

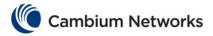




BASIC CONFIGURATION GUIDE cnMatrix

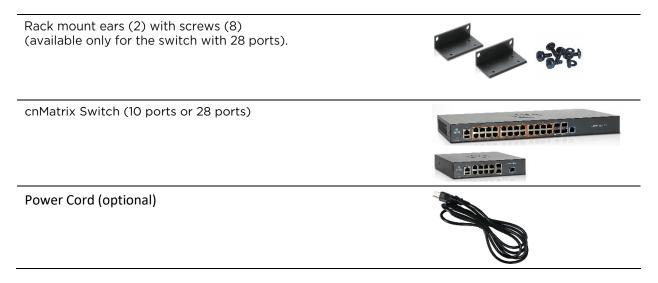






Thank you for choosing the cnMatrix switch, a Cambium Networks communications device. Before you begin installing the switch, **verify** you have all the package contents available, and a PC with SSH client, such as PuTTY or OpenSSH SSH Client.

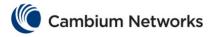
Package Contents



Product Overview

The cnMatrix switch comes in four versions to support various deployment scenarios:

Part Number	Number of Ports	Power over Ethernet	Throughput	Switch
cnMatrix EX2010	10	No	20 Gbps	
cnMatrix EX2010-P	10	Yes	20 Gbps	
cnMatrix EX2028	28	No	128 Gbps	
cnMatrix EX2028-P	28	Yes	128 Gbps	



Powering Up

Connect the power cord to the power inlet, and then plug the power cord into a wall socket.





When the switch is booting up, the illuminated Cambium Networks logo will be blinking blue. When the switch is fully up and running, the illuminated Cambium Networks logo is solid blue.

Default Configuration

IP address 192.168.0.1 is automatically configured on Out-Of-Band Management Port (MGMT). There is no default IP address In Band Network Ports.



Note: DHCP is enabled by default on In Band Ports (VLAN1).

Default login information:

Username: **admin**

Password: admin

Configure Management PC

1	In Windows, double-click the Control Panel command. The Control Panel window is displayed.	Ethernet 2 Properties X		
2	In the Control Panel window, select the View network status and tasks option. The Network and Sharing Center window is displayed.	Networking Connect using: Peatlek PCIe GBE Family Controller Configure This connection uses the following items:		
3	Click the Change adapter settings option. The Network Connections window is displayed.	Clent for Microsoft Networks Clent for Microsoft Networks Constraints of Microsoft Networks Constraints of Microsoft Networks Constraints of Microsoft Network Adapter Multiplexor Protocol Microsoft Network Protocol Version 6 (TCP/IPv6) Microso		
4	Double-click the interface. The interface Properties window is displayed.			
5	Select the Internet Protocol Version 4 (TCP/IPv4) option. Click OK.			



6	Set The IP address of the interface to 192.168.0.10 and the Subnet mask to 255.255.255.0	Internet Protocol Version 4 (TCP/IPv General	4) Properties >	×
		You can get IP settings assigned aut this capability. Otherwise, you need for the appropriate IP settings.		
		Obtain an IP address automatic	ally	
		Use the following IP address:		
		IP address:	192.168.0.10	
		Subnet mask:	255 . 255 . 255 . 0	
		Default gateway:		
		Obtain DNS server address aut	omatically	
		Use the following DNS server as	ddresses:	
		Preferred DNS server:		
		Alternate DNS server:	· · ·	
		Validate settings upon exit	Advanced	
			OK Cancel	

Logging in to the switch

	Use PuTTY SSH client.	😵 PuTTY Configuration X
1		Category:
2	On the PuTTY Configuration window, in the Host Name field, enter the 192.168.0.1 IP address and in the Port field, enter the 22 value.	Basic options for your PuTTY session Basic options for your PuTTY session Specify the destination you want to connect to Host Name (or IP address) Port 192.168.0.1 221 Connection type: Parameter Pehaviour
3	Click Open. The login prompt is displayed.	PuTTY Configuration × Category: Basic options for your PuTTY session Logging Basic options for your PuTTY session Keyboard Specify the destination you want to connect to Host Name (or IP address) Port Section Onection type: Ologin Set Name Proxy Telnet Proxy Telnet Rlogin SSH SSH Serial Load Sever About Open Qpen Cancel
4	In the cnMatrix login prompt enter the default username: admin	



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In the Password prompt enter	Cambium Networks cnMatrix EX2010-P Ethernet Switch
the default login password:	cnMatrix login: admin
admin	Password:

Hardware Overview



LED Color

cnMatrix Logo (Power) LED is continuously blue the switch is operational.

cnMatrix Logo (Power) LED is blinking blue - the switch is initializing.

Reset button Local Simple reboot: Console Port *RJ45* Factory reset: connection hold for 10-15 for console access.

hold for 1-5

seconds.

seconds.

Ports 8 or 24 Data ports used for traffic forwarding. Ports with an orange border indicate PoE+ support. (802.3at)

Fiber Ports

The 10-port cnMatrix provides two 1 Gig fiber ports (SFP) and the 28port cnMatrix provides four 1 Gig / 10 Gig fiber ports (SFP+).

Management Port

Used for Managing the switch. It provides out of band network connectivity for management of the switch.

Specifications

cnMatrix MODELS	EX2028-P	EX2028	EX2010-P	EX2010
MTBF (hours)	285.350.90	432.283.26	338.917.20	806.354.10
Power budget	400W	n/a	100W	n/a
Power supply	AC/Internal	AC/Internal AC/Internal		AC/Internal
Weight	3.96 kg (8.75 lb)	2.77 kg (6.1 lb)	1.99 kg (4.375 lb)	1.6 kg (3.5375 lb)
Dimensions	44 x 4.4 x 25 cm (17.3 x 1.75 x 9.85 in)	44 x 4.4 x 20.9 cm (17.3 x 1.75 x 8.22 in)	21 x 4.4 x 25 cm (8.26 x 1.75 x 9.85 in)	21 x 4.4 x 25 cm (8.26 x 1.75 x 9.85 in)
LEDs per port	Link/Activity, PoE	Link/Activity, PoE	Link/Activity, PoE	Link/Activity, PoE
Rack mountable	Yes 1U	Yes 1U	Yes 1U	Yes 1U
Temperature ranges	-o°C to + 50°C(+32° F to + 122°F)	-o°C to + 50°C(+32° F to + 122°F)	-o°C to + 50°C(+32° F to + 122°F)	-o°C to + 50°C(+32° F to + 122°F)
Operating humidity	+55° at 95% RH	+55° at 95% RH	+55° at 95% RH	+55° at 95% RH
Storage temperature	-40°C to +70°C(- 40°F to +158°F)	-40°C to +70°C(- 40°F to +158°F)	-40°C to +70°C(- 40°F to +158°F)	-40°C to +70°C(-40°F to +158°F)



Safety Notice

Only use attachments/accessories specified by the manufacturer.

Electrical Safety Information

This switch is designed with a power inlet with an integrated ground. A power cord from the switch shall be connected to a power outlet with ground connection.

The equipment is designed for indoor installation and not intended to be connected to exposed



To prevent loss of life or physical injury, observe the following safety guidelines. In no event shall Cambium Networks be liable for any injury or damage caused during the installation of the switch.

(outside) networks.

Equipment intended for installation in Information Technology Equipment Rooms. "Suitable for installation in Information Technology Rooms in accordance with Article 645 of the National Electrical Code and NFPA 75."

There are no serviceable parts inside this equipment. Service should be provided only by a qualified service technician.

FCC Compliance

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

RoHS/WEEE Compliance

Caring for the Environment: RoHS/WEEE

European Directive 2002/96/EC requires that the equipment bearing this symbol on the product and/or its packaging must not be disposed of with unsorted municipal waste. The symbol indicates that this product should be disposed of separately from regular household waste streams. It is your responsibility to dispose of this and other electric and electronic equipment via designated collection facilities appointed by the government or local authorities. Correct disposal and recycling will help prevent potential negative consequences to the environment and human health. For more detailed information about the disposal of your old equipment, please contact your local authorities, waste disposal service, or the shop where you purchased the product.



Europe- EU Declaration of Conformity

Hereby, CAMBIUM NETWORKS, Inc. declares that the equipment type [EX2010, EX2010-P, EX2028, EX2028-P] is in compliance with Directive 2014/30/EU. The full text of the EU declaration of conformity is available at the following internet address: <u>https://www.cambiumnetworks.com/</u>

Online Resources

User Guides: https://www.cambiumnetworks.com/guides Technical Training: https://learning.cambiumnetworks.com Cambium Networks Support Centre: https://support.cambiumnetworks.com Contact us: https://www.cambiumnetworks.com/support/contact-support/