MoCA/Docsis Passive

TARGET AUDIENCE

All Fulfillment Technicians (In Deployment & Trained Markets)

OVERVIEW

As we continue to extend our MoCA network in a customer's home, we want to be conscientious about the way we configure their in-home network. We will be trialing and testing out a new MoCA compliant splitter in an effort to extend our MoCA network with no need for Power and/or a POE MoCA Filter (Resonator) during the installation. These new MoCA splitters can be used on installations where we are installing XB3/XB6 Gateways, XG1/XG2 Controllers, and Xi-3/Xi-D Terminals in a customer's home. Allowing us to create a centralized MoCA network in a customer's home.

MoCA SPLITTER SCOPE

The Extreme IPGH3M4-VF MoCA/Docsis Passive Splitter is designed with very low Port-to-Port isolation between MoCA ports and isolates MoCA signals from the traditional CATV frequencies on the Input and RF Output Ports. The MoCA/Docsis Passive Splitter communicates with the MoCA Only Clients using the MoCA frequencies from 1125 MHz - 1675 MHz; where there is no need for traditional CATV frequencies (5 - 1002 MHz) between devices connected to the MoCA ports. Traditional downstream (54-1002 MHz) and upstream (5-42 MHz) communication is still maintained between the Input port and the three MoCA/Docsis ports. The Input port is isolated from the MoCA frequencies so no external MoCA POE Filter (Resonator) will be needed during the installation.

FEATURES & SPECIFICATIONS

- MoCA Gateway Network Compatible
- 5-1002 MHz between IN to Hybrid1, 2 and 3 Ports.
- 1125 -1675 MHz between Hybrid1, 2, 3 and MoCA1, 2, 3 and 4 Ports
- Low Port - to - Port Isolation between Hybrid1, 2, 3 and MoCA1, 2, 3 and 4 Ports
- Eliminates the need for a POE Filter (Resonator)
- True Flex Housing; UL Listed
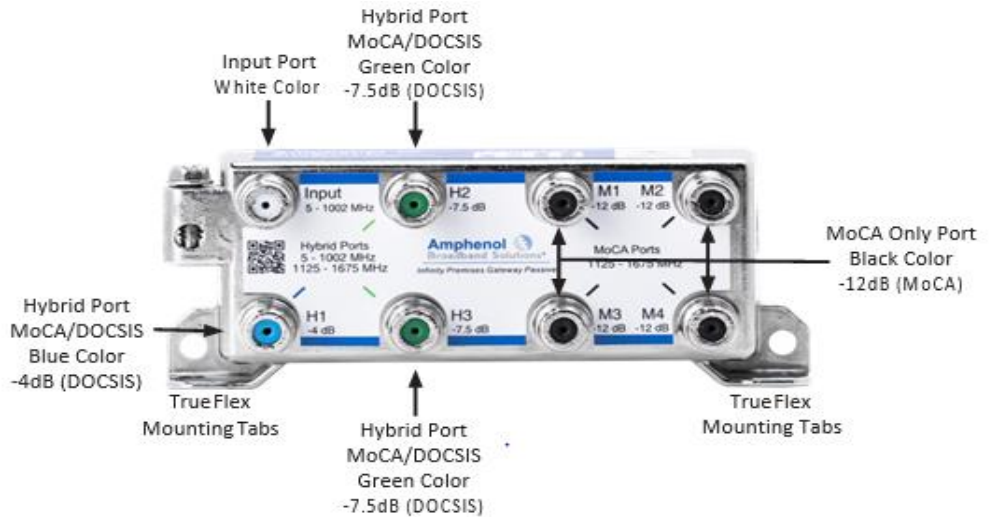- Color Coded Ports with Port Attenuation Labeling;

BENEFITS OF USING THIS UNIT

» No Power needed to install, this unit is completely 100% Passive.

» You only need enough RF Signal for a 3-Way splitter to properly service 3 DOCSIS RF devices and 4 MoCA Only Xi-Devices.

» No need to use an external POE Filter, one less point of failure because the Resonator is built into the unit.

» MoCA Only ports mitigate noise by design because they do not allow any signal below 1125 MHz to feed back into the DOCSIS/MoCA ports.

MoCA/DOCSIS PASSIVE LAYOUT

Below is a quick layout of the unit's ports description and the color-coding for easy port identification.

MoCA/DOCSIS PASSIVE SIGNAL FLOW

- Every port on the unit has the capability of communicating with one another via MoCA

- The input port as you can see; blocks any MoCA transmission from escaping because of the built in MoCA Resonator (POE Filter)

- The only ports that have Min / Max RF Docsis threshold requirements are H1, H2, and H3

- Ports M1 thru M4, only rely on MoCA frequency transmissions; and are not subject to the traditional RF Docsis Signal restraints
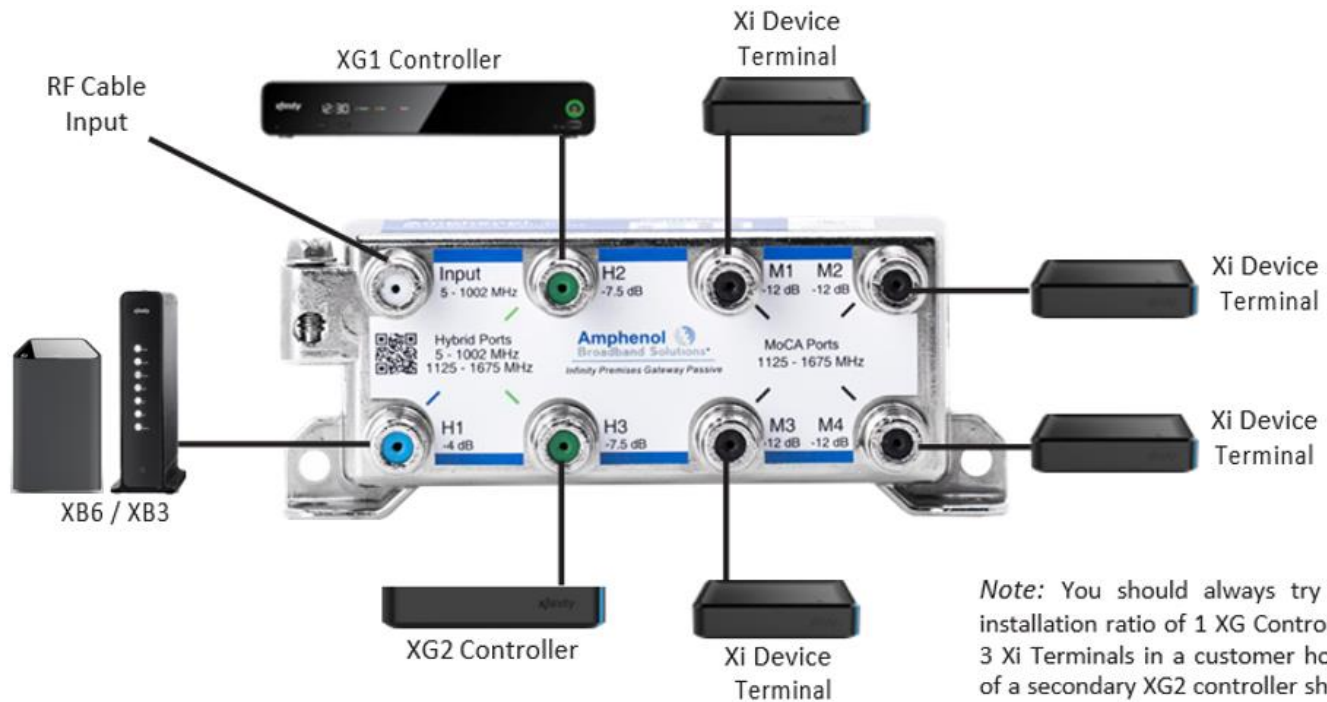

= DOCSIS 5 - 1002MHz

= MoCA 1125 - 1675MHz
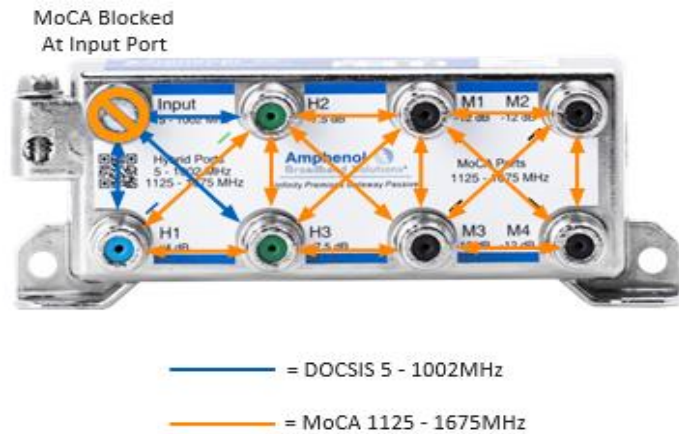
MoCA/Docsis Passive Video Tutorial: https://youtu.be/wAS9CfmUbf4

X1 DVR Installation with a XG1 Controller, 3 Xi-Terminal Devices, and an XB Gateway
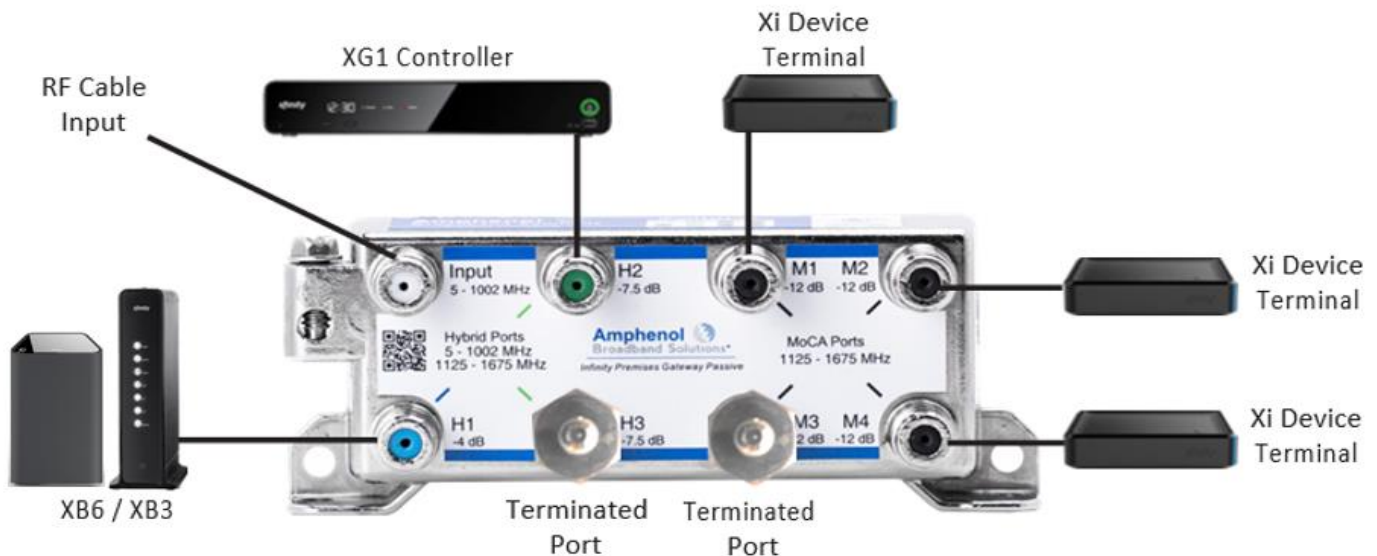
X1 DVR Installation with a XG1 and XG2 Controller, 4 Xi-Terminal Devices, and an XB Gateway

Note: You should always try to have an installation ratio of 1 XG Controller for every 3 Xi Terminals in a customer home. The use of a secondary XG2 controller should be used if the need more than 3 Xi Terminals.

X1 DVR Installation with a XG1 and XG2 Controller, 6 Xi-Terminal Devices, and an XB Gateway
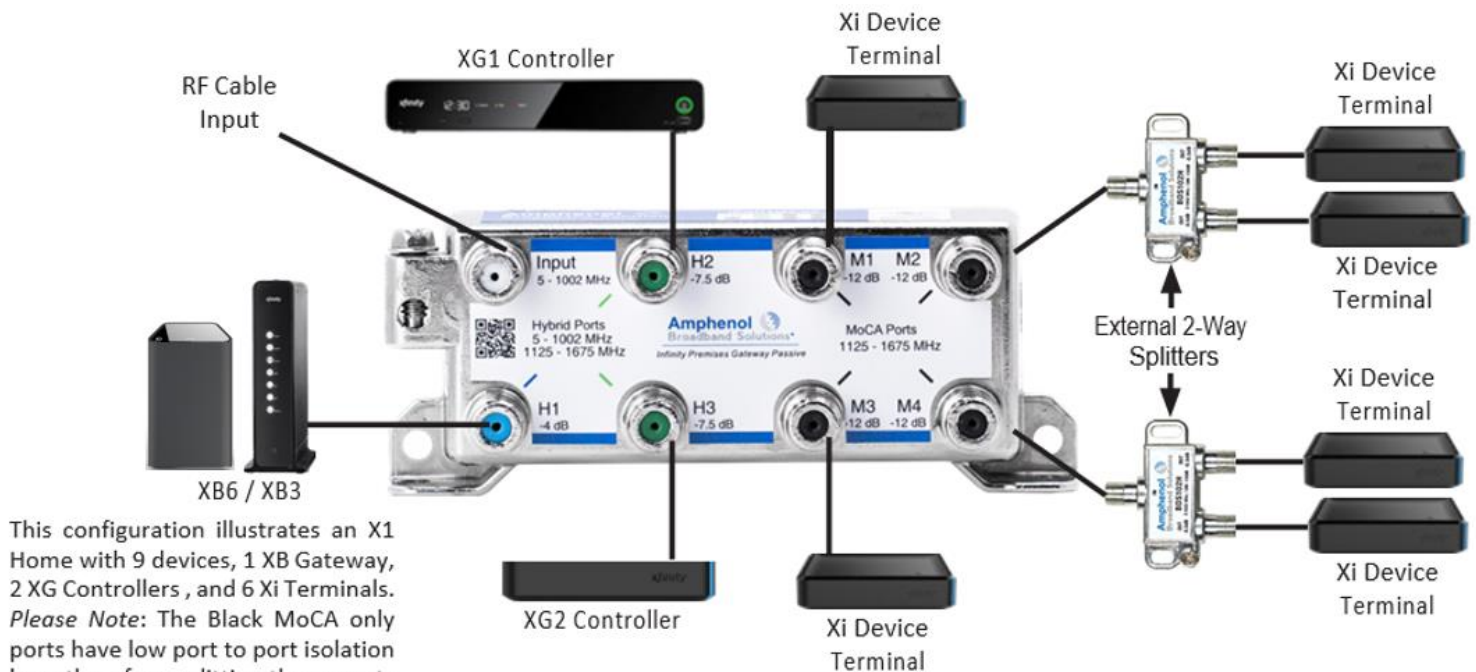
This configuration illustrates an X1 Home with 9 devices, 1 XB Gateway, 2 XG Controllers , and 6 Xi Terminals. *Please Note*: The Black MoCA only ports have low port to port isolation loss; therefore splitting those ports will have minimal to no impact on the Xi Terminals.

WHAT SHOULD SUPERVISORS DO WITH THIS INFORMATION?

Please discuss this at your next team meeting and review all of the different installation use cases for this new unit. Encourage your technicians to follow the proposed configuration methods when using this MoCA-Passive unit.

Additionally, please ensure technicians are using the proper "**AM4**" resolution code to close out a work order when one of these units is installed; following our (CCV) Custom Configuration Visibility guidelines.