

The 7 most important cable technologies for 2021

With bandwidth demand at an all-time high, now is the time to get familiar with new solutions that can increase network capacity and keep subscribers connected. Here are the technologies you should have on your radar this year.

1 Mid and High-Split

37%

INCREASE

peak upstream bandwidth utilization



The rise of video conferencing, telehealth, and video sharing is accelerating the need to allocate more spectrum to the upstream. Look for the mid and high-split to come on strong this year.



2 Distributed access architectures

10G
SERVICE
EVOLUTION

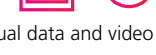
2021 is the year we take a major step toward 10G services. Look for operators to move up to remote PHY and remote MACPHY to add capacity, optimize the headend, and prepare for virtualization.



3 Headend virtualization

ELASTICITY
AGILITY
SCALABILITY

In 2021, we'll start to see today's rigid, hardware-based headend infrastructure evolve to a more dynamic virtualized architecture. For operators, that means more flexibility and lower costs.



Virtual data and video core



Virtual management plane

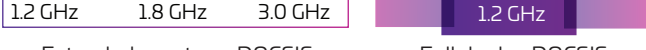
4 DOCSIS 4.0

6 Gbps upstream



10 Gbps downstream

With the release of the DOCSIS 4.0 specification in 2020, operators turned their thoughts to gigabit services. In 2021, they'll turn those thoughts into action and begin making critical preparations for deployment.



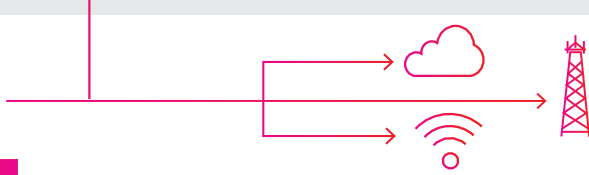
Extended spectrum DOCSIS

Full duplex DOCSIS

5 Passive optical networking

**SYMMETRICAL
BANDWIDTH**

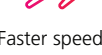
Cloud-based applications, mobile backhaul, and increased utilization are driving traffic in both the upstream and downstream. PON is a great option in 2021 for operators that need to support symmetrical, multi-gigabit services.



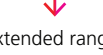
6 Wi-Fi 6/6E

Wi-Fi is getting a boost in 2021 with Wi-Fi 6 and Wi-Fi 6E. These technologies are poised to significantly improve Wi-Fi performance and reliability throughout the home.

4X FASTER THAN WI-FI 5



Faster speed



Extended range



Superior experience

7 Low-latency DOCSIS

For some subscribers, a low ping means everything. That's why low-latency DOCSIS is so exciting. It promises a round-trip delay as low as 5 ms for latency-sensitive AR, VR, gaming, telemedicine, and financial applications.

5ms

Round-trip delay in the DOCSIS network



Want to learn more about the top solutions and considerations for operators in 2021?

[Read the new report](#)