OPTUS MF920V

4G WI-FI HOTSPOT

USER MANUAL

CHECK YOUR SYSTEM REQUIREMENTS

Your 4G Wi-Fi hotspot will connect to any device that supports Wi-Fi, 802.11 b/g/n A web browser is required to log in to your Wi-Fi hotspot if you wish to make any configuration changes.

USB driverless connection is also supported for Windows, MAC and LINUX operating systems:

- Windows 10, 8 (not including RT) / 7 / XP / Vista
- MAC OS X 10.5.11 and above
- Linux

Using the USB connection requires administrator rights to install and run the software.

We suggest you switch off your anti-virus software before connecting the hotspot - In some cases protection software can prevent automatic installation.

It is possible to start the installation process manually by clicking the Autorun icon when it appears.

GET TO KNOW YOUR 4G WI-FI HOTSPOT



INSERT YOUR SIM CARD

- 1. Open the SIM tray cover to access the SIM slot and the Reset button.
- 2. Insert your SIM card carefully as shown:



- 3. Close the SIM tray cover.
- 4. You are now ready to power up your device and you'll be on-line in no time.

IMPORTANT

This device supports a micro SIM or 3FF size.

Do not insert a nano SIM (4FF) or use a nano to micro SIM adaptor. Use of 3rd party adaptors or non approved SIM card can damage your device. Physical damage to the SIM card slot is not covered by warranty and will make your device unusable.

TIPS

Remember to keep your plastic SIM card holder. It has a record of your SIM card which you should keep handy.

If you cannot connect via Wi-Fi because you have lost, changed or forgotten your password please connect your device to a computer and log in via the web User Interface (192.168.0.1). See USB Installation for Tethered Connection.

POWER UP YOUR 4G WI-FI HOTSPOT

Press and hold the Power key for 3-4 seconds until the lights flash.

The LED's flash in sequence to indicate the start up condition. During this sequence the device functions are not available.

The Wi-Fi hotspot will be available after about 20 seconds.

Note: If you insert the charger with the device off, or the battery is flat, you can only power up the device after about 20 seconds when the start up sequence is complete.

Check the condition of your Wi-Fi hotspot as shown by the LED indicators.

| | On, battery is low (<23%). |
|------|---|
| * | Flashing, battery is discharged, (< 12 %). |
| • | On, battery is OK (>23 %). |
| * | Flashing, battery is charging. |
| | On, WPS is enabled, available for 2 minutes. |
| * | Flashing, Wi-Fi is On. |
| | Off, Wi-Fi is off. |
| | A new message has arrived. Check the web UI to read. |
| * | Flashing, a software update is available, check the web |
| | interface for details. |
| | Not registered on the network. |
| | No SIM, invalid SIM, PIN or PUK locked. |
| | On, device is registered on 2G/3G, |
| * | Flashing, device is connected to 2G/3G. |
| | Device is registered on 4G |
|) ** | Flashing, device is connected to 4G |
| | ** |

LED INDICATORS

During periods of inactivity it is normal for the LED's to go out to preserve battery life. Press the power key briefly to confirm the device status if required.

CONNECT DEVICES BY WI-FI

Your 4G Wi-Fi hotspot can connect up to five devices via Wi-Fi providing internet access for all your devices on the go.

- On the devices you wish to connect make sure Wi-Fi is switched on, then search for Wi-Fi devices.
- The Wi-Fi hotspot will show up as OPTUS_xxxxxx, click on this device to

connect.

• Consult your SSID sticker and enter the default Wi-Fi key which is case sensitive. Any letters entered must be in upper case (capitals).

Connection example for Windows 7 computer:

- 1. On your task bar, next to the clock, click on the Network Interface icon
- 2. Click on the Wireless device OPTUS_xxxxxx
- 3. Enter the password exactly as shown on your SSID sticker observing the correct case for all letters
- 4. With Connect Automatically enabled your computer will remember the password and connect to your Wi-Fi device when it is on and in range.

TIP

It is also possible to connect via USB connection. See later for details.

| QUICK REFEREN | CLJ |
|---------------------|--|
| Browser home page | http://192.168.0.1 |
| Administrator login | admin |
| Default SSID | OPTUS_xxxxxx |
| | Supplied on your SSID Sticker on the device and a spare |
| | sticker in the box. |
| Default Wi-Fi Key | 10 characters which are case sensitive. |
| | Supplied on your SSID Sticker. |
| Restore defaults | From the powered up state: |
| | Open the SIM cover and use a toothpick, paperclip or |
| | other suitable device to press and hold the "Reset" button |
| | for 5 seconds. |
| | All passwords and settings will be restored to defaults |
| | and the hotspot will reboot. |
| | Use the default credentials on your SSID sticker to log |
| | back onto your device or log in via the USB connection if |
| | you do not know your password. |

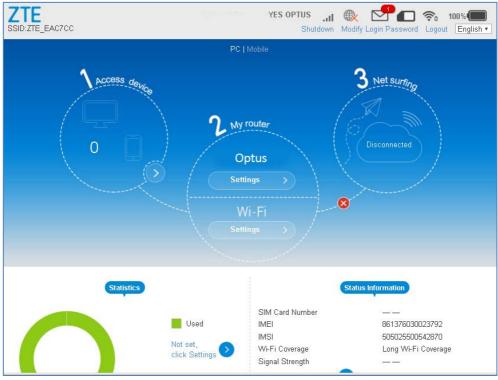
QUICK REFERENCES

LOGIN TO THE USER INTERFACE

| ZTE | | | English • |
|-----|------------------|-------|-----------|
| | PC Mobile | | |
| | | | |
| | Password = admin | Login | |
| | | | |
| | | | |

Open a browser and go to http://192.168.0.1 to access the hotspot home page. The default login password is 'admin'

HOTSPOT HOMEPAGE OVERVIEW



STATUS INDICATORS



Tip use your mouse to hover over the icons to see a brief description for each icon.

CONNECTED DEVICES

| < | Connected Devices All of wireless devices connected to this router will show on the page, including device nam MAC address | e and |
|---|--|-------------|
| | Wireless Access Device | |
| | No. Host Name | MAC Address |
| | No data | |

• Click on 1. Access Devices to see the list of devices connected to your hotspot.

CONNECTION SETTINGS



- Click on 2. Network (Optus) Settings to view or configure your Network settings.
- Note to make any changes you need to disconnect first.
- Click on the On / Off switch to switch off your Network data connection

CONNECTION MODE

| Connection Mode | |
|------------------------------|--|
| Connection Mode | Automatic Manual |
| | Check here, you can connect to internet in the roaming status. (Warning: Connecting while roaming may occur additional charges) |
| The setting can only be chan | Jed when the modern is disconnected. |
| 0 | |

- The default state is to automatically connect to the network. If you wish to change this behaviour, first disconnect from the network by selecting Off on the device overview page then set Manual and press Apply to save your changes.
- Enable Roaming if you wish to use the device overseas. (High data charges will apply, check with your carrier)

NETWORK SELECTION

| Network Selection | | | 6 |
|-----------------------------------|-------------------------------|-----------|-------|
| Network Selection | Automatic | Automatic | · · |
| | Manual | | |
| The setting can only be changed v | when the modem is disconnecte | əd. | Apply |
| 0 | | | |

- Network Selection is set to Automatic. You can choose to lock to preferred network technologies such as 4G, 3G or 2G only.
- Press the Disconnect button to change this setting if required.
- If you make any changes, press Apply to save your changes

| APN | | 33 |
|-------------------------|---|-----------|
| | | 22 |
| Current APN | YesOptus | |
| Mode | Auto | |
| Profile | YesOptus • | |
| PDP Type | IPv4 | Ŧ |
| | | |
| Profile Name * | YesOptus | |
| APN * | internet | |
| Authentication | NONE | ¥ |
| User Name | | |
| Password | | |
| | | Set as de |
| The setting can only be | changed when the modem is disconnected. | |
| | | |

- Disconnect the modem using the LTE/3G switch button on the home page then go to Settings > APN
- In Auto mode the device will provision the correct APN based on your SIM card and service provider.
- Select Manual to add a new APN
- Press Add New to create a new APN
- Add the Profile Name, eg Optus
- Enter the correct APN details eg YesOptus
- Press Save to save your new APN
- Press the Profile drop down box
- Select the new APN profile
- Click on 'Set as default' to set the new APN as your preferred setting
- Only change these settings if you change service provider.
- The Wi-Fi hotspot is locked to Optus. If you use a SIM card from another provider you may not be able to connect to the network.
- Consult your new carrier to obtain alternate APN details for your device.

WI-FI SETTINGS

| Wi-Fi Switch | Enable | Disable | |
|----------------------|----------------|-----------|--------------|
| Multi SSID Switch | Enable | • Disable | |
| | | | |
| Main SSID | Guest SSID | WPS | Advanced Set |
| Network Name(SSID) * | ZTE_EAC7CC | | |
| | ✓ Broadcast SS | SID | |
| Security Mode | WPA2(AES)-F | PSK | T |
| Password * | | | |
| | Display Pass | word | |
| Max Station Number | 32 | | • |

- Click on 2. Wi-Fi Settings to change the Wi-Fi Settings:
- WiFi Switch can be used to turn the Wi-Fi On or Off. Default is On.
- The SSID is the Wi-Fi name that is broadcast that represents your device:
- You can change the SSID to something more memorable or personal
- Uncheck Broadcast SSID to hide the SSID broadcast so unknown users will not even see your network
- You can change the security settings and password to suit your own preferences
- You can set the number of available connections between 1 and 10. The default setting for 5 users is to improve battery life and Wi-Fi data throughput.
- Press Apply to save your changes

ADVANCED SETTINGS > POWER SAVE

| Advanced Settin | gs | | | ස |
|-----------------|------------|---------------------------------------|--------|--------|
| Power-save | Router | Firewall | Update | Others |
| Wi-Fi Coverage | | erage - Best battery life Coverage | Spone | Apply |
| 0 | | | | |
| Wi-Fi Sleep | | | | |
| Sleep after | 10 Minutes | Ŧ | | Apply |
| 0 | | | | |
| | | | | |

- You can change the Wi-Fi settings to suit your personal choices or for specific requirements of your attached devices.
- Wi-Fi coverage has three different range settings to suit your needs or to preserve battery power.
- Wi-Fi Sleep will only engage when there is no data traffic. You can select No Sleep to keep the Wi-Fi always on (consumes more power)
- Press Apply to save your changes

ADVANCED SETTINGS > ROUTER

| Advanced Setting | js | | | Se |
|----------------------------|-------------------------|-----------------|-----------------|--------|
| | | | | 22 |
| Power-save | Router | Firewall | Update | Others |
| IP Address * | 192.16 | 8.0.1 | | |
| Subnet Mask * | 255.25 | 5.255.0 | | |
| DHCP Server | Enable | e 🔍 Disab | le | |
| DHCP IP Pool * | 192.16 | 8.0.100 | - 192.168.0.200 | |
| DHCP Lease Time * | 24 | hour(s) | | |
| | | | | A |
| The setting can only be ch | anged when the modem is | s disconnected. | | |
| 0 | | | | |
| MTU * | 1500 | | | |
| MSS * | 1460 | | | |
| | | | | A |

ADVANCED SETTINGS > FIREWALL

| Advanced Settin | gs | | | -{ĉ |
|-----------------|------------|----------|--------|--------|
| Power-save | Router | Firewall | Update | Others |
| Port Filtering | \odot | | | |
| Port Mapping | \bigcirc | | | |
| UPnP | \bigcirc | | | |
| | | | | |

FIREWALL > PORT FILTERING

- Select Enable to turn on the Port Filtering settings
- You can apply filters based on MAC Address, Source IP Address, Destination IP Address and select the action to drop or accept the packets.
- Firewall settings are for advanced users and network administrators.

FIREWALL > PORT FORWARDING

- Select Enable to turn on the port forwarding settings.
- Port forwarding can be used to allow a specific external server or computer access to devices located on your LAN side or to translate a specific incoming port into a different destination port.
- The destination port and address is on your local LAN side.
- Typical applications will be for multi party gaming, requiring specific control and communications channels between the remote server and the local machine.
- Firewall settings are for advanced users and network administrators.

FIREWALL > SYSTEM SECURITY

- Enable or Disable Remote Management (via WAN) and PING
- Firewall settings are for advanced users and network administrators.

FIREWALL > UPNP

- Universal Plug and Play is a set of networking protocols that permits networked devices, such as personal computers, printers, Internet gateways, Wi-Fi access points and mobile devices to seamlessly discover each other's presence on the network and establish functional network services for data sharing, communications, and entertainment.
- UPnP is enabled by default on the LAN side (local) but if you require extra security you should disable this setting.
- UPnP is not enabled on the WAN (Network) side.
- Firewall settings are for advanced users and network administrators.

FIREWALL > DMZ

- Enable the DMZ Setting to open up all ports from the WAN side (mobile network) to the LAN side for this particular allocated IP address.
- It is advisable to set a Static IP address for this device outside of the DHCP range eg 192.168.0.20

ADVANCED SETTINGS > UPDATE

| Advanced Setting | s | | | 6 |
|----------------------------|---------------------------|---------------------------|-----------------|--------|
| | | | | 225 |
| Power-save | Router | Firewall | Update | Others |
| Check New Version | | | | |
| Last Update: 2016-09-22 14 | 4:28:08 | | | Check |
| Auto Check Settings | | | | |
| Auto-check New Version | Enab | e Oisable | | |
| Auto-check Cycle | 15 da | ys 🔹 | | |
| Check this option, the d | evice will update when ro | aming, which will incur n | oaming charges. | |
| | | | | Apply |

ADVANCED SETTINGS > OTHERS

| Advanced Settin | gs | | | (ĉ |
|-----------------|--------|----------|--------|--------|
| Power-save | Router | Firewall | Update | Others |
| Reset | > | | | |
| Restart | 5 | | | |
| PIN Management | 5 | | | |
| | | | | |

- Press Reset Factory Settings to restore your device to factory defaults. This will reset your SSID and Password to the default state.
- Press Restart Device to reboot your system.
- PIN Management to set a SIM PIN
- Fast Boot to enable fast boot mode
- **TIP** If you cannot connect via Wi-Fi because you have lost, changed or forgotten your password please connect your device to a computer and log in via the web User Interface (192.168.0.1)

PIN MANAGEMENT:

| < | PIN Management | | | 6 |
|---|--|--------------------------|------------|-------|
| | PIN Status | Enable | Change PIN | 2005 |
| | | • Disable | | |
| | Current PIN * | | | |
| | | Attempts Left: 3 | | Apply |
| | The setting can only be changed when the | e modem is disconnected. | | |
| | 0 | | | |

- Switch off the Network Connection on the home page to change the PIN settings if required.
- Enter your current SIM PIN code to change or disable the PIN.
- If you make any changes, press Apply to save the change.
- If you enter the incorrect PIN code three times in succession you will lock your SIM card.
- Contact your service provider to obtain your PUK code.

USB INSTALLATION FOR TETHERED CONNECTION

TIP If you cannot connect via Wi-Fi because you have lost, changed or forgotten your password please connect your device to a computer and log in via the web User Interface (192.168.0.1)

You can also connect to your Wi-Fi hotspot using the USB lead provided.

- The installation software is pre-loaded on your device.
- Simply insert the Wi-Fi hotspot into your computer and follow the instructions on-screen.

Example shown for Windows operating system.

1. Click on CD Drive ZTEMODEM

2. Double click Autorun.exe

| 🔮 CD Drive (E:) ZTEMODEM | | | |
|--|-------------------|-------------------|------------|
| G 🕞 🗢 🔛 🔹 Computer 🝷 CD Drive (E:) ZTEMO | DDEM 👻 | - 🛃 | Search C 😥 |
| <u> </u> | | | |
| Organize 🔻 Burn | | 8 | = - 🔟 🕐 |
| Name * | Date modified | Туре | Size |
| 퉬 Data | 5/02/2016 4:25 AM | File folder | |
| 🥶 APPWEB.ico | 2/12/2015 4:01 AM | Icon | 14 KB |
| 📄 AutoRun.dat | 5/02/2016 4:24 AM | DAT File | 2 KB |
| T AutoRun.exe | 1/01/2015 9:56 AM | Application | 369 KB |
| 🗃 autorun.inf | 2/12/2015 4:01 AM | Setup Information | 1 KB |
| | | | |
| 5 items | | P Compu | iter // |

3. The installation will create a short-cut on your desktop and open your browser at the device homepage.

USB INSTALLATION NOTES

- The installation will create a new shortcut on your desktop and a new program listing under Start-Programs
- Follow ZTE Australia on Facebook to get one on one support.
- If you have problems with the installation please contact your supplier or see our website, ztemobiles.com.au for more assistance and FAQ's or call our hotline on 1300 789 475 available between 9am and 5pm AEST.
- If you can't connect to the internet check your SIM card is inserted correctly, contact your service provider and check your account is active.
- To uninstall the application: Windows users: Programs > Optus 4G > Uninstall

MAC Users:

• Double click the CD Drive Optus Mobile 4G on the desktop to install the software.

- To uninstall, go to Applications and run Uninstall Optus Mobile 4G **HELP**
- Click Help button to access this full user guide
- Go to ztemobiles.com.au for product and warranty support

NOTES FOR BATTERY CHARGING

The internal battery will last up to four hours in normal use but this is dependant on many factors such as network signal strength, number of users connected and the amount of data being transferred.

Battery time will reduce when the network signal is low, many Wi-Fi users are connected or users are engaged in continuous data downloads or uploads (ie streaming video, audio or FTP traffic).

It is normal for the device to get hot when the network signal is low and users are engaged in continuous data traffic.

If the device temperature exceeds 45C then the battery will not be charged. This is a safety feature required for Lithium-ion batteries.

In these cases it is possible for the battery to discharge, even though the device is connected to the charger.

TROUBLESHOOTING

If you have any problems with your connection or Wi-Fi hotspot please consult the manual and check this section.

If the problem still exists contact your service provider or check our website for more details at ztemobiles.com.au

| Problem | Possible Causes | Suggested Solution |
|----------------------|-----------------------------|-----------------------------------|
| I cannot connect via | Security settings, password | Check the security settings SSID |
| Wi-Fi | has been changed. | and Password shown on your |
| | | Security Card. |
| | | If the password has been |
| | | changed reset the hotspot to |
| | | factory defaults: |
| | | 1. With the device switched on |
| | | open the back cover and locate |
| | | the reset button on the left hand |
| | | side. |
| | | 2. Using a blunt item such as a |
| | | pencil, tooth pick or paperclip |
| | | press and hold the "Reset" |
| | | button for 5 seconds. |
| | | 3. The LEDs will flash and the |
| | | device will re-boot to factory |
| | | default settings. |
| The user interface | PC configuration is not | Start the program manually by |
| doesn't start after | correct. | going Start > Program Files or |
| the Wi-Fi hotspot is | (No autorun) | use the shortcut on the desktop. |
| plugged in. | | |
| The Wi-Fi hotspot | You have no | Try moving location until you get |
| has no signal. | network coverage. | good reception. |
| SIM Card is locked | SIM card requires a PIN or | Contact your service provider to |
| | PUK number. | obtain the PIN or PUK key. Enter |
| | | your PIN or PUK via the web |
| | | , interface (192.168.0.1 in a |
| | | browser) |
| Data connection | You have no | Try moving location until you get |
| failed. | network coverage. | good reception. |
| | | |

| Problem | Possible Causes | Suggested Solution |
|--------------------|-----------------------------|----------------------------------|
| The Wi-Fi hotspot | You don't have | Consult your service provider |
| cannot connect to | international roaming | before you go overseas to enable |
| the internet when | enabled on your plan. | roaming. |
| overseas | | |
| Where can I get | If you get really stuck, we | Consult the manufacturer's |
| more help and | are on hand to help | website at ztemobiles.com.au |
| technical support? | | Follow ZTE Australia on |
| | | Facebook to get one on one |
| | | support. |

PRECAUTIONS AND SAFETY INFORMATION

- Some electronic devices are susceptible to electromagnetic interference. The Wi-Fi hotspot is a transmitting device and may cause interference to sensitive electronic equipment such as audio systems, vehicle systems and medical equipment. Please consult the manufacturer of the other device before using the Wi-Fi hotspot.
- Operating the Wi-Fi hotspot may interfere with medical devices like hearing aids and pacemakers. Please keep the Wi-Fi hotspot more than 20 centimetres away from such medical devices. Turn the Wi-Fi hotspot off if necessary. Consult a physician or the manufacturer of the medical device before using the Wi-Fi hotspot near such devices.
- Be aware of regulations when using the Wi-Fi hotspot at places such as oil refineries or chemical factories, where there are explosive gases or explosive products being processed. Turn off your Wi-Fi hotspot as instructed.
- Don't touch the housing area unnecessarily whilst connected. This can affect your Wi-Fi hotspot performance and reduce the signal quality.
- Store the Wi-Fi hotspot out of the reach of children. The Wi-Fi hotspot may cause injury or get damaged.
- The Wi-Fi hotspot contains sensitive electronic circuitry. Do not expose the Wi-Fi hotspot to any liquids, high temperatures or shock.
- Only use original accessories or accessories that are authorised by the manufacturer. Using unauthorised accessories may affect your Wi-Fi hotspot's performance or damage your Wi-Fi hotspot.
- Avoid using the Wi-Fi hotspot in areas that emit electromagnetic waves or in enclosed metallic structures eg lifts.
- The Wi-Fi hotspot is not waterproof. Please keep it dry and store it in a cool, dry place.

- Don't use the Wi-Fi hotspot immediately after a sudden temperature change eg from an air conditioned environment to high temperature and humidity outside. In such cases there could be condensing moisture inside the Wi-Fi hotspot which can cause internal damage. Unplug the Wi-Fi hotspot and leave it for 30 minutes before use.
- Always handle the Wi-Fi hotspot with care. Be careful not to drop or bend the device.
- There are no user serviceable parts. Unauthorised dismantling or repair will void the warranty.
- The battery will not be charged above 45C.

RF SAFETY INFORMATION

The wireless device has an internal antenna. For optimum performance with minimum power consumption do not shield the device or cover with any object. Covering the antenna affects signal quality and may cause the Wi-Fi hotspot to operate at a higher power level than needed.

RADIO FREQUENCY ENERGY

The wireless device is a low-power radio transmitter and receiver. When switched on it intermittently transmits radio frequency (RF) energy (radio waves). The transmit power level is optimized for best performance and automatically reduces when there is good quality reception.

Maximum power is only used at the edge of network coverage so under most circumstances the power output is very low.

Under poor network conditions the Wi-Fi hotspot transmits at a higher power level and may get hot.

SPECIFIC ABSORPTION RATE (SAR)

The wireless device is designed to be used in close proximity to the body. We declare that the product detailed in this manual, and in combination with our accessories, conform with the essential requirements of The Radio Communications Standard (Electromagnetic Radiation Human Exposure) 2003 and the Australian Communications and Media Authority Section 376 of the Telecommunications Act 1997 when used at a distance of not less than 5mm from the body.



TECHNICAL SPECIFICATIONS

| | 4G LTE: 700, 1800, 2300, 2600 MHz 3G UMTS: 900, 2100 MHz | |
|-----------------------|---|--|
| Network compatibility | | |
| | GSM: 900, 1800 MHz | |
| Dimensions | 105.6 x 63.8 x 14.38mm. Approx 100g | |
| Data Rates* | 4G download speeds up to 150Mbps | |
| Data Nates | 3G DC-HSPA+ Mode up to 42Mbps | |
| Wi-Fi | 802.11 a/b/g/n, 2x2 MIMO, 2.5GHz | |
| Voltage | 5V | |
| Current | Resting: 100mA rms | |
| Current | Max: 500mA rms | |
| Operating systems | Windows 10, 8 (not RT), 7, XP SP3, Vista | |
| Operating systems | MAC OS X 10.5 and above | |
| Operating | -5ºC to +45ºC | |
| temperature | -3-0 10 +43-0 | |
| Battery capacity | 2000mAh | |
| Charge time | Up to 3 hours with charger, up to 6 hours via USB | |
| Standby time** | Up to 100 hours | |
| Operation time** | Up to 8 hours use | |
| | | |

* Download speeds will vary due to distance from the cell, local conditions, user numbers, file source, hardware, software and other factors.

** Operation and Standby times depend on a number of conditions and are measured in ideal conditions.

ZTE Copyright © 2016. All rights reserved.

No part of this publication may be excerpted, reproduced, translated or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without the prior written permission of ZTE Corporation.

The manual is published by ZTE Corporation. We reserve the right to make modifications on errors or update specifications without prior notice.

Version 1.0 October 2016