

## APPLICATION NOTE 04

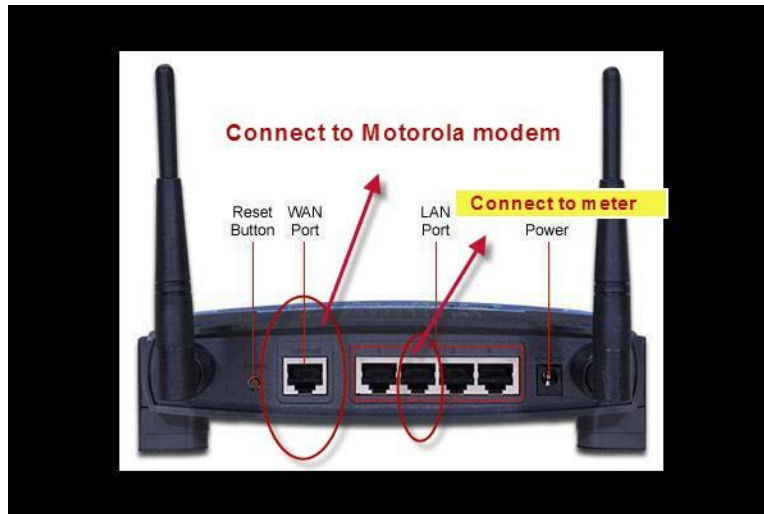
### How to make the meter Internet accessible with a Cable Modem

Motorola Cable Modem with single Ethernet port **does not have routing ability**. A router is required to forward the meter's ports onto a router for public access.

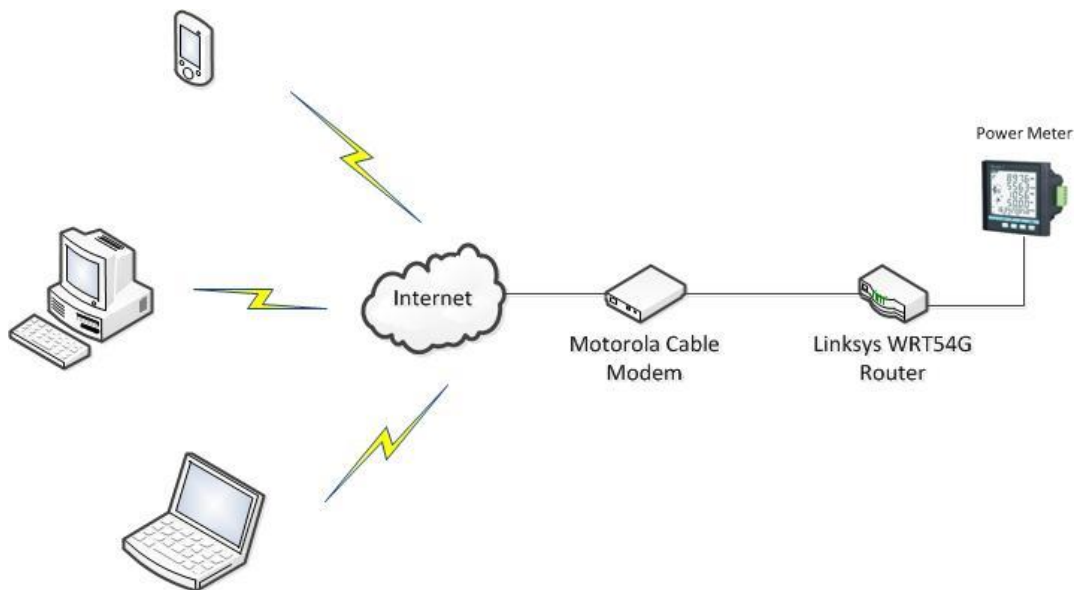


The following figure is a typical router (Linksys WRT54G) used for this application. This router also has wireless access to allow computers to connect to it wirelessly. After set it up as the figure shows, a connection of “Motorola Modem – WRT54G Router – Power Meter” will be made.

The power meter DHCP can be set as AUTO, and the power meter will be assigned an IP address, Subnet Mask, Gateway by router WRT54G. If the power meter DHCP setting configured as MANUAL, an IP address, Subnet Mask, Gateway needs to be correctly hardcoded according to the router setup.



If the Motorola modem assigns the router a public IP address (externally accessible), the following scenario will be available when the power meter ports are forwarded to the router.



Here is about how to do the port forwarding. A computer that is connected to the same router will be required. Assuming WRT54G IP address is 192.168.1.1, log onto the router by typing 192.168.1.1 in a web browser of the computer, and forward the power meter's Modbus port and HTTP port to the modem. The private IP address of the meter is forwarded to the router's public IP address, as well as the meter's HTTP port 80 and Modbus port 502.

Port Range Forward

Wireless-G Broadband Router WRT54G

Applications & Gaming

Setup Wireless Security Access Restrictions Applications & Gaming Administration Status

Port Range Forward | Port Triggering | DMZ | CoS

Port Range Forward

Port Range					
Application	Start	End	Protocol	IP Address	Enable
HTTP	80	to 80	Both	192.168.1.254	<input checked="" type="checkbox"/>
MODBUS	502	to 502	Both	192.168.1.254	<input checked="" type="checkbox"/>
	0	to 0	Both	192.168.1.0	<input type="checkbox"/>
	0	to 0	Both	192.168.1.0	<input type="checkbox"/>
	0	to 0	Both	192.168.1.0	<input type="checkbox"/>
	0	to 0	Both	192.168.1.0	<input type="checkbox"/>
	0	to 0	Both	192.168.1.0	<input type="checkbox"/>
	0	to 0	Both	192.168.1.0	<input type="checkbox"/>
	0	to 0	Both	192.168.1.0	<input type="checkbox"/>
	0	to 0	Both	192.168.1.0	<input type="checkbox"/>
	0	to 0	Both	192.168.1.0	<input type="checkbox"/>

Port Range Forwarding:  
Certain applications may require to open specific ports in order for it to function correctly. Examples of these applications include servers and certain online games. When a request for a certain port comes in from the Internet, the router will route the data to the computer you specify. Due to security concerns, you may want to limit port forwarding to only those ports you are using, and uncheck the Enable checkbox after you are finished.  
[More...](#)

Save Settings Cancel Changes

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