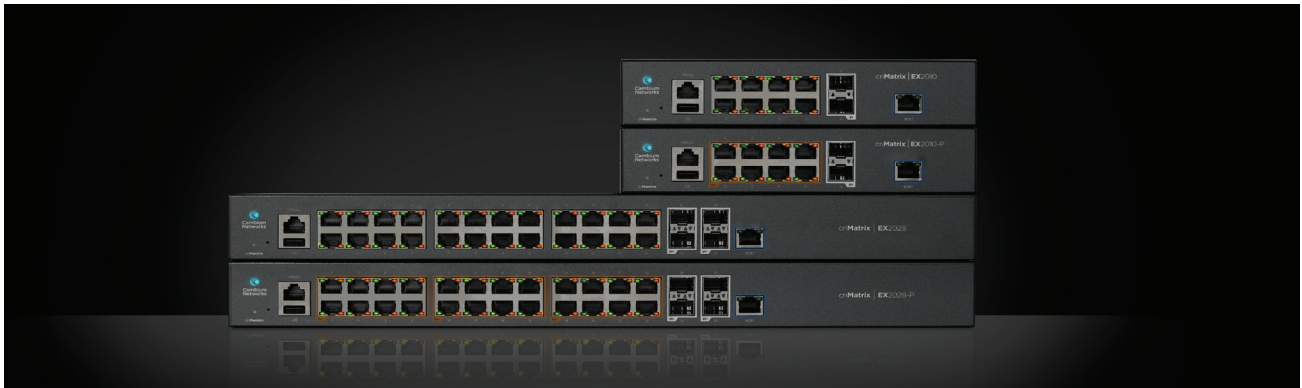


# 7 Questions about cnMatrix



Cambium Networks' cnMatrix™ product line empowers network managers with an unprecedented level of response to many complex situations. John Mead, Senior Director of Engineering, tells the cnMatrix story, explaining how Cambium Networks developed the switch solution and compliment to a wireless network. With over 15 years of extensive industry experience with Ethernet switches, John has led the development of a new portfolio that delivers a unified access network that is robust and affordable.

## What is cnMatrix?

cnMatrix is the brand name for the portfolio of switches from Cambium Networks. Currently, cnMatrix is a comprehensive portfolio of switches that are purpose built for different deployment scenarios. To start, we will release the Enterprise Family with four variants (8-port variant and a 24-port variant each with and without Power over Ethernet (PoE) capability). This family of switches will be extended with additional models to meet the demands of any enterprise network. That family is going to continue to grow.

In the near future, the cnMatrix portfolio will be further extended with additional innovative switches to solve some challenging real world problems.

## How does cnMatrix fit within the Cambium Networks portfolio?

Today, Cambium Networks has many devices that make up what we refer to as the wireless fabric, but every one of those devices plug into an Ethernet switch. Previously, our solutions included the devices from Cambium Networks, but a switch from some other company. Now with our own portfolio of switches, we provide a much more comprehensive solution to our customers. This significantly strengthens Cambium Networks' current solution.

## Why are Cambium Networks switches distinctive?

There are several attributes that differentiate cnMatrix from the competition. We have free cloud-based management without an incremental subscription fee. Managing the network from the cloud is a relatively new concept that is becoming very popular. Some vendors have cloud-based management and charge a significant subscription fee. Our cloud-based management platform, cnMaestro™, comes with cnMatrix for no additional charge.

Another very important attribute for us is ease of use. This user-friendliness is defined as easy to deploy the switch, easy to configure the switch, easy to maintain the switch, and easy to troubleshoot any problems that might occur. Cambium Networks also surpasses the competition in regard to the superior support we provide to customers. Some of our competitors have no support at all. Cambium Networks' products also have very high standards for quality, and our switches continue that legacy.

In addition, cnMatrix delivers a very rich feature set with a strong Layer 2 switching offering, and we do not stop there. In the enterprise access layer, a lot of switch vendors only provide Layer 2 capability. We made the fundamental decision to provide full layer 3 capability, static and dynamic routing. In many deployments, layer 3 is desired at the edge of the network. Our switch comes with a long list of security features as well. One example of this is our ability to profile connecting devices and auto segment them into the correct network.

To manage the switch the user can take advantage of a very comprehensive set of management interfaces that includes cloud based management, CLI, Web-GUI, and SNMP. cnMaestro is Cambium's industry leading cloud based management solution, which is available via the cloud or on premise. All of Cambium's products can be managed with cnMaestro providing a true single pane of glass.

We also have what we are calling Intelligent Edge capabilities. The Intelligent Edge aspect of our switches is really a suite of features that provides some very sophisticated functionality – policy-based, zero touch, dynamic configuration, enhanced security – keeping network operators aware of all the wireless devices in the network, as well as having our cloud-based management of cnMaestro, which results in a very comprehensive solution.

### Why does a customer need cnMatrix?

cnMatrix offers a superior user experience. When connecting Cambium devices into a cnMatrix switch, the customer can expect enhanced functionality with extra capabilities. Plus, the cnMaestro cloud-based management platform makes deployment of unified wired and wireless networks fast and easy. cnMatrix also eliminates error prone manual configuration with the Policy Based Automation. With this innovative capability, our switch will automatically detect a device and apply a policy to it. A customer can plug in a device, walk away, and all the necessary configuration is automatically provisioned.

Research shows that about 80% of network problems are due to misconfiguration. This policy based automation provides a true zero touch experience that eliminates error prone manual configuration. With less manual configuration customers can also experience a lower cost of ownership.

### How can customers manage their switching equipment?

cnMaestro is such a great network management solution because it provides so many capabilities to our customers. This tool can not only manage just one device, but also the entire network of devices simultaneously. If cnMaestro is used to configure a policy, that policy will be pushed down to every switch in the network. If the customer has 100 switches and configures that policy once with cnMaestro, that policy gets pushed down to all 100 switches. It works seamlessly for any device type that matches that policy. For example, a customer can plug a video surveillance camera into any port of any switch, anywhere they want. The port that they plug it into and the switch itself will be automatically configured for the capabilities needed for that camera.

### How can a customer evaluate their investment?

Generally, the quality of investment is measurable in time and costs. Certainly, with cnMatrix, the time and energy needed to maintain the switches is reduced substantially because configuration and troubleshooting are automated and streamlined. Customers can enjoy zero-touch for all the daily activities of adds, moves, and changes.

### What feedback have you received from customers?

One stand out feature that really resonates with customers is the Policy Based Automation. Typically, when a device is plugged into a switch it requires 10 or 15 commands to configure the switch. This feature eliminates all those commands and automates the entire process. At every demonstration, both distributors and customers were extremely impressed by the ease of use and auto configuration. Customers concerned about security are especially pleased when they see how configuration is removed when a device is unplugged. After a recent demonstration, someone from the audience said, "You know, that was by far the most impressive thing I saw all day." It is a very good feeling to know that we are headed in the right direction.

