



# CSL ROUTER

CONNECTED • SECURE • LIVE

# CSL Router

## Quick Guide

This section provides basic information to enable you to install and commission CSL Router quickly.

CSL Router is preconfigured with the SIMs already fitted in the SIM slots.

### **STEP 1. INSTALLATION SITE**

1. Find a suitable location with good 4G coverage
2. Keep away from sources of interference i.e. monitors, fridges, power supplies, etc.
3. LED will show connection status

### **STEP 2. AERIAL & POWER**

1. Fit the included Aerial to the rear connection port marked MAIN
2. Power up the Router using the supplied PSU

### **STEP 3. SIGNAL STRENGTH**

1. For best results ensure that both green signal strength LEDs are ON to indicate the Router has established good signal strength
2. OFF/ON LED status indicates a medium signal strength which is also acceptable

### **STEP 4. CONNECT DEVICES**

1. IP devices can now be connected using the supplied ethernet cable or wirelessly. Be aware Port Forwarded AnyConnect traffic is set by default to forward to 192.168.100.2/24. For your specific 4G Router WAN SIM IP Address please see the sticker on the back page.

CSL router has an optional wi-fi capability which will require the CSL Router Wi-Fi Aerial Pack. Please contact CSL M2M support if you wish to order the pack and utilise this feature.

CSL Router is shipped with a single 4G aerial. The device also has an aux connector for connection of a second 4G aerial (not supplied) to allow for aerial diversity. Aerial diversity can sometimes improve the quality and reliability of a wireless link. Please contact CSL M2M support for more information.

The external wall mounted CSL High Gain Aerials are available as an optional accessory. Please contact CSL M2M support for more information.

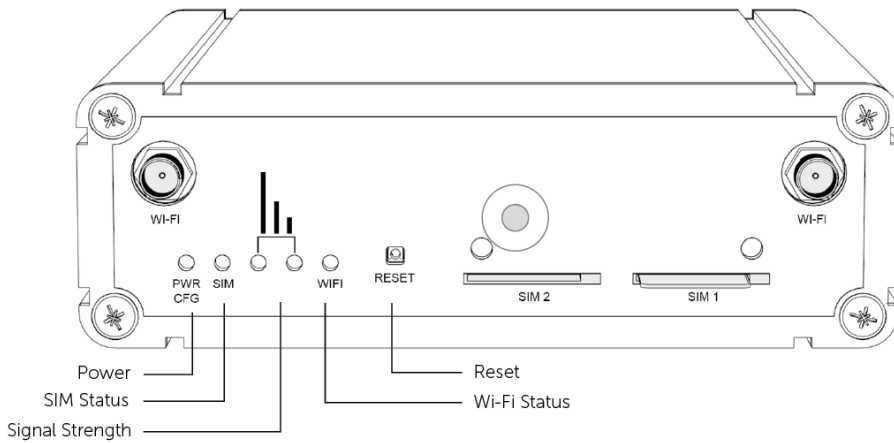
CSL M2M Support can be contacted via email [m2msupport@csl-group.com](mailto:m2msupport@csl-group.com) or by phone +44 (0)1895 474 444

# CSL Router

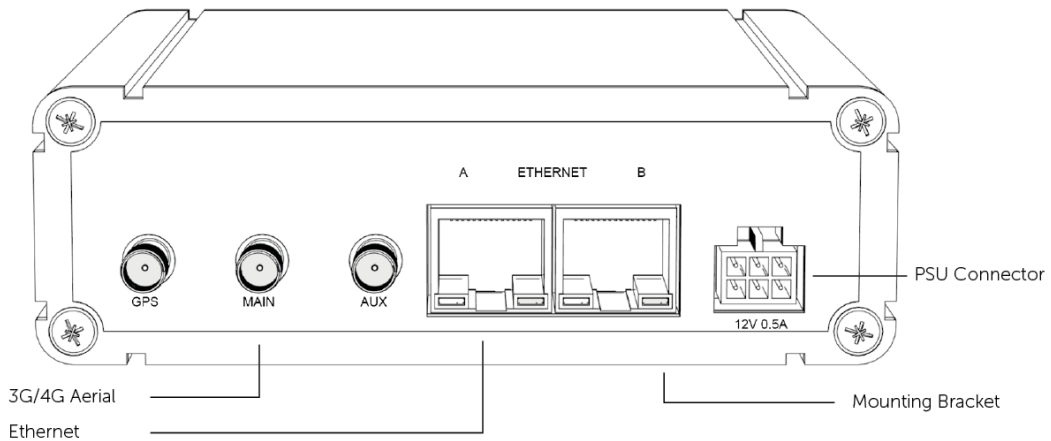
## Technical Specifications

Figure 1 - CSL Router

### FRONT



### BACK



Dimensions	120 (w) x 120 (d) x 45mm (h)
Radio Technology	4G/3G/Wi-Fi*
Radio Frequency	3G (900/2100Mhz) & 4G (800/900/1800/2100/2300/2600Mhz)
Aerial Connections	1 LTE SMA male (included)

Monitoring Options	ARC and self-monitoring
Bundles	From 1GB - 500GB and beyond
Wi-Fi	2.4Ghz/802.11bgn*
Ethernet Speed	10/100Mbps
Warranty	12 months
Approvals	EN60950 / ENS55022 / EN55024 / EN300328V1.9.1 / BSI IoT Kitemark**
Operating Temperature	-40°C to 70°C
Power	9-36V

\*must purchase Wi-Fi Aerial Pack separately (CM02011).

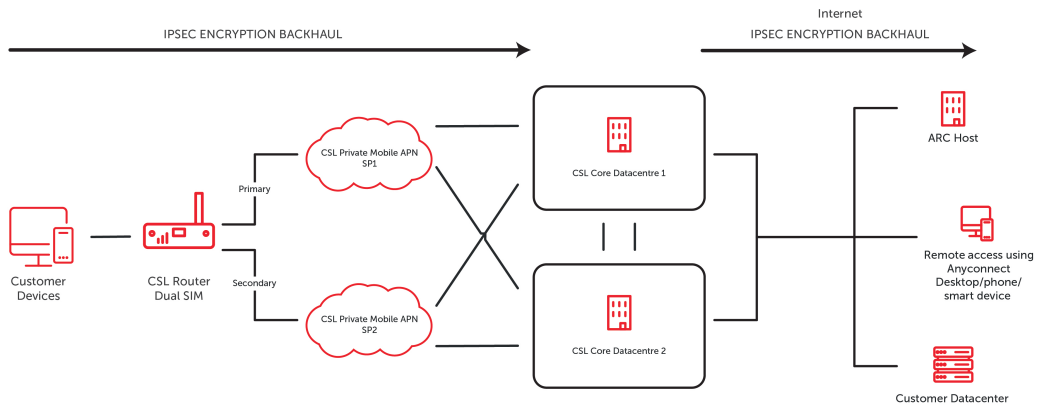
\*\*BSI Kitemark requires specific variant. Contact us for more information

	Dual 4G World SIM	Single 4G Fixed Network SIM	Back-up 4G Fixed Network SIM
SIMs	2	1	1
Roaming	Yes	No	No
Ethernet Ports	1	2	2

# CSL Router

## Network Diagrams

Figure 2 - Dual SIM Network Diagram

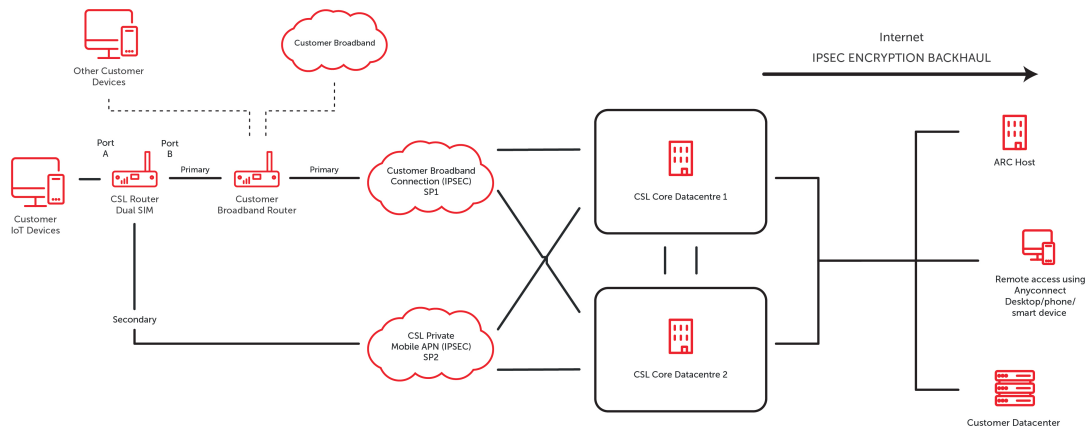


[CLICK HERE TO VIEW ENLARGED DIAGRAM](#)

AS STANDARD, DATA TRAFFIC IS FORWARDED TO A SINGLE CUSTOMER DEVICE ATTACHED TO THE ETHERNET PORT OF THE ROUTER. ONLY TRAFFIC SOURCED FROM THE ANYCONNECT VPN CLIENT OR FROM AN ARC HOST WILL BE FORWARDED TO THIS DEVICE. IF ACCESS TO MORE THAN ONE DEVICE IS REQUIRED, PLEASE CONTACT CSL M2M SUPPORT.

THE CUSTOMER DEVICE CONNECTED TO THE ROUTER CAN ESTABLISH OUTBOUND CONNECTIONS TO INTERNET CLOUD-BASED SERVICES. IN SUCH CIRCUMSTANCES, TRAFFIC WILL BE ROUTED OUT TO THE INTERNET VIA THE CSL GEMINI GLOBAL PLATFORM.

Figure 3 - Broadband Backup Network Diagram



[CLICK HERE TO VIEW ENLARGED DIAGRAM](#)

AS STANDARD, DATA TRAFFIC IS FORWARDED TO A SINGLE CUSTOMER DEVICE ATTACHED TO THE ETHERNET PORT OF THE ROUTER. ONLY TRAFFIC SOURCED FROM THE ANYCONNECT VPN CLIENT OR FROM AN ARC HOST WILL BE FORWARDED TO THIS DEVICE. IF ACCESS TO MORE THAN ONE DEVICE IS REQUIRED, PLEASE CONTACT CSL M2M SUPPORT.

OTHER DEVICES (E.G. LAPTOPS, HOME ENTERTAINMENT DEVICES ETC.) OPERATING DIRECTLY THROUGH THE CUSTOMER'S BROADBAND ROUTER WILL BE UNAFFECTED AND WILL CONTINUE TO OPERATE AS NORMAL....

THE DEVICE CONNECTED TO THE ROUTER CAN ESTABLISH OUTBOUND CONNECTIONS TO INTERNET CLOUD-BASED SERVICES, VIA THE CUSTOMER'S BROADBAND ROUTER...

SHOULD THE ROUTER NOT BE ABLE TO COMMUNICATE ON ITS PRIMARY DATA TRAFFIC ROUTE, VIA THE CUSTOMER'S BROADBAND ROUTER, IT WILL AUTOMATICALLY ENABLE ITS BACKUP DATA TRAFFIC ROUTE OVER THE 2G/3G/4G RADIO NETWORK. THE ROUTER WILL AUTOMATICALLY REVERT TO THE PRIMARY DATA TRAFFIC ROUTE, VIA THE CUSTOMER'S BROADBAND ROUTER, ONCE IT BECOMES AVAILABLE AGAIN....

WHEN OPERATING ON THE BACK-UP ROUTE VIA THE 2G/3G/4G RADIO NETWORK, THE DEVICE CONNECTED TO THE CSL ROUTER REMAINS ABLE TO ESTABLISH OUTBOUND CONNECTIONS TO INTERNET CLOUD-BASED SERVICES. IN SUCH CIRCUMSTANCES, TRAFFIC WILL BE ROUTED OUT TO THE INTERNET VIA THE GEMINI GLOBAL PLATFORM....

PORT B ETHWAN - CUSTOMER ROUTER DHCP

# CSL Router

## Troubleshooting

**Q:** Why do my signal LEDs not light up or show low signal strength?

**A:** Ensure that the supplied aerial is attached to the MAIN connector. Reposition the Router away from interference or in a better position for mobile signal coverage using the green LEDs as guidance. Alternatively, try using an external High Gain Aerial.

**Q:** Why does my PWR Config LED flash quickly?

**A:** The Router is in factory configuration mode. Check you have a medium to good signal strength and wait for 4-5 minutes. If the Config LED continues to flash contact CSL Technical Support.

**Q:** I have connected my IP device to the ethernet port but do not see any activity and cannot connect to the device.

**A:** Check the IP device is connected properly and configured. Power down the device and re-power whilst connected to the Router.

**Q:** What is the reset button for?

**A:** Pressing reset for 1-2 seconds will perform a soft reboot of the device which can be used to force the unit to reconnect to the mobile network. Do not press the button for longer than three seconds unless advised by CSL Technical Support services.

LED STATUS		
	LED BEHAVIOUR	STATUS
Power / CFG	Green - double flash	Router is booting after power up
	Green - flashing quickly	Router is in factory config mode
	Green - permanently on	Router has completed boot process and is ready
SIM Status	Off	Router is not connected to a Mobile Data Network
	Green flashing	Router is attempting to connect to a Mobile Data Network
	Green on	Router has successfully connected to a Mobile Data Network
Signal Strength	Green - off/off	No cellular radio signal detected
	Green - on/off	Low cellular radio signal detected
	Green - off/on	Medium cellular radio signal detected
	Green - on/on	Good cellular radio signal detected
Wi-Fi-Status	Off	Optional Wi-Fi capability not enabled
	Green - on	Wi-Fi capability enabled
	Green - on/flashing	Data activity is occurring via Wi-Fi