

Connect F-Series, FMD Series, and Nano-10 PLCs to a 3G Network for Remote Internet Connection

It is possible to connect any of our Ethernet PLCs (F-series, FMD series, and Nano-10) to a 3G router in order to connect to the Internet using a cellular network. One possible product is the D-Link DIR-450 3G Mobile Router, which is compatible with EV-DO Networks. Here is the product page for this item on the D-Link website :

<http://www.dlink.com/products/?pid=524>



Figure 1: Front View

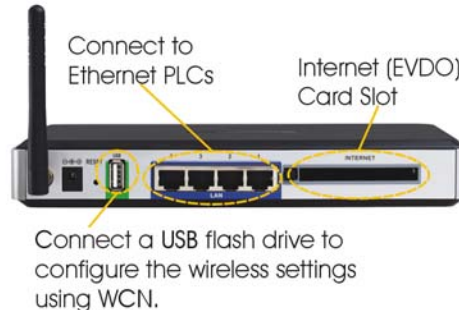


Figure 2: Back View

The DIR-450 provides 4 wired Ethernet ports, as shown in figure 2 above, for devices that need to be added to the 3G network. This means that up to 4 PLCs could be connected to the DIR-450 and connected wirelessly to the Internet through an available 3G-network tower, as portrayed in the following diagram.

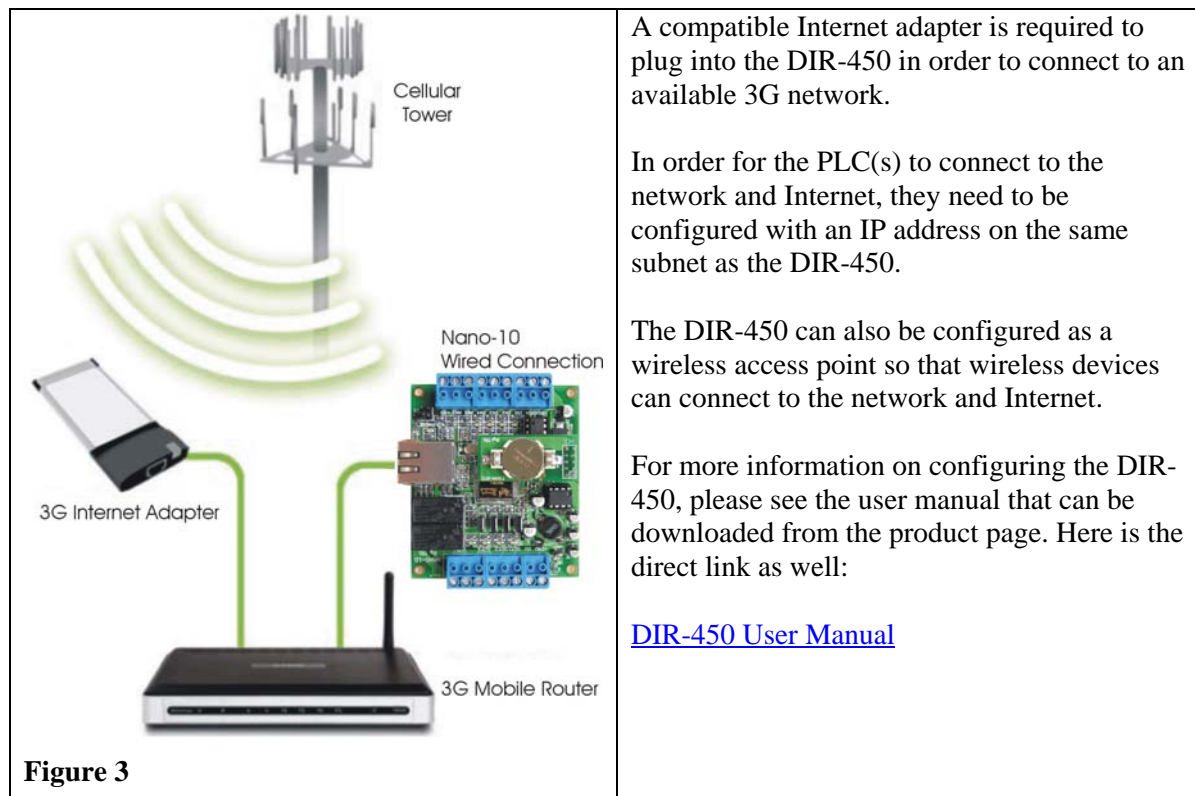


Figure 3

A compatible Internet adapter is required to plug into the DIR-450 in order to connect to an available 3G network.

In order for the PLC(s) to connect to the network and Internet, they need to be configured with an IP address on the same subnet as the DIR-450.

The DIR-450 can also be configured as a wireless access point so that wireless devices can connect to the network and Internet.

For more information on configuring the DIR-450, please see the user manual that can be downloaded from the product page. Here is the direct link as well:

[DIR-450 User Manual](#)

Another possible product is the Cradlepoint CTR350 Mobile Router, which is compatible with HSPA and EV-DO Networks. Here is the product page for this item on the D-Link website :

<http://www.cradlepoint.com/products/ctr350-mobile-broadband-travel-router#>

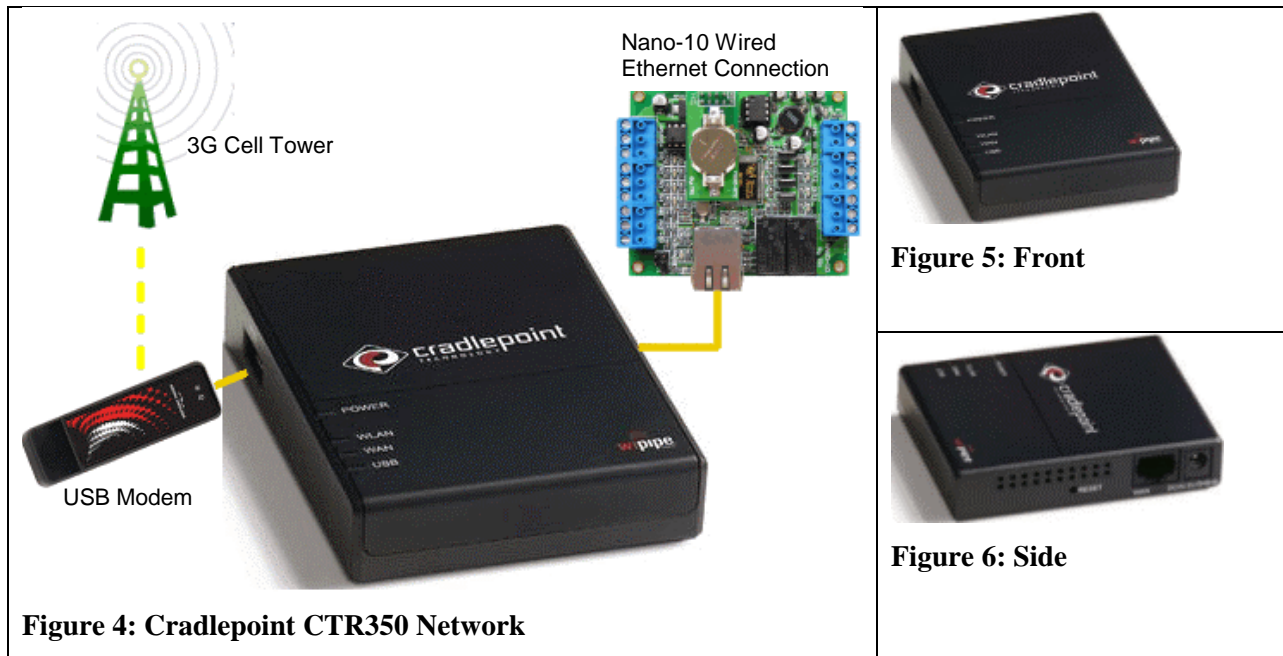


Figure 4: Cradlepoint CTR350 Network

Figure 5: Front

Figure 6: Side

A compatible USB Internet adapter or cell phone with tethering service is required to plug into the CTR350 in order to connect to an available 3G network.

There is only a single Ethernet connection on the CTR350, but there should not be any need to configure the PLC for connection, so it should connect automatically.

The CTR350 can also be configured as a wireless access point so that wireless devices can connect to the network and Internet.

For more information on configuring the CTR350, please see the datasheet and quick start guide that can be downloaded from the product page. Here are the direct links as well:

[Data Sheet](#)
[Quick Start Guide](#)

You may also wish to view chapter 2 of the user manual for any of the above-mentioned PLCs for information on configuring/utilizing the built-in Ethernet. The user manuals can be downloaded from the documentation page on the Triangle Research Website at the following link :

<http://www.tri-plc.com/documentlist.htm>