

Tech Note: Using Comrex Connect Modems on IPV6 or IPV4 Only Networks

Comrex Connect Modems are a popular way to connect ACCESS codecs to 4G LTE networks worldwide. We've recently come across some networks in some countries that require the modems to communicate in a slightly different way than the default settings in our modem drivers. This tech note describes the symptoms of the issue, the settings, and how to adjust them.

The setting is the value the modem uses for "PDP" (Packet Data Protocol). The default value in our modems is "IPV4V6", meaning the modem is equipped to work both on IPV4 and IPV6 cellular networks. What we've found on some networks is the need for this value to be set to "IPV6" or "IPV4" only in order to transfer data successfully to the network.

The symptom of these settings being wrong:

- 1. Modem will show "registered" with the 4G network.
- 2. Switchboard will not show valid results, and codec calls will time out.

In codec firmware 4.5-p13 and above, it's possible to change the default PDP setting via the web interface or touch screen.

Image: Constraint Enabled Enabled Yes MC7455 Network Preference Automatic Image: Constraint of Const	P Type IP type used by network Current IPv4 onlv
Built-in Ethernet Port Name SIM termination Installed Enabled Dialing String *99 # Moi: F8:00:7A:12:4A:27 APN general-trmobile.uk Address: 192.168.111.201 IP Type IPV4 only Address: r6#00:fadci7aff:fe12:4a27 Region Northern Europe DMS Server: 192.168.111.1 Country United Kingdom Provider FMobile (general-trmob	Leave at modem default IPv4 only IPv6 only IPv4/v6

Fig. 1

Once a Comrex Connect modem is attached, open the Network Manager and navigate to the Connect Modem device (MC7455), Under the SIM settings, a new entry appears allowing you to change the PDP setting. Because this change will be preserved through power cycles, we recommend setting it back to the default IPV4V6 setting if the change doesn't help.