

# Cisco Catalyst Multigigabit Technology

## Keep Up with Network Demands Quickly and Easily

The best user experience is the ultimate goal for all businesses. A delightful customer experience will have direct revenue impact. A seamless employee experience will improve productivity. In this digital age, technology is the medium to drive customer and employee experience, and IT is tasked with this difficult challenge.

The challenge is made harder as more and more bandwidth-hungry, cloud-based applications become the norm. Add the explosion of connected devices and the need for mobility and connectivity everywhere, and the demands are compounded. While next-generation wireless technology such as Wi-Fi 6 (802.11ax) and Wave 2 (802.11ac) solves part of the problem by providing higher bandwidth to the user, it exposes another issue as these technologies push the threshold of the capacity of your wired infrastructure. In fact, next-generation wireless data rates will likely exceed that capacity. Traditional Cat5e/6e wired Ethernet infrastructure can support speeds up to 1 Gigabit per second (Gbps), but today's technology drives much more traffic per Access Point (AP). One option is completely replacing your legacy cabling infrastructure and upgrading your hardware. But wouldn't it be better to increase network speed and traffic capacity in a way that's quick, inexpensive, and efficient?

Cisco® Catalyst® Multigigabit Technology switches offer just that: an easy-to-deploy, budget-friendly solution that allows you to increase network speed and bandwidth using your existing cables. By partnering with other industry leaders to form the NBASE-T Alliance, Cisco uses NBASE-T technology to help you get more out of your existing infrastructure. Save time and money by avoiding upgrades and extending the life of your installed cable plants. And discover the benefits of meeting consumer demand for increased bandwidth and speeds without a large initial investment.

## Benefits

- **Increase network bandwidth and speed** without running multiple cables between switches and access points.
- **Lower operational costs** by getting more performance out of existing cabling infrastructure.
- **Power devices that require up to 90W**, at speeds over 1 Gbps, even at 10G BASE-T rates.

## Next steps

For more information about integrating Cisco Catalyst Multigigabit Technology switches into your network, visit <https://www.cisco.com/go/multigigabit>.

## Cisco Services

Successfully deploy, manage, and support Cisco Catalyst 9000 switches with a full life cycle of Cisco Services including implementation, optimization, technical, managed and training services. Our team of experts can help you speed deployment, reduce costs and minimize risk as you introduce new hardware, software and protocols into the network.

[Learn more about Services for Switches](#)

Table 1. Cisco Catalyst Multigigabit Technology Supports New Intermediate Network Speeds

Cable	1 Gbps	2.5 Gbps	5 Gbps	10 Gbps
Category 5e	✓	✓	✓	Not supported
Category 6	✓	✓	✓	✓ (55m)
Category 6a	✓	✓	✓	✓

## Cisco Next-Generation Mobility Campus-Ready Portfolio

Cisco Catalyst Multigigabit Technology uses capabilities in your existing cabling infrastructure to meet bandwidth requirements of 802.11ax (Wi-Fi 6) and 802.11ac Wave 2 and provide up to five times the performance. The technology enables intermediate data rates of 2.5 and 5 Gbps to ease the jump between traditional rates of 1 Gbps and 10 Gbps. These intermediate rates run on the majority of installed cables and preserve legacy UTP wiring.

The technology also supports Power over Ethernet (PoE) forms, including PoE, PoE+, UPOE and UPOE+. Cisco Catalyst Multigigabit Technology switches help you avoid having to run multiple cables between switches and access points and let your networks welcome next-generation traffic speeds and data rates.

Cisco Catalyst Multigigabit Technology Switches along with Cisco Catalyst and Aironet® Access Points provide an end-to-end solution that allows to meet your growing IT demands.

The Cisco Multigigabit Portfolio includes:

- **Cisco Catalyst 9400 Series Switches:** Modular switches up to 384 Multigigabit ports
- **Cisco Catalyst 9300 Series Switches:** Stackable switches with 24 or 48 Multigigabit ports
- **Cisco Catalyst 4500E Series Switches:** Modular switches with up to 96 Multigigabit ports
- **Cisco Catalyst 3850 Series Switches:** Stackable switches with 12 or 24 Multigigabit ports
- **Cisco Catalyst 3650 Series Switches:** Stackable switches with 8 or 12 Multigigabit ports
- **Cisco Catalyst 3560-CX Series Switches:** 8-port switch with 2 Multigigabit Ethernet ports
- **Cisco Catalyst Digital Building Series switches:** 8 port switch with 2 Multigigabit ports
- **Cisco 350 Series Switches:** Stackable switches with 2 Multigigabit ports
- **Meraki® MS350 Series Switches:** Stackable Switches with 8 Multigigabit ports
- **Cisco Catalyst 9100 Series Access Points:** 802.11ax (Wi-Fi 6) with OFDMA and MU-MIMO
- **Cisco Aironet 3800 Series Access Points:** 802.11ac Wave 2 with multiuser MIMO (MU-MIMO)