

615M-1 Security

The ELPRO 615M-1 is a powerful Multi-Service Provider Cellular Broadband Router that delivers wireless data connectivity for up to two LAN connections and one serial port through both Public and Private cellular networks at 3G network speeds.

The ELPRO 615M-1 hosts a number of security features that can be implemented to ensure secure delivery of data across cellular networks. The security features supported by the 615M-1 listed below will vary in the requirement of use depending if the application is using either Public Cellular Networks or Private Cellular Networks.

- IPsec, GRE Tunnelling, PPTP - VPN, RADIUS/802.1x
- Port Forwarding
- MAC and IP Address Filtering
- MAC/ IP Filtering – Whitelist/Blacklist
- SIM Pin access requirements
- User Name and Password Access

With the use of the 615M-1 over Public Cellular networks which has access to the internet, it is recommended that to

secure the data from eavesdropping a high level of security such as 128Bit IPsec be implemented. The 615M-1 supports IPsec for use over Public cellular networks.

When the 615M-1 is being used over Private Cellular networks, the cellular provider blocks all internet connections preventing access via the internet or other cellular devices. A private cellular network only allows the network connectivity to authorised devices via the client account and use of GRE, PPTP - VPN or Port Forwarding can be used for data delivery.

Recommendations for adding security to a 615M-1 network are as follows,

- Implementation of Private Cellular Network with dedicated private APN which prevents unauthorised public access
- Utilize IPsec over Public Cellular Networks when required,
- Implementation of either GRE, PPTP or Port Forwarding for data delivery,
- Enable filtering to only allow defined host devices to connect over the network,
- Disable remote access to the 615M-1 over the cellular network,
- Enabling of SIM card PIN numbering,
- Enabling 615M-1 network access only to SIM cards with correct stored PIN,
- Strong user and password access procedures for configuration and modem access.
- Implement physical security for remote areas where modems may be unattended such as lockable cabinets

Each application can vary in use of either Public or Private Cellular Networks along with being in secure or remote environments. Not all of the above recommendations may need to be implemented to ensure a secure 615M-1 Cellular Network.

Amendment Register:

Issue No.	Date	Details of Amendment
1.0	19/06/17	Draft Issue
1.1	15/10/18	Elpro branding