

## CASE STUDY



## SAVE TIME AND COSTS USING G.HN POWERLINE TO DEPLOY VIDEO

*Upscale community receives Whole-Home DVR offering using the existing power lines.*



**TELCO  
SERVICE  
PROVIDER**

INDUSTRY



CUSTOMER

**SUMMIT  
BROADBAND**



REGION

**CENTRAL AND  
SOUTHWEST  
FLORIDA**



SOLUTION

**COMTREND G.HN  
POWERLINE  
NETWORKING**

## AT-A-GLANCE



Summit Broadband is a leading fiber-optics telecommunications provider in Central and Southwest Florida. The company provides voice, video, data and high-speed internet services to commercial and residential customers, as well as Ethernet and dark fiber transport to enterprise and carrier customers.

### CHALLENGE

Summit Broadband was looking to upgrade an existing community to whole-home DVR powered by TiVO. They needed a faster deployment method than installing Ethernet Cable, and a more reliable connection than older Powerline technologies.

### SOLUTION

#### Comtrend's PG-9172PT G.hn Powerline Adapter

Powerline technology utilizes the existing electrical wiring to bring Ethernet connectivity to hard-to-reach locations, thus reducing the need to install Ethernet cabling. G.hn is the latest standard in Powerline, and boasts the latest technologies to deliver higher speeds with greater stability.

## CASE STUDY



## SOLUTION

### Product:

Comtrend matched Summit Broadband's unique set of needs with their premium PG-9172PT G.hn Powerline Adapter.

The PG-9172PT utilizes the existing power lines to bring an Ethernet connection anywhere there is an outlet. This was ideal for the DVR connection, because it would already need to be near an outlet to be powered.

Unlike older Powerline of the past, G.hn Powerline utilizes the latest technologies and standards like NDIM noise mitigation and LDPC/FEC error correction for higher speeds and greater stability.

## BACKGROUND

Summit Broadband was looking to upgrade an existing community to whole-home DVR, and needed a better way to deploy the solution. They were seeking an alternative option to retrofitting the community and running Ethernet cable throughout the home, which is both time-intensive and costly. Powerline technology was of interest, because it provided a hard-wired connection wherever an outlet was located, but previous Powerline technologies had not shown promising results.

### Requirements:

- Summit Broadband wanted to use a hard-wired connection for the DVR in order to provide the highest quality experience for the user.
- The solution needed to be faster than installing Ethernet Cable, and more reliable than older Powerline technologies.

**"Comtrend's G.hn Powerline offer excellent reliability and throughput. We tried other competing products, and they just didn't compare. Once we received the units, Comtrend went above and beyond to support us in ensuring our customers had the best experience."**

**FLO BULANHAGUI  
SUMMIT BROADBAND  
SENIOR VICE PRESIDENT,  
ENGINEERING**

## CASE STUDY

## SOLUTION

### Continuous Enhancements: Remotely Keeping Customers Connected

Summit Broadband has deployed Comtrend's G.hn Powerline solution in over 1,500 homes, and since then Comtrend has provided continued enhancements post-install. Comtrend collaborated with Summit Broadband's engineering to **create a custom code that increased uptime and reduced support calls**. Based on the collaboration and discussions, improvements were made that aided in keeping customers connected and happy as well as reducing support calls.



Further, Comtrend worked with Summit Broadband to provide access to their free ACS Central service for help with remotely upgrading units in the future, should it be necessary. Comtrend also **developed a Statistics Page within the User Interface** for Summit Broadband to gain further insight into connectivity specifics such as packet errors, link rates, and uptime. This allowed for **proactive and remote problem solving**.

## PRODUCT OVERVIEW



### PG-9172PT

- G.hn Speeds | Up to 1200Mbps
- Gigabit Ethernet Port
- AES 128 Bits Encryption
- Pass Through Outlet
- TR-069 Support

### EVERY OUTLET BECOMES AN ETHERNET CONNECTION





## CASE STUDY

## BENEFITS & FEATURES



SAVED TIME AND  
COSTS ON INSTALLS



REACHED REMOTE  
LOCATIONS



ENHANCED VIDEO  
PERFORMANCE



MANAGED UNITS  
REMOVEDLY

## G.HN OUT-PERFORMS THE COMPETITION

Advantages	Comtrend's G.hn	HomePlug AV2 MIMO	HomePlug AV/AV2 SISO
<b>Reliably Crosses Electrical Phases</b> MIMO Dual Phase Technology & LDPC	✓	✗	✗
<b>Better <i>Real World</i> Performance</b> Unique G.hn Algorithms	✓	✗	✗
<b>Optimizes Video Streaming</b> LDPC/FEC Error Correction Technology	✓	✗	✗
<b>Performs Well in MDU's</b> (i.e. Apartments, Condos etc.) NDIM Signal Segregation Technology	✓	✗	✗
<b>Higher Speeds and Greater Stability</b> MIMO Dual Phase Technology	✓	✓	✗

## RESULTS

Summit Broadband now has an efficient and reliable solution to provide connectivity for their whole-home DVR offering. Since Comtrend's G.hn Powerline uses the existing electrical lines, they saved both time and money eliminating the need to install new wiring. Additionally, now that an ACS is setup, the G.hn Powerline Adapters will be remotely upgradeable, should it ever be necessary.

