



# Astound Broadband Partners With Calix To Expand Fiber Broadband

## The Challenge

Astound Broadband (Astound) is a cable multiple-systems operator (MSO) that began providing services in the late 1990s via acquired companies, including Wave Broadband, RCN, and Grande. Astound is now the sixth-largest cable operator in the country—operating in 12 states and eight of the top 10 metro markets nationwide, with 4.2 million homes passed and 1.1 million subscribers.

Astound has been edging out its networks for over a decade to reach new neighborhoods adjacent to its existing footprint. They started with hybrid fiber-coaxial (HFC) then transitioned to fiber-to-the-home (FTTH) builds starting with a Gigabit Passive Optical Network (GPON) for residential and commercial subscribers.

Embracing fiber was a critical move, and Astound builds over 100,000 units each year with the ability to scale as they choose. However, they recognized that GPON was not enough, and their priority was to upgrade their GPON network to a 10 Gigabit Symmetrical Passive Optical Network (XGS-PON) and also continue to pursue edge-out markets and greenfield expansion projects. Astound needed a partner who could scale as they continue to expand their fiber footprint via an edge-out strategy without any disruptions to their existing HFC and GPON networks.

Astound wanted to shift their FTTH strategy to XGS-PON to upgrade aging network infrastructure and to compete more effectively both in and out-of-market.



### COMPANY

Astound Broadband  
(RCN, Grande Communications,  
and Wave Broadband)

### BUSINESS TYPE

Cable MSO

### WEBSITE

[www.astound.com](http://www.astound.com)

### HQ

Princeton, New Jersey

### MARKETS

California, Illinois, Indiana,  
Massachusetts, Maryland,  
New York, Oregon, Pennsylvania,  
Texas, Virginia, Washington,  
and Washington D.C.

### SERVICES

Internet, Mobile, TV &  
Streaming, and Phone

### SUBSCRIBERS

1.1 million



## Case Study

### The Solution

After evaluating vendor PON solutions, Astound partnered with Calix, who already serviced their GPON network. With an embedded GPON base in their FTTH network, Astound needed to manage the XGS-PON network in tandem with GPON. This scenario lessens the impact not only on Astound but on existing FTTH customers, too.

With Calix, Astound is running GPON and XGS-PON systems simultaneously without changing equipment at the customer's home. Astound is deploying Calix XGS equipment in a multi-plan solution so they can support their existing GPON ONTs and start offering XGS ONTs into those environments going forward.

Calix can scale quickly, allowing Astound to upgrade their network without interruption. By running both GPON and XGS-PON at the same time, the upgrade has not been intrusive on customers. Equipment change-outs are not necessary until the customer decides to upgrade. In addition to the migration of GPON to XGS deployments with Calix, Astound is also leveraging Calix XGS-PON solutions for all edge-out and greenfield expansion projects.

As Astound continues to evolve, they know they can rely on Calix to be responsive and flexible, to support planned growth both in footprint and (potentially) out of footprint. Partnering with Calix, Astound is positioned to continue to grow beyond their annual run rate of 100,000 new incremental homes passed.

### The Results

Astound Broadband is upgrading 260,000 homes to XGS-PON. Everything on their FTTH networks will be 10 Gbps capable, including the ONTs. They still have a hybrid network topology, including 86 percent as HFC and 14 percent as FTTH.

There is no "one size fits all" network technology. Being able to use their HFC and GPON networks without interruption as they upgrade to XGS-PON means no Astound customer is left with a poor internet experience. This experience is critical, as Astound recognizes that subscriber experience is an important differentiator against multiple competitors.

Calix has continued to be a trusted partner, helping Astound effectively and efficiently execute their FTTH strategy to:

- **Overlay their current GPON network to XGS-PON**
- **Manage GPON and XGS-PON networks simultaneously**
- **Continue edge-out and greenfield expansion strategies**

As they continue to expand their fiber footprint with Calix, Astound will be able to more effectively compete in their markets, provide subscribers an optimal broadband service, and deploy a future-proof network to better serve residential, business, and MDU segments.

**Want to learn more? Set up a [consultation](#).**

*"With Calix, we can seamlessly operate GPON and XGS-PON systems simultaneously, enabling a smooth transition without requiring an immediate equipment change at the customer's home. This approach empowers customers with the flexibility to upgrade to higher speeds on their terms, ensuring a superior experience without disruption."*

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**Patrick Murphy,**  
**EVP and CTO of**  
**Astound Broadband**

### Results

- Overlaying GPON network with XGS-PON
- Running GPON and XGS-PON networks simultaneously
- Upgrading 260,000 homes to XGS-PON

