

RAPIDlink RL10

User Manual



RAPIDlink

Powered by PERMACONN™

Permaconn
Unit 3/9-11 South Street
Rydalmere NSW 2116
+61 2 9352 1777
support@rapidlink.com
rapidlink.com

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1 Introduction

RAPIDlink is a managed connectivity platform that makes secure, remote communications easy to set-up and manage.

The RL10 is a managed router that incorporates a high-speed 4G internet gateway with in-built wireless connectivity (4G and Wi-Fi) and a secure cloud-based management portal for full remote configuration and management.

Pre-provisioned with dual SIM cards, the RAPIDlink RL10 is fast and easy to commission and requires minimal time on site.

Configuration is highly flexible with wired and wireless options for upstream (WAN) and downstream connectivity, IP to 4G fail-over.

2 Features

- High speed 4G gateway with up to 150Mbps download and 50Mbps upload speed.
- Pre-provisioned SIM cards.
- Fully featured Internet router with secure remote control of settings via the RAPIDlink cloud portal (e.g., firewall/ port-forwards, DDNS, VPN config etc).
- Secure network connectivity to the RAPIDlink portal ensures you can privately manage the settings of the device from anywhere with an internet connection.
- Wi-Fi supports both upstream (WAN) and downstream (Access Point) connectivity.
- Dual SIMs for resilience and optimised 4G network coverage.
- Automatic failover from IP to 4G (if using WAN IP).
- 3 LAN ports (1 of these can be configured as WAN).
- 3 Inputs and 3 Outputs that can be remotely managed via the RAPIDlink cloud portal.
- Built-in watchdogs to automatically recover the device in the event of connection issues.
- Non-volatile memory stores all setup information in the event of a power failure.

3 RAPIDlink Portal

The RAPIDlink cloud portal is provided by Permaconn, the Australian market leader in mission-critical comms for the security industry and is hosted on multiple secure Australian servers.

The portal enables full remote configuration of RAPIDlink routers, easy management of services and data allowances, and simple set-up of access rights for your staff and end-users.

Sign up or log in at <https://www.rapidlink.com>

4 What's in the box?

- RAPIDlink RL10 router
- Three core antenna set (2 X 4G and 1 X Wi-Fi)
- Euro style terminal plug (1 X 2 Pin and 1 X 9 Pin)
- 3.3k Ω “end-of line” resistors X 3 for use with input monitoring
- Flat head screwdriver
- 1 x metal ground plate

4.1 Optional Accessories – available to purchase separately

- 12V DC Power Supply
- High-gain 4G antenna
- 3m, 5m and 10m antenna extension cables

5 Installation Procedure

5.1 Summary

1. Create a RAPIDlink Portal account if you don't already have one. Visit www.rapidlink.com
2. Add the device to your account in the Portal
3. Subscribe the device to a Data Pack
4. Power-up the RAPIDlink device
5. Use the Portal to configure the RAPIDlink

5.2 Create a RAPIDlink Portal account

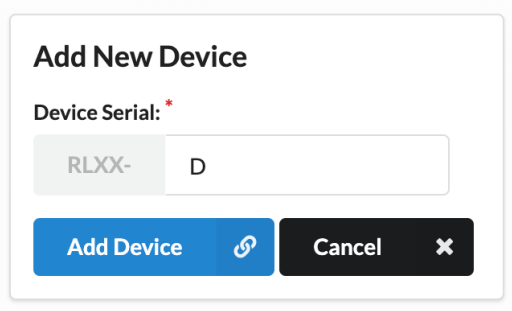
You will need a company account to purchase and manage data services, and a user account to login to the RAPIDlink portal.

If you need to set up a new company account, please call Permaconn on 02 9352 1777.

If you do not already have a RAPIDlink portal account but you are joining an existing company account, then ask your administrator to send you an invitation.

5.3 Adding a New RAPIDlink device to your account

1. Login to the RAPIDlink portal at www.rapidlink.com
2. Select your Company Dashboard to see the list of any existing devices
3. Click Add Device and enter the serial number of the new device. The serial number is located on a sticker on the underside of the device, and begins with the letter D.



Add New Device

Device Serial: *

RLXX- D

Add Device  Cancel 

5.4 Subscribe to a Data Pack

For a RAPIDLink device to communicate over the 4G network, it needs to have a valid monthly Data Pack subscription.

1. Select the device from your company's dashboard.
2. Click 'Change' button under 'Subscription'.

The screenshot shows a 'Data Pack Subscription' interface. On the left, it displays 'Data Pack: 1GB Data Pack'. On the right, it shows 'Data Used: 0MB' and 'Data Available: 1023MB' with a corresponding progress bar.

3. Select the relevant Data Pack and click 'Next'.

	Data Pack	Monthly Data Allowed	Monthly Cost
	None	0 MB	\$0.00
☒	10GB Data Pack [DP-10GB-RL]	10,240 MB	\$48.00

Next

4. Accept the Terms and Conditions and click 'Subscribe'.

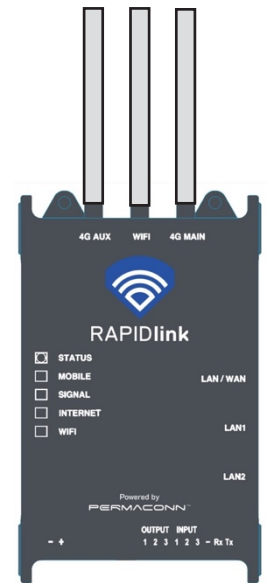
	Current Data Pack	New Data Pack
Name	None	10GB Data Pack [DP-10GB-RL]
Monthly Data Allowed (from next month)	0MB	10,240MB
Monthly Data Cost (from next month, excludes GST)	\$0.00	\$48.00
Data Allowed This Month (indicative)	0MB	10,240MB
Data Cost This Month (indicative, excludes GST)	\$0.00	\$48.00

☒ I have read and agree to Permaconn's terms and conditions.

Subscribe

5.5 Power-up the RAPIDLink device

1. Attach the three antennas to the 4G Main, 4G Aux and Wi-Fi connectors. The 4G antennas are different to the Wi-Fi antenna, and these need to be connected to correct colour-coded connector.
2. Apply 12v DC to the power supply terminals.
3. Wait for the device to complete its boot up sequence. The STATUS LED will blink green when ready.
4. Check that the device is receiving a 4G connection by checking that the MOBILE LED is green.
5. Check the 4G signal strength by referring to the SIGNAL LED.
 - a. Green – good signal strength.
 - b. Amber – moderate signal strength.
 - c. Red - poor signal strength – try relocating antennas to a different location or try a high-gain antenna (available separately). Signal strength is also displayed in the Portal.



5.6 Configure the RAPIDLink

RAPIDLink can be configured to support many different applications including:

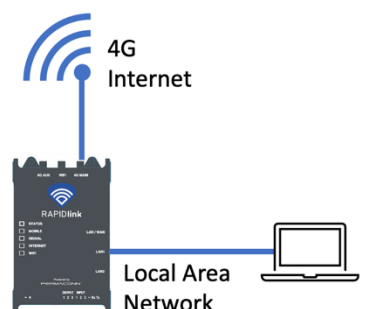
- 4G Internet Gateway to LAN.
- 4G Wi-Fi Hot Spot.
- Internet Gateway with 4G Failover.

Each of these scenarios is described below.

5.6.1 4G Internet Gateway to LAN

The RAPIDLink device will operate as a 4G Internet Gateway without any further configuration.

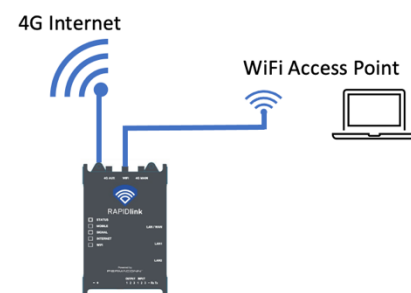
Simply connect the local device or network into the LAN1 or LAN2 port. RAPIDLink will provide the local device with an IP address via DHCP and route traffic to the Internet via the 4G wireless link.



5.6.2 4G Wi-Fi Hot Spot

To use the RAPIDlink as a Wi-Fi hotspot and allow local machines to access the internet:

1. Select the RAPIDlink from the Dashboard.
2. Click on the Wi-Fi tile.
3. Turn on Enable Wi-Fi.
4. Set the SSID network name.
5. Set a password to access the Wi-Fi access point.
6. Click Save.

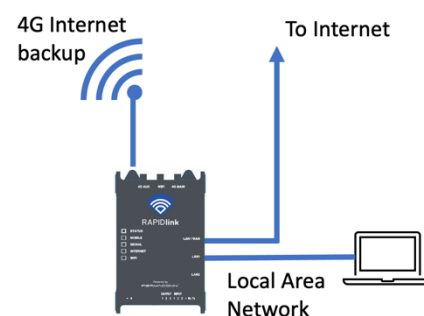


Local machines will now be able to see and connect to the new Wi-Fi access point.

5.6.3 Internet Gateway with 4G Failover

To use the RAPIDlink as an internet gateway that primarily uses an upstream Internet connection, but can failover to 4G:

1. Select the device from the Dashboard.
2. Click on WAN to configure the WAN settings.
3. Select Upstream Ethernet (using WAN port).
4. Select connection Automatically (Using DHCP).
5. Click Use DNS from upstream DHCP.
6. Click Save.



Devices connected to the LAN ports of the RAPIDlink device can be externally accessed via 4G port forwards using the DDNS service provided. To access a local device utilizing either the WAN connection or via 4G (high availability inbound connection) the device needs to be configured to connect to the Permaconn managed VPN service; contact our support team for further details.

To ensure that the RAPIDlink can connect and be managed by the Portal, ensure that the upstream Internet connection allows outbound connections on the following ports:

Port	Protocol
11443	TCP
55300	UDP
59682	UDP

6 Data Pooling

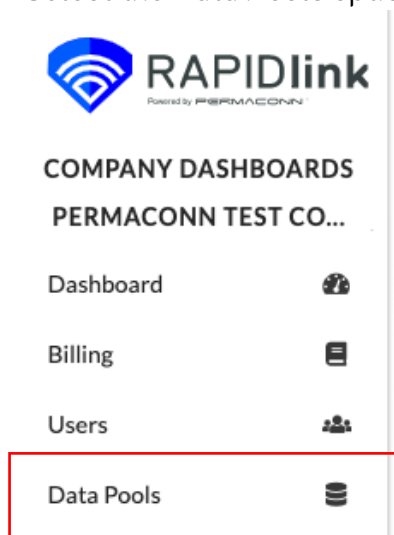
The Data Pooling feature allows multiple devices on the same size data pack to share their data across the pool.

When a device is in a Data Pool, it can use more than its allocated data so long as there is data available on other devices.

Note: when the data in a Data Pool is exhausted, all devices in that pool will stop transferring data until the pool is topped up, or the next month commences. To add more data to a Data Pool, simply top-up the data on any device in that pool

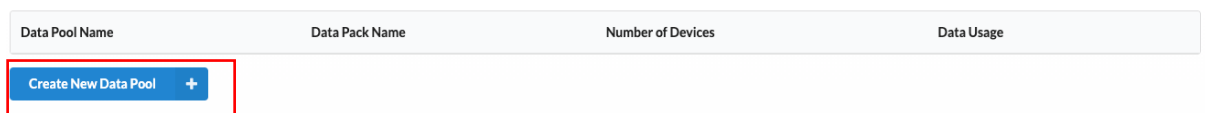
6.1 Create a Data Pool:

1. Select the Data Pools option in the menu:

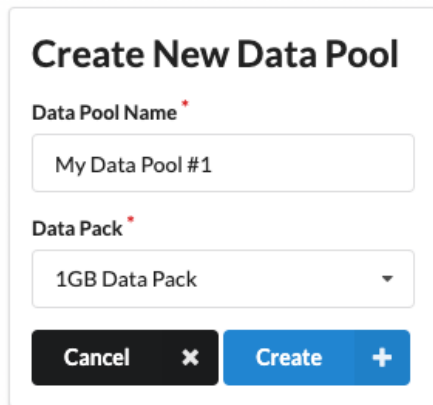


2. Click the Create New Data Pool button

Permaconn Test Company Data Pools



3. Give the new Data Pool a name to help identify it later and choose the size of Data Packs that this pool will contain. Data Pools can only pool data from Data Packs of the same size.



Create New Data Pool

Data Pool Name *

My Data Pool #1

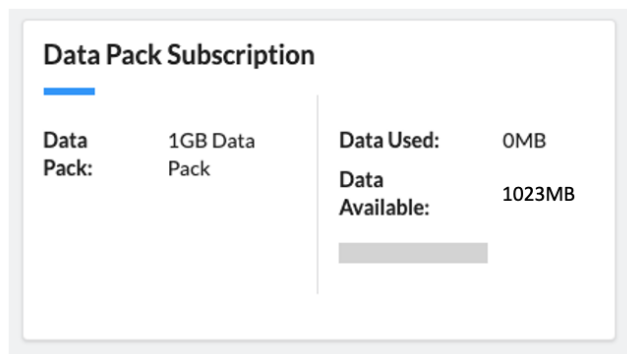
Data Pack *

1GB Data Pack

Cancel **Create**

6.2 Add devices to the Data Pool

1. Select the device you want to add to the Data Pool from the Dashboard page
2. Click on the Data Pack Subscription tile



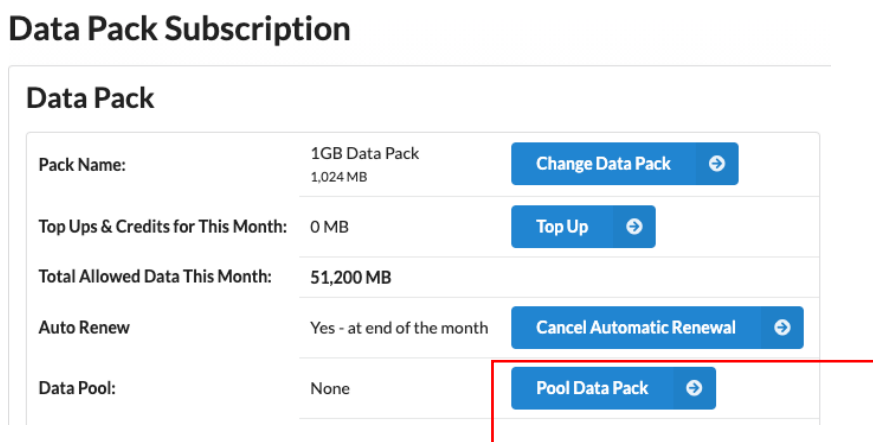
Data Pack Subscription

Data Pack: 1GB Data Pack

Data Used: 0MB

Data Available: 1023MB

3. Click on the Pool Data Pack option



Data Pack Subscription

Data Pack

Pack Name:	1GB Data Pack 1,024 MB	Change Data Pack
Top Ups & Credits for This Month:	0 MB	Top Up
Total Allowed Data This Month:	51,200 MB	
Auto Renew	Yes - at end of the month	Cancel Automatic Renewal
Data Pool:	None	Pool Data Pack

4. Select the desired Data Pool.

Note: you will only see existing Data Pools that have the same size as the Data Pack assigned to this device.

Add Device to Data Pool

Select Data Pool *

My Data Pool #1

☒ I acknowledge that by adding this device to the data pool that data may be consumed by other devices in the pool

Confirm

Back

7 Troubleshooting

7.1 RL10 - LED Status Indicators

RAPIDlink LEDs	Activity	Indication
STATUS	Green Flashing	Processor OK
	Red Flashing	Processor Rebooting
	Off	Processor Off / No power
MOBILE	Green Flashing	Data traffic on 3G/4G
	Green ON	No data traffic on 3G/ 4G but unit is connected
	Amber On	Available but on standby (not currently in use)
	Red On	Unit is offline/ Not connected
SIGNAL	Green ON	Good signal strength
	Amber On	Moderate signal strength
	Red On	Poor signal strength
	Off	No signal strength
INTERNET	Green Flashing	Data traffic on IP network (non-mobile)
	Green ON	No data traffic on IP but unit is connected
	Amber On	Connectivity issue (firewall, VPN, data-pack, etc)
	Red On	Unit is offline
WI-FI	Green ON	Wi-Fi AP mode connected with internet
	Amber On	Wi-Fi AP mode connected but no internet
	Red On	Wi-Fi AP mode enabled but not connected
	Off	Wi-Fi AP mode not enabled

7.2 Reboot the RL10

To reboot the RL10, either remove power or use a small screwdriver to press the Reset button in the Reset slot (see right)

Reset Slot



7.3 Factory Reset the RL10

To restore the factory setup on the unit:

1. Power up the RL10.
2. Use a small screwdriver to press the Reset button unit until all LEDs flash green together, this indicates a successful Reset.
3. Keep the device powered until the reset is complete and the STATUS LED returns to green.



For further information visit rapidlink.com,
call 1300 55 66 43 or email mail@rapidlink.com