



# cnMatrix TX1K WISP Switch Basic Configuration Guide



Thank you for choosing the cnMatrix TX1K 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

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A rack mount kit for the TX1K switch models can be ordered as an optional accessory.

For a standard rack mount, use kit: **MX-Rack-TX1K-0**



For a DIN mount, use kit: **MX-DIN-TX1K-0**



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### cnMatrix TX1K Switch

TX1012-P-AC Model:



TX1012-P-DC Model:





Power Cord (separate accessory)



## Product Overview

The cnMatrix TX1K switch comes in 2 SKUs to support AC or DC input power deployment scenarios.

Model Name / Number	Part	Number of Ports	Power over Ethernet	Throughput	Switch
cnMatrix TX1012-P-AC		12	Yes	96 Gbps	
cnMatrix TX1012-P-DC		12	Yes	96 Gbps	

## Powering Up

For the TX1012-P-AC model, connect the power cord to the power inlet, and plug the power cord into a wall socket.



For the TX1012-P-DC model, connect the Red (+) and Black (-) terminals to the DC power supply.

**Warning:** The TX1012-P-DC does not have an isolated input/output power supply. The switch must be powered with a positive polarity power source, otherwise damage to the switch will occur.



When the switch is booting up, the Power LED will be blinking green. When the switch is fully up and running, the Power LED will be solid green.

## Default Configuration

When booting up for the first time the cnMatrix TX1K switch will try to acquire a dynamic IP address through DHCP. If a DHCP Server is not present on the network, the switch will fall back to **192.168.1.1** static IP address on the In-Band ports.



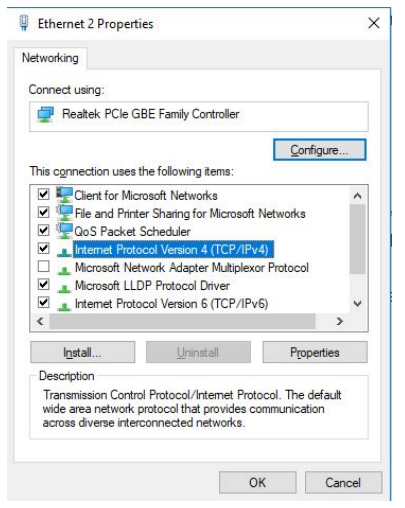
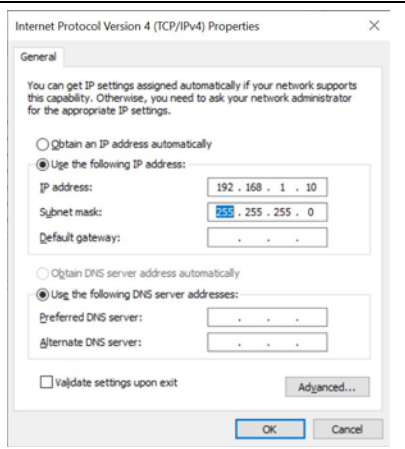
Note: DHCP is enabled by default on In Band Ports (VLAN1).

### Default login information:

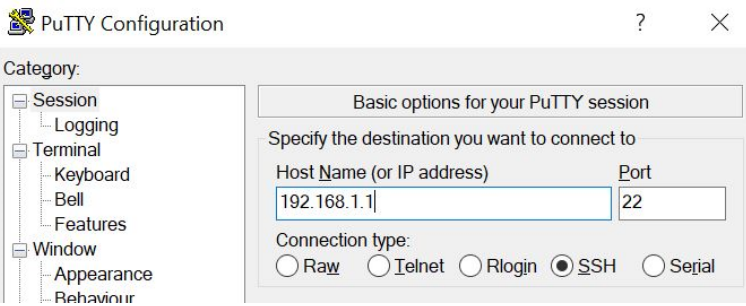
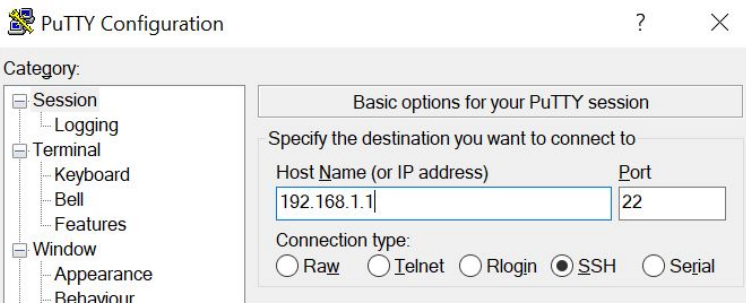
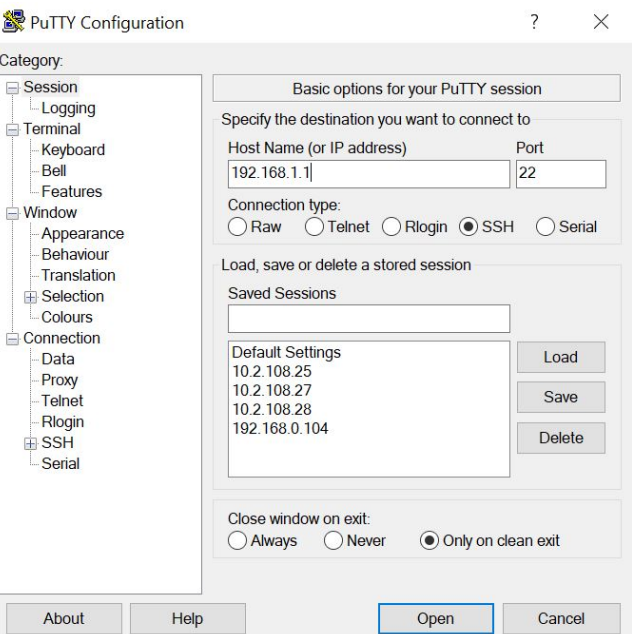
Username: **admin**

Password: **admin**

## Configure Management PC

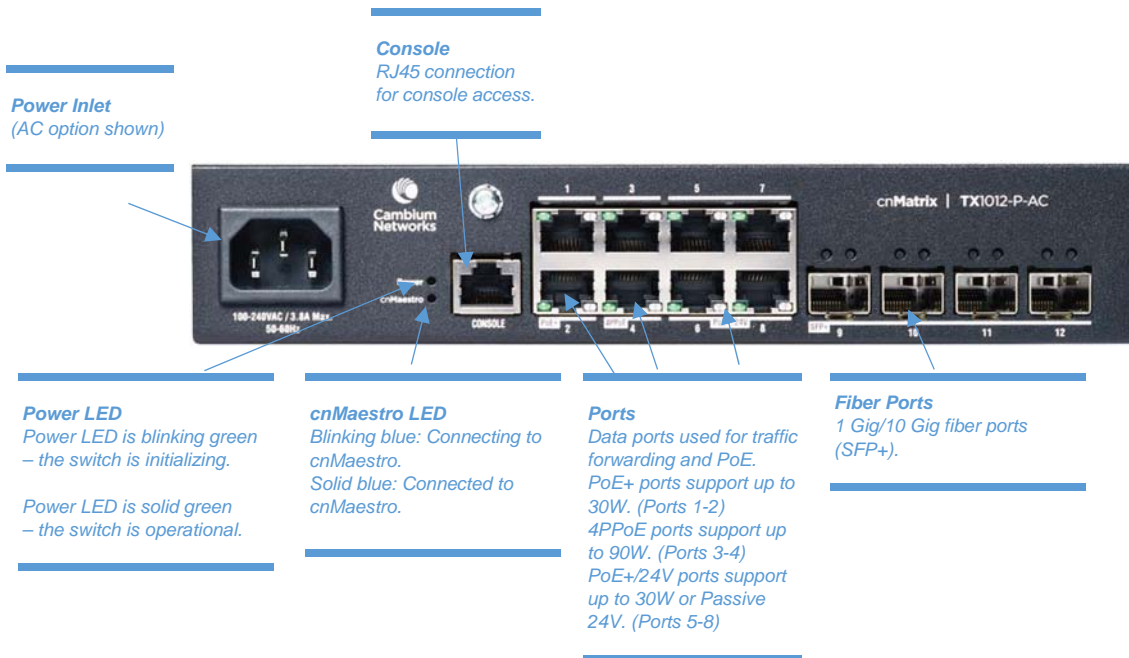
1	For Windows operating system, open the Control Panel window.	
2	In the Control Panel window, select the View network status and tasks option. The Network and Sharing Center window is displayed.	
3	Click the Change adapter settings option. The Network Connections window is displayed.	
4	Double-click the interface connected to the switch. The interface Properties window is displayed.	
5	Double click on the Internet Protocol Version 4 (TCP/IPv4) option.	
6	<p>The Internet Protocol Version 4 (TCP/IPv4) Properties is displayed. Select Use the following IP address. Set The IP address of the interface to 192.168.1.10 and the Subnet mask to 255.255.255.0</p>	

## Logging in to the switch

1	Use PuTTY SSH client.	
2	On the PuTTY Configuration window, in the Host Name field, enter 192.168.1.1 IP address and in the Port field, enter the 22 value.	
3	Click Open. The login prompt is displayed.	
4	In the cnMatrix login prompt enter the default username: <b>admin</b>	
5	In the Password prompt enter the default login password: <b>admin</b>	



## Hardware Overview



## Specifications

cnMatrix Models	TX1012-P-AC	TX1012-P-DC
MTBF (hours, 25°C/60°C)	741,409 / 223,619	749,495 / 207,122
PoE Power budget	200W	170W @ 30V-65V input 120W @ 9V-29V input
Power supply	AC Input / Internal	DC Input / Internal
Weight	2.39 kg (5.27 lb)	2.17 kg (4.78 lb)
Dimensions	28 x 4.4 x 23 cm (11.0 x 1.75 x 9.06 in)	28 x 4.4 x 23 cm (11.0 x 1.75 x 9.06 in)
LEDs per port	Link/Activity, PoE	Link/Activity, PoE
Rack mountable	Yes 1U	Yes 1U
Operating Temperature	-30°C to + 60°C (-22°F to + 140°F)	-30°C to + 60°C (-22°F to + 140°F)
Operating humidity	+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)

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@version 3.0 (December 2000)

Optimised ANSI C code for the Rijndael cipher (now AES)

@author Vincent Rijmen <vincent.rijmen@esat.kuleuven.ac.be>  
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Version 2.1, February 1999

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Ty Coon, President of Vice

That's all there is to it!

## Hardware Warranty

Cambium provides standard warranty as per Cambium's standard warranty policy for applicable warranty period for each product type. For details, regarding Cambium's warranty policy, warranty terms and conditions and applicable warranty periods, please click <https://www.cambiumnetworks.com/support/standard-warranty/>.



## 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.



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.

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

To avoid a shock hazard:

- Do not connect or disconnect any cables or perform installation, maintenance, or reconfiguration of this product during an electrical storm.
- Connect power cord to a properly wired and grounded electrical outlet.
- Connect to properly wired outlets any equipment that will be attached to this product.
- When possible, use one hand only to connect or disconnect signal cables.
- Never turn on any equipment when there is evidence of fire, water, or structural damage.

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

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Le switch est conçu avec une prise de courant possédant une connexion à la terre. Un cordon d'alimentation devra être connecté à la prise de courant possédant une connexion à la terre.

L'équipement est prévu pour des installations en intérieur et n'est pas prévu pour être installé à l'extérieur.

CAUTION: The SFP/SFP+ ports should use UL listed Optical Transceiver product, Rated Laser Class I. 3.3Vdc.

Si le transceiver optique n'est pas livré avec l'appareil, le manuel d'utilisation doit comporter la description ci-dessous ou son équivalent : « Ce produit est destiné à être utilisé avec un transceiver optique homologué UL, tension DC3.3V, classe laser I.

## FCC Compliance

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation.

**Note:** 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 it is not installed and used in accordance with the instruction manual, it 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.

**Modifications:** Any modifications made to this device that are not approved by Sun Microsystems, Inc. may void the authority granted to the user by the FCC to operate this equipment.

この装置は、クラスA機器です。この装置を住宅環境で使用すると電波妨害を引き起こすことがあります。この場合には使用者が適切な対策を講ずるよう要求されることがあります。

VCCI - A

## 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, EX2052, EX2052-P, EX2052R-P, EX2016M-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:

<https://www.cambiumnetworks.com/>

### 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/>