

FACTSHEET

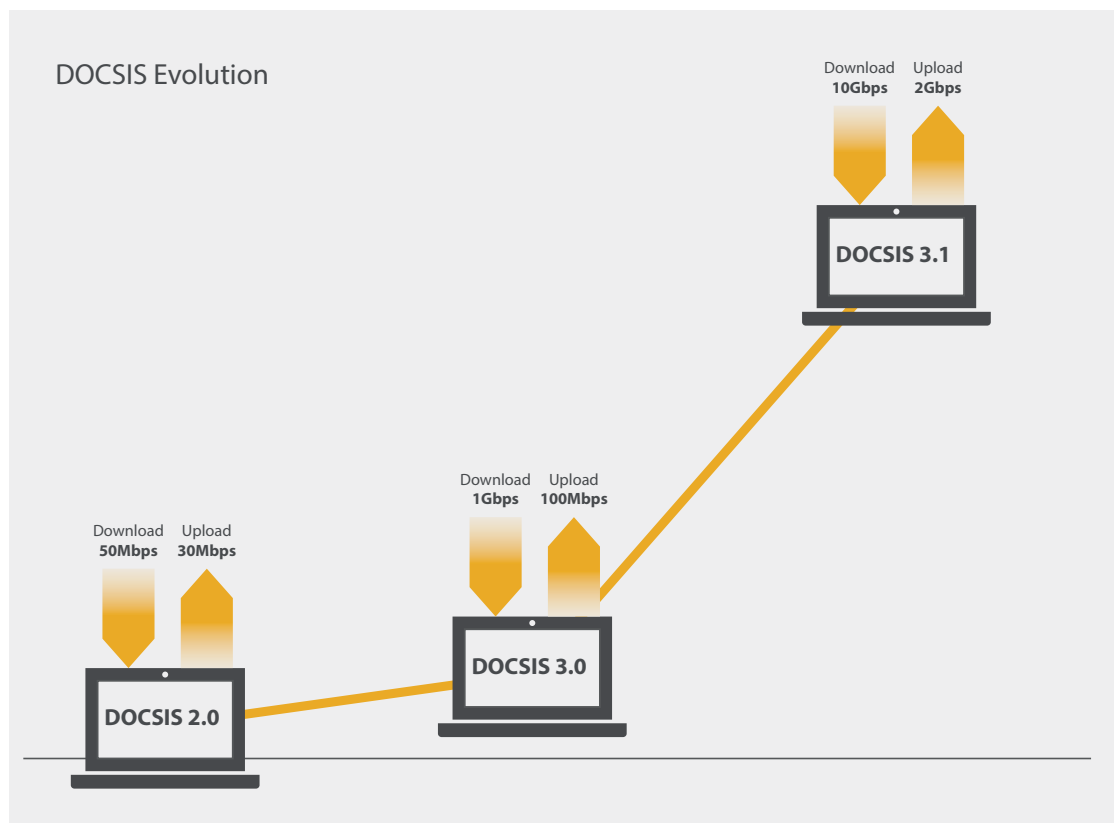
DOCSIS and DOCSIS 3.1

DOCSIS stands for Data Over Cable Service Interface Specification. It's an international telecommunications standard which enables the addition of high-bandwidth data transfer to an existing cable system which was traditionally dedicated to TV and dial-up internet. The earliest version of DOCSIS was introduced in 1997.

DOCSIS 3.1 is the most recent of these technical specifications, which will enable a new generation of cable services, allowing cable operators to meet future consumer demand for high speed connections and advanced applications.

The specification was launched by CableLabs, the nonprofit research and development consortium for the cable industry, in October 2013. Since then, extensive interoperability tests have been undertaken, and the first products are expected to reach market during 2015.

DOCSIS 3.1 is an evolution of the successful DOCSIS and EuroDOCSIS specifications 1.0, 2.0 and 3.0, and introduces a new generation of high speed hardware that can deliver up to 10Gbps broadband speeds on Hybrid Fibre-Coax (HFC) networks.





Key features building upon the previous specifications include:

Speed	Up to 10 Gbps downstream and up to 2 Gbps upstream network capabilities
Quality of Experience	Dramatically improved responsiveness for applications such as online gaming
Higher Capacity	Enables a significant increase in network capacity with the ability to transmit up to 50 percent more data over the same spectrum, on existing HFC networks and resulting in cost per bit reductions
Energy Efficiency	Enhancements to the DOCSIS protocols will increase cable modem energy efficiency
Flexible Migration Strategy	DOCSIS 3.1 modems are designed to co-exist with older versions enabling incremental deployment based on market demand

In partnership with global members, CableLabs has provided a unified DOCSIS specification incorporating the features and technologies required by North American and European operators with anticipated adoption by Asian operators. This new global platform will support the development and roll out of innovative and competitive market solutions that can scale across cable operators worldwide.

The majority of cable networks in Europe (covering 50% of households in Europe) have already been upgraded to DOCSIS 3.0, with commercial broadband offers of 250 Mbps and even 500 Mbps already available to customers. The roll-out of DOCSIS 3.1 will bring cable networks to the next, future-proof level.

Introducing Gigasphere



Gigasphere is the consumer facing name for products and services that will flow from the technology spawned by DOCSIS 3.1. Gigasphere is a category name, used to encompass the DOCSIS 3.1 platform itself as well as the many products and services which the technical specification will enable. As the cable industry transitions from DOCSIS 3.0 to DOCSIS 3.1, cable companies are adopting this consumer branding. Over time, Gigasphere will establish widespread use.

DOCSIS: Before and After

