be opened by clicking on the **Help** tab on the Web-UI, or can be downloaded from

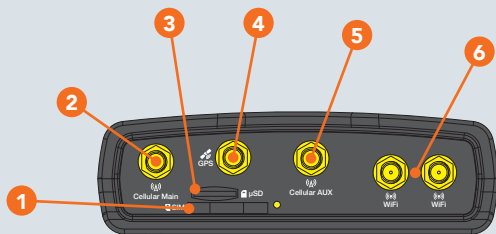
<http://www.netcommwireless.com/product/m2m/ntc-140w>

Package contents

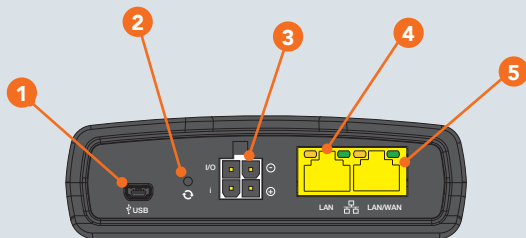
All NTC-140W packages include:

-  1 x NetComm Wireless NTC-140W Series router
-  2 x Cellular antennas
-  2 x WiFi antennas
-  1 x 1.5m Black Ethernet cable
-  1 x DIN rail mounting bracket
-  1 x Quick start guide
-  1 x Power supply cable with fitted Molex connector
-  1 x WiFi security card

Device overview





























ITEM		DESCRIPTION
1	SIM card slot	Insert SIM card here.
2	Cellular Main	SMA female connector for Cellular antennas.
3	MicroSD card slot	Insert a MicroSD card here to provide additional storage (Optional).
4	GPS antenna connector	SMA female connector for GPS antenna.
5	Cellular AUX	SMA female connector for Cellular antennas.
6	WiFi antenna connectors	Reverse polarity SMA female connectors for WiFi antennas.



ITEM	DESCRIPTION
1	Micro USB 2.0 OTG port Provides connectivity for optional external storage or a USB Ethernet dongle. Supplies up to 0.5A to connected device.
2	Reset button Press and hold for less than 5 seconds to reboot to normal mode. The LEDs are green and extinguish in sequence to indicate that the router will reboot normally if the button is released during this period. Press and hold for 5 to 15 seconds to reboot to recovery mode. The LEDs are amber and extinguish in sequence to indicate that the router will reboot to recovery mode if the button is released during this period. Press and hold for 15 to 20 seconds to reset the router to factory default settings. The LEDs are red and extinguish in sequence to indicate that the router will reset to factory default settings if the button is released during this period.
3	Molex Mini-Fit™ receptacle Connect the provided power supply here. The Molex receptacle provides: <ul style="list-style-type: none"> • Ground (–) • Power (+) • I/O terminal • (I) ignition input detection terminal.
4	LAN port LAN port for wired Ethernet clients.
5	LAN/WAN port LAN or WAN port for wired Ethernet clients or to bridge another network connection.

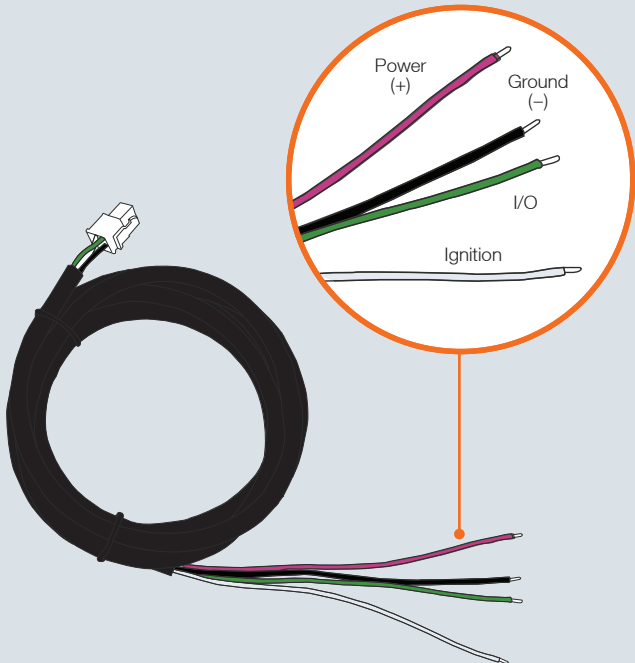
Overview of LED indicators

LED ICON	NAME	COLOR	STATE	DESCRIPTION
	Power		Off	Power off
			Double flash	Powering up
			On	Power on
			On	Power on in recovery mode
			Slow flashing	Hardware error, such as SIM not inserted.
	WiFi		Off	Radio Off
			On	WiFi Access Point is enabled
			Blinking ¹	Traffic via WiFi
			On	WiFi Client mode is enabled, WiFi Access Point mode is disabled
			Blinking ¹	Traffic via WiFi in client mode
	Network		Off	Radio Off
			On	Connected via WWAN
			Blinking ¹	Traffic via WWAN
			Slow flashing	Connecting PDP
			On	Registered on Network
			Slow flashing	Registering network
			Slow flashing	SIM PIN locked
			Fast flashing	SIM PUK locked
			On	Can't connect
	Signal strength		On	LTE signal
			On	WCDMA signal
			On	GSM signal

¹ The term "blinking" means that the LED may pulse, with the intervals that the LED is on and off not being equal. The term "flashing" means that the LED turns on and off at equal intervals.

Power supply cable

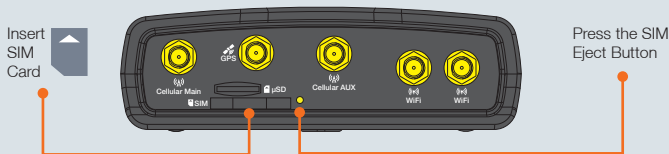
The included power supply cable has colour-coded breakout wires which can be terminated to provide power, ignition detection and input/output functionality. The picture below outlines the polarity and functions of the wires.



Installing your device

Step 1: Insert the SIM card

Using a paper clip, press the SIM Eject button to eject the SIM card tray. Place the SIM card in the tray and then insert the loaded tray into the SIM slot with the gold side facing up, as shown below.



Step 2: Attach the antennas

The NTC-140W Series router is shipped with caps on the Cellular, WiFi and GPS antenna sockets. To attach the supplied antennas, first remove the socket caps from the antenna sockets then screw the antennas onto the sockets by turning them in a clockwise direction. Please refer to the [Device overview](#) section for the antenna socket layout. If you have purchased a GPS antenna, remove the socket cap from the GPS antenna socket and attach the antenna to the socket in the same manner.



Step 3: Connect the power and Ethernet cables

Connect the included power supply cable to the Molex Mini-Fit™ receptacle and then connect the green and white breakout wires to the ignition and I/O connections as required. Connect the Power (red) and the Ground (black) wires to your power source. The power LED on the router lights up when a power source is connected.

Attach the supplied Black Ethernet cable to the LAN Ethernet port on your router and the other end to your computer.

Step 4: Access the router's web interface

In your web browser's address bar enter **http://192.168.1.1/** or **http://my.router/**. The login page is displayed.

There are two system management accounts (Root Manager and Admin) with different management capabilities.

Root Manager account

Grants full privileges such as firmware upgrades, device configuration, backup and restore, and reset to factory default settings. To access the Root Manager account, use these login details.

http://192.168.1.1 or http://my.router	
Username	root
Password	admin

Admin account

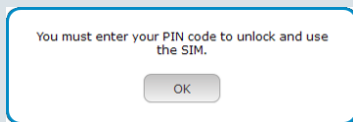
Allows updates to general settings. To access the Admin account, use these login details.

http://192.168.1.1 or http://my.router	
Username	admin
Password	admin

Enter the username and password for the admin or root manager account and click **Log in**. The Status page is displayed.

Step 5: Unlock the SIM card

If the inserted SIM card is PIN locked, a pop-up window is displayed informing you that you must unlock the SIM before use.



Click the **OK** button. The SIM Security page is displayed.

The "PIN settings" page has a light grey background. At the top left, the title "PIN settings" is in orange. Below it, a red error message with an exclamation mark icon says "SIM is PIN locked - remaining attempt(s) 3". There are two input fields: "Current PIN" and "Confirm current PIN". Below these is a checkbox labeled "Remember PIN" which is currently unchecked. At the bottom is a blue "Save" button.


In the Current PIN field, enter the SIM PIN and then enter it again in the **Confirm current PIN** field. If you do not want to enter the PIN code each time the SIM is inserted, select the **Remember PIN** option. Click the **Save** button. After a moment, the router displays "Success! The SIM unlock was successful".

Step 6: Connect to the Internet

If the SIM Status is OK, the NTC-140W Series router automatically attempts to connect to the Internet by detecting the correct APN and connection details.

If automatic configuration was unsuccessful, you must manually enter the connection details.

To manually configure the connection profile:

1. From the top menu bar, select the **Networking** option.
2. Next to Profile1, click the  button. The Data connection profile settings screen is displayed.
3. Ensure that the **Automatic APN selection** toggle key is set to the OFF position.

Automatic APN selection ☐ ON ☒ OFF

4. In the APN field, enter the APN name that your carrier requires for mobile broadband connection. If required, enter the **Username** and **Password** in the Username and Password fields. Click the **Save** button.

The connection profile is now configured.

Verifying the connection status

Click on the **Status** menu item from the top menu bar. The Status page is displayed. The mobile broadband connection is established successfully if the **Status** field in the **WWAN connection status** section displays **Connected**.

WWAN connection status

Profile name
Profile1

Status
Connected

Default profile
Yes

WWAN IP
10.100.108.132

DNS server
10.4.81.103
10.4.182.20

APN
XXXXXXXXXX

Connection uptime
00:11:27

Show data use

Wireless LAN connection

The NTC-140W Series router can operate as both an access point and a WiFi client simultaneously, if required. By default the NTC-140W Series router has the Wireless LAN enabled and operates as an access point only.

Connecting a wireless client to the NTC-140W access point

The WiFi Network Name (SSID) and WiFi Security Key are unique for your device and are printed on the back of your NTC-140W Series router. The credentials are also printed on the Wireless Security Card.

Follow these steps to connect your client device to the Internet over the wireless network:



1. Turn on the wireless radio on your client device.
2. Open the wireless network manager on your client device and connect to the Wireless Network Name (SSID) printed on the Wireless security card.
3. When prompted for your wireless security settings, enter the Wireless Security Key. Wait a few seconds for the connection to be established.



Connecting the NTC-140W Series router to another access point

To use your NTC-140W router as a client, you must first change the wireless mode on the web user interface. To enable the wireless client:

1. From the top menu bar, select the **Networking** option.
2. Select **Wireless settings** on the left, then select the **Client configuration** menu item.
3. Click the **Client radio on/off** toggle key so that it is in the **ON** position then click the **Save** button.
4. On the **Client configuration** page, click the **Scan** button to scan for remote access points to connect to, then click the **Connect** link corresponding to the desired network. The wireless network's details are copied to the Client configuration fields.
5. If the network requires a password, enter the password in the **WPA pre-shared key** field, then click the **Save** button. The wireless client connects to the access point. You can confirm that it is connected by viewing the **WLAN client connection status** section of the Status page. For further detail on using the wireless client, refer to the product user guide.

Step 7: Mount the router

Mount your router in a suitable location using the options listed in the [Mounting options](#) section.

When selecting a location to mount the NTC-140W Series router, keep in mind that it features high performance antennas designed to provide optimum signal strength in a wide range of environments. You can check the signal strength by observing the colour and number of LEDs illuminated on the front of the device. For a precise reading of the signal strength, refer to the Status page on the web user interface. If you find the signal strength is weak, try moving the router to a different place, mounting it differently or changing the orientation of the antennas.

The signal strength LEDs update within a few seconds with a rolling average signal strength reading. When selecting a location for the router, please allow up to 20 seconds for the signal strength LEDs to update before repositioning.

Congratulations - your NTC-140W Series Router is now ready to use!

Mounting your device

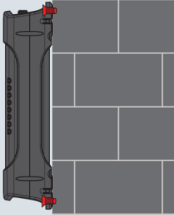
Depending on your individual setup, you may need certain components to mount your device correctly, such as additional fasteners and screwdrivers for specific wall or rail mounting.

Mounting options

The NetComm Wireless NTC-140W Series router can be installed quickly and easily in a variety of locations.

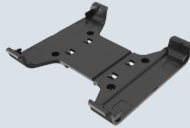
MOUNT TYPE	DESCRIPTION	BENEFITS
Wall mount	Flat against the wall	Slimline form factor, close to wall
Wall mount via DIN rail mounting bracket	DIN Rail mounting bracket is secured to the wall and the router is attached to the mounting bracket.	Easy to remove
DIN rail mount	DIN Rail mounting bracket is slid or snapped on to the DIN Rail and the router is attached to the mounting bracket.	Simplicity, easy to remove.
Pole mount via DIN rail mounting bracket	DIN Rail mounting bracket is secured to a pole or other fixed object using cable ties and the router is attached to the mounting bracket.	Easy to remove, flexibility of orientation, variety of objects to which the router may be mounted.
Desk mount	Stand on a desk	Simplicity, versatility

Wall mount

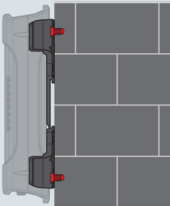


DIN Rail mounting bracket

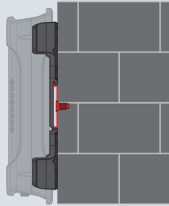
V Bend allows you to snap the DIN bracket onto the middle of a DIN rail rather than sliding it onto the end.



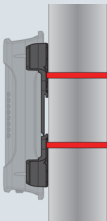
Wall Mounted via DIN Rail Bracket



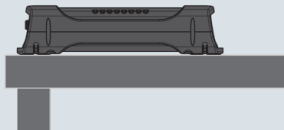
DIN Rail mount



Pole mount using DIN Rail bracket



Desk mount



Configuring multiple devices

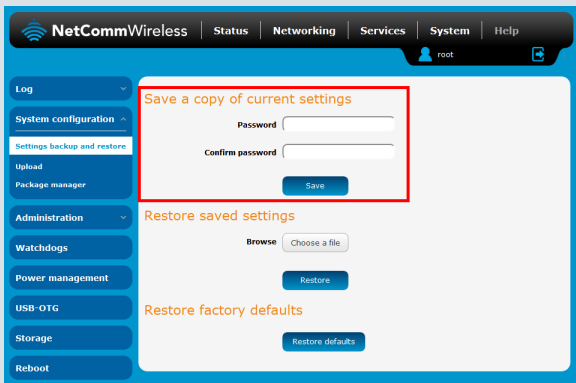
To apply your advanced configuration settings to more than one NTC-140W Series router, follow these simple steps.

Step 1

Back up your router's configuration

Log in to the web configuration interface, click on the **System** menu, select **System configuration** and click on **Settings backup and restore**.

If you want to password protect your backup configuration files, enter your password in the fields under **Save a copy of current settings** and click on **Save**. If you don't want to password protect your files, just click on **Save**. The router will then prompt you to select a location to save the settings file.



The screenshot shows the NetCommWireless web configuration interface. The top navigation bar includes the logo and links for Status, Networking, Services, System, and Help. The user is logged in as 'root'. The left sidebar contains a menu with options: Log, System configuration (expanded), Settings backup and restore (selected), Upload, Package manager, Administration (expanded), Watchdogs, Power management, USB-OTG, Storage, and Reboot. The main content area is titled 'Settings backup and restore' and contains three sections: 1. 'Save a copy of current settings' (highlighted with a red box) with fields for Password and Confirm password, and a Save button. 2. 'Restore saved settings' with a Browse button (Choose a file) and a Restore button. 3. 'Restore factory defaults' with a Restore defaults button.

Step 2

Restore your backup configuration

In the web configuration interface click on the **System** menu, select **System configuration** and click on **Settings backup and restore**.

From the **Restore saved settings** section, click on **Choose a file** and select the backup configuration file on your computer.

Click **Restore** to copy the settings to the new NTC-140W Series router. The router will apply these settings and inform you it will reboot - click on **OK**.

Tip: Don't change the file extension of the backup file as this may cause it to corrupt.

The screenshot shows the NetCommWireless web configuration interface. The top navigation bar includes links for Status, Networking, Services, System, and Help. The 'System' menu is selected, and the user is logged in as 'root'. On the left sidebar, the 'System configuration' menu is expanded, and 'Settings backup and restore' is selected. The main content area has three sections: 'Save a copy of current settings' with password fields and a 'Save' button; 'Restore saved settings' (highlighted with a red rectangle) with a 'Browse' button, a 'Choose a file' button, and a 'Restore' button; and 'Restore factory defaults' with a 'Restore defaults' button.

Product Warranty

For warranty information please visit

<http://www.netcommwireless.com/product/m2m/ntc-140w>

Safety and product care

Please refer to the user guide for safety and product care information.



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