MokerLink 10G Series Ethernet Switch User Manual
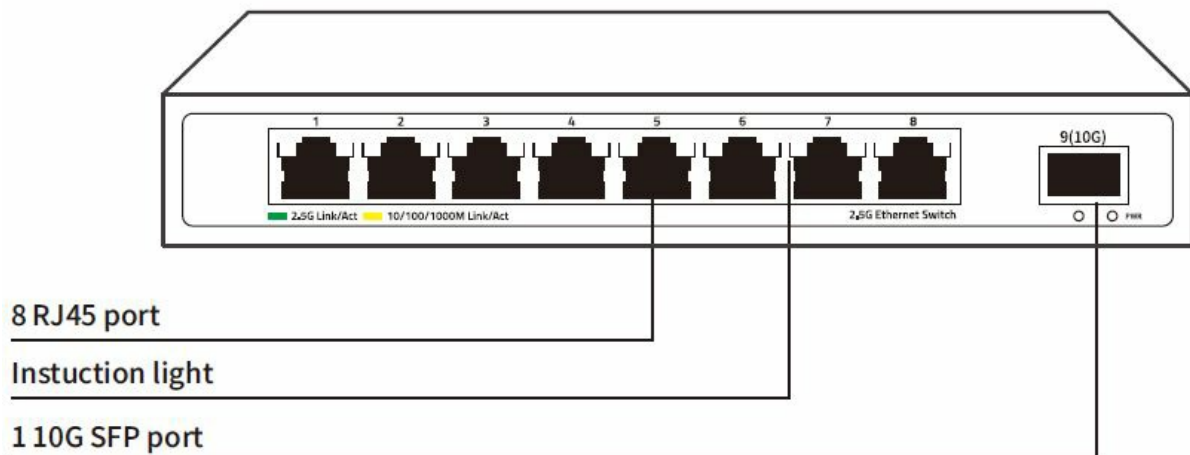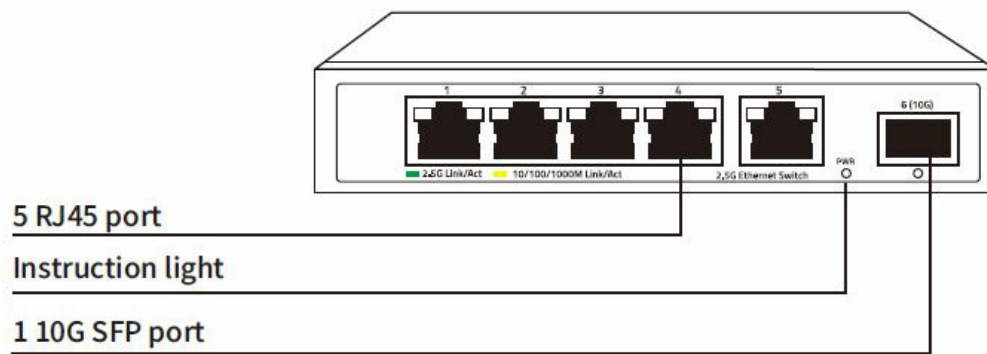
Contents

MokerLink 10G Series Ethernet Switch

Production Introduction

6 Port, 9 port 2.5G switches front panel is shown in the following figure:

5 RJ45 port

Instruction light

1 10G SFP port

8 RJ45 port

Instuction light

1 10G SFP port

Indicator	Name	Wstaotruksing	Operating instructions
PWR	Power indication light	On	ower on
		Off	Power off
Link/Act (RJ45)	Port status indicator	Power on (Green)	2.5Gbps
		Power on (Yellow)	10/100/1000Mbps
		Flashing	Data transmitting
		Off	Link failure
Link/Act (SFP)	Port status indicator	On	1G/2.5G/10Gbps
		Flashing	Data transmitting
		Off	Link failure

26 Port 2.5G switch front panel is shown in the following figure:

Instruction light
Function dial switch
24 RJ45 port
2 10G SFP port

Lightning protection grounding screw
Power interface

Indicator

Indicator	Name	Wstaotruksing	Operating instructions
PWR	Power indication light	On	Power on
		Off	Power off
Link/Act (RJ45)	Port status indicator	Power on (Green)	2.5Gbps
		Power on (Yellow)	10/100/1000Mbps
		Flashing	Data transmission
		Off	Link failure
Link/Act (SFP)	Port status indicator	Power on (Blue)	10Gbps
		Power on (Green)	2.5Gbps
		Flashing	Data transmission
		Off	Link failure

8 Port 10G switch panel is shown in the following figure:
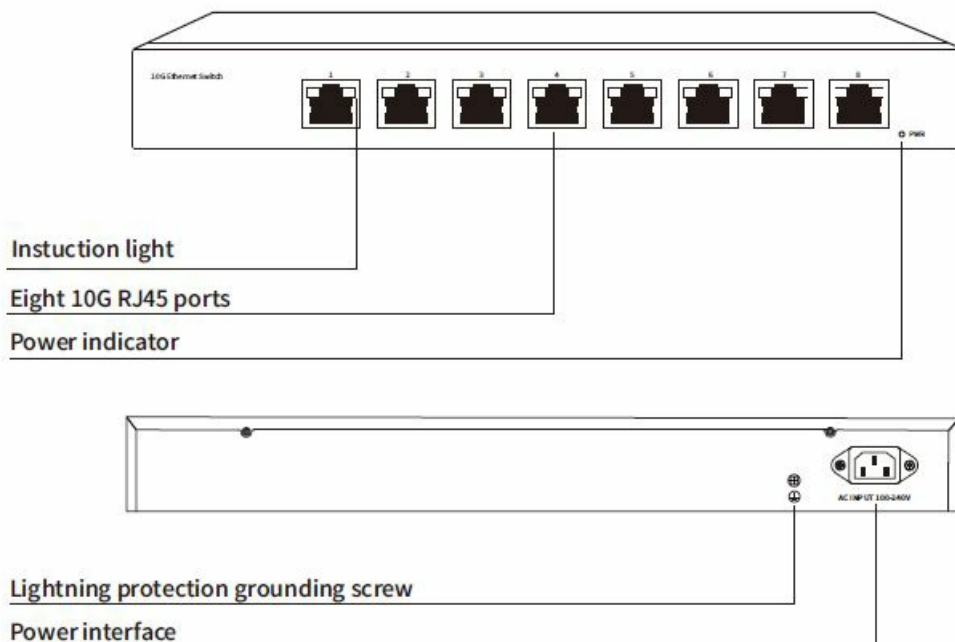
Instuction light

Eight 10G RJ45 ports

Power indicator

Lightning protection grounding screw

Power interface

Indicator

Indicator	Name	Working status	Operating instructions
PWR	Power indication light	On	Power on
		Off	Power off
Link/Act (RJ45)	Port status indicator	Power on (Green)	2.5/5G/10Gbps
		Power on (Yellow)	10/100/1000Mbps
		Flashing	Data transmitting
		Power off	Link failure

30 Port 2.5G The PoE switch panel is shown in the following figure:
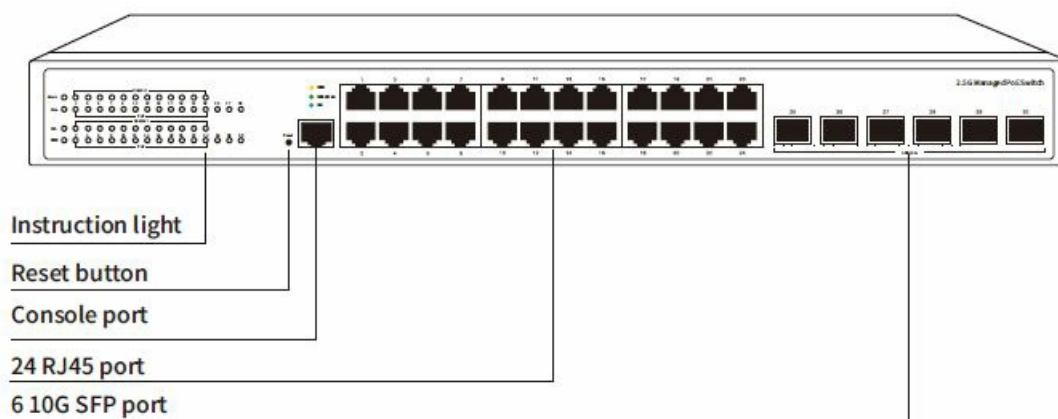
Instruction light

Reset button

Console port

24 RJ45 port

6 10G SFP port

Indicator

Indicator	Name	Working status	Operating instructions
PWR	Power indication light	On	Power on
		Off	Power off
SYS	System indicator light	On	System startup completed
		Flashing	System starting
Max	PoE power warning	On	Total PoE output power ≥ 80%
		Off	PoE total output power ≤ 80%
PoE	PoE Indicator	On	PoE power supply is normal
		Off	PoE power supply abnormality
Link/Act (RJ45)	Port status indicator	Power on (Green)	2.5Gbps
		Power on (Yellow)	10/100/1000Mbps
		Flashing	Data transmitting
		Off	Link failure
Link/Act (SFP)	Port status indicator	Power on (Blue	10Gbps
		Power on (Green)	2.5Gbps
		Flashing	Data transmission
		Off	Link failure

Product Installation

Item List

Switch	Power adapter (External switch)	User manual, certificate of conformity

Console Cable (Management type)	Rack ear (Rack mount switch)	Power cord (Internal switch)
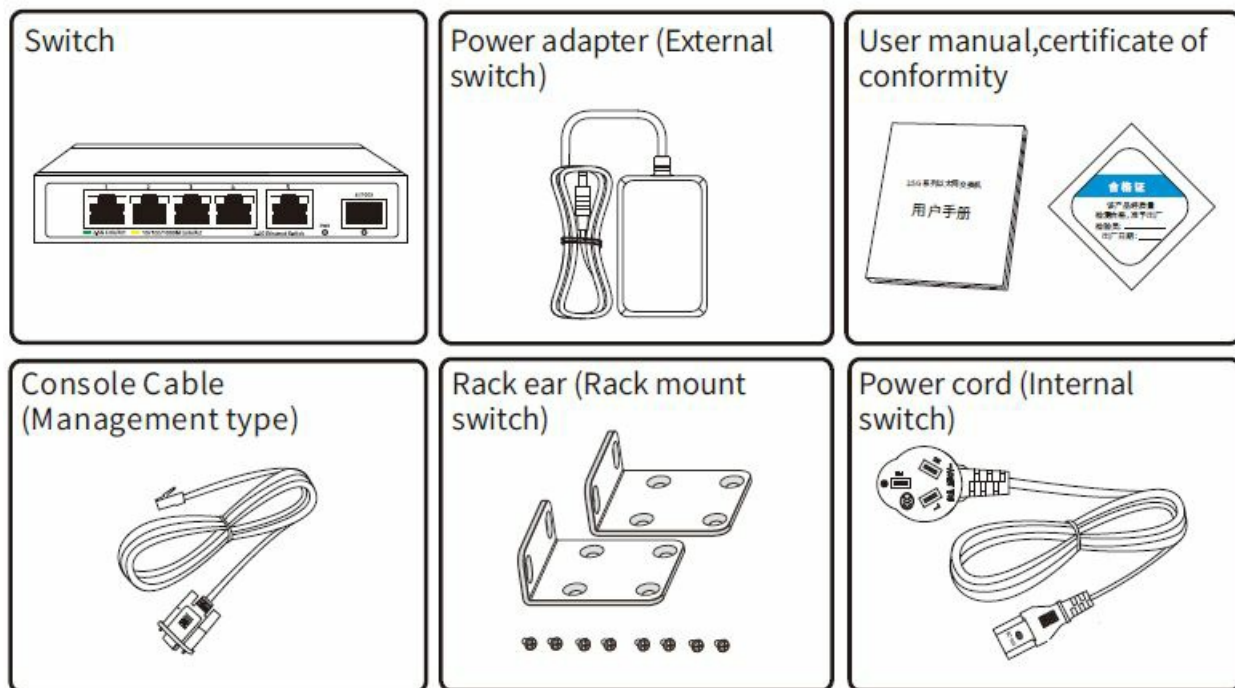
Installation Safety Precaution

- During installation, please wear an antistatic bracelet or gloves, and keep the switch powered off, to avoid potential safety hazards;
- The switch needs to be at the correct voltage to work properly. Please use the power adapter provided with the switch to power the switch;
- Before powering on the switch, please confirm that it will not cause overload of the power circuit, so as not to affect the normal operation of the switch or even cause unnecessary damage;
- To reduce the risk of electric shock, do not open the casing when the switch is working;
- Do not place other heavy objects on the switch, and keep the heat dissipation hole of the switch well ventilated;
- Before cleaning the switch, please turn o ffthe power supply and do not use any liquid to scrub the switch.

Installation Environment Precaution

Temperature/ Humidity

To ensure the long-term stable operation of the switch and prolong the service life of the switch, keep the environment at a certain temperature and humidity. Too high or too low humidity may cause electrical leakage and deformation of insulation materials, or even corrosion of metal components. High temperature accelerates the aging process of insulation materials, which seriously affects the service life of switches. Normal operating and storage temperature/humidity are shown in the following table:

Environmental Description	Temperature	Relative humidity
Working environment	-10℃ 50℃	10%~90% RH, non-condensing
Storage environment	-40℃~70℃	5%~95%RH, non-condensing

Indoor dust prevention

Dust on the surface of the switch causes electrostatic adsorption, which prevents metal contacts from contacting properly. Although the switch takes certain measures to preventESD, when the ESD exceeds a certain intensity, it still causes fatal damage to the electronic components on the internal circuit board. To prevent ESD from affecting the normal operation of the device, please note the following:

- Regularly remove dust and keep indoor air clean;
- Confirm that the equipment is well grounded to ensure smooth transfer of ESD.

Electromagnetic interference

Electromagnetic interference can affect electronic components such as capacitors and inductors inside the device in conductive ways such as capacitive coupling, inductive coupling, and impedance coupling. In order to reduce the adverse effects caused by electromagnetic interference factors,please note the following:

- The power supply system shall take necessary measures against interference of the power grid;
- The switch should be far away from high-frequency high-power, high-current devices, such as wireless transmission stations;
- Take electromagnetic shielding measures if necessary.

Surge protection requirements

When a lightning strike occurs, a powerful electrical current is generated for an instant, heating the air in its path to 20,000 °C, enough to cause fatal damage to electronic device. To achieve a better surge protection effect, please note the following:

- Confirm that the equipment ground terminals are in good contact with the ground;
- Confirm that the power socket maintains good contact with the ground;
- Correct wiring to avoid internal induced surge;
- When wiring outdoors, it is recommended to use a signal surge protector.
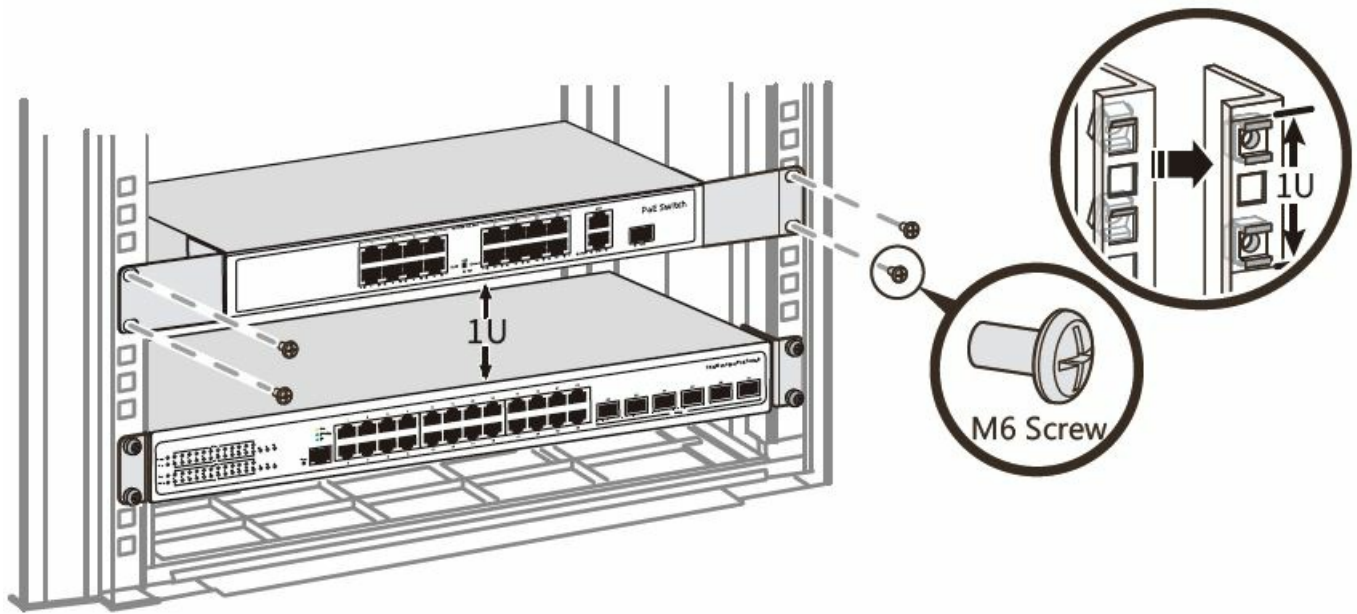
Desktop Installation
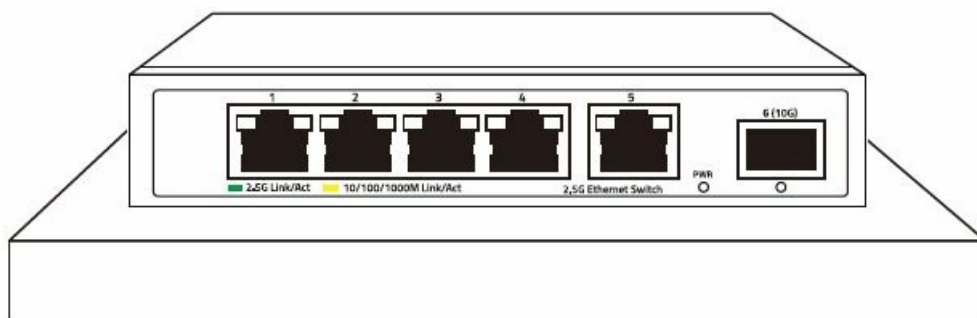
Desktop Installation Diagram

The switch is installed on a horizontal workbench, please note that

1. Confirm that the workbench is stable and firm;
2. Maintain good indoor ventilation;

3. The distance between the power socket and the switch shall not exceed 1.2 meters.

Rack Mount

Frame Installation Diagram

The specific installation steps for installing the switch on a 19 inch standard rack are as follows

1. Check the grounding and stability of the rack;
2. Install the two L-shaped brackets in the accessories on both sides of the switch panel and fix them with the screws provided in the accessories;
3. Place the switch in a suitable position within the rack, supported by a bracket;
4. Fix the L-shaped bracket on the fixed guide grooves at both ends of the rack with M6 screws to ensure a stable and horizontal installation of the switch on the rack.

Device Connection

Network connections

After powering on, please check the status of the corresponding indicator light. If the light is on, it indicates that the link is normally connected, and if the light is off, it indicates that the link is not connected. Please check the line to confirm that the peer device is enabled. Please refer to the corresponding panel description for detailed indicator light descriptions.

1. When the electrical port uses 2.5GE speed, it is necessary to use Cat5E and above network cables.
2. When using 5GE speed at the electrical port, shielded network cables with Cat5E and above specifications are required, and unshielded network cables are not recommended.
3. When using 10GE speed at the electrical port, it is necessary to use shielded network cables with Cat6A and above specifications.

Attention

- When the switch is connected to a workstation, server, router, or other Ethernet device, the network cable length cannot be greater than 100 meters;
- The Auto MDI/MDIX function of the Ethernet port of the switch is enabled by default.;When Category 5 twisted pair cables are used to connect Ethernet, standard network cables or cross network cables can be used;
- Do not connect the RJ45 port to a phone line;

Power connection
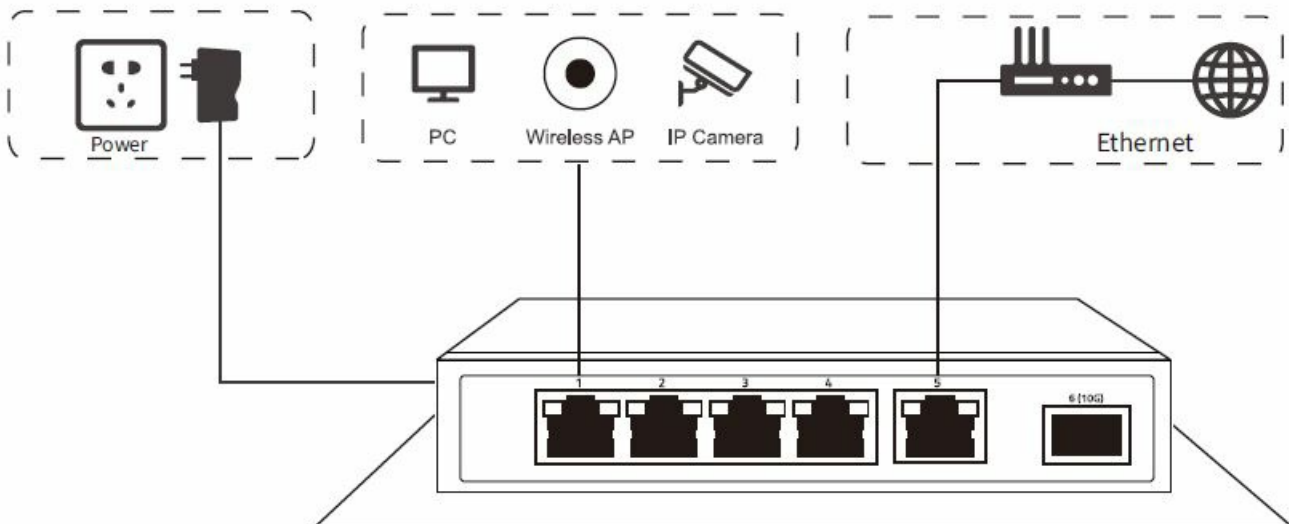
1. Check that the selected power supply is consistent with the power supply requirements marked on the switch;
2. Use the original power adapter or power cord of the switch to connect the switch to the power outlet.

Login Management

WEB login

Before logging into the management interface of the switch, please set the IP address of the computer and the IP address of the switch in the same network segment. The default IP address for the switch service port is 192.168.2.1. When a computer connects to the switch service port, it is necessary to set the computer IP address to 192.168.2. x ("x" is any value between 1-254, and cannot be 1), and the subnet mask to 255.255.255.0.

1. Connect the device and PC to ensure that the device initialization is complete.
2. Configure the IP address of the PC to be in the same network segment as the default IP address of the switch.
3. Open the browser on the PC and enter it in the address bar https://192.168.2.1 "After pressing Enter, the web management login interface will be displayed. Enter the default user name admin and password admin, and press Enter directly."

Local login
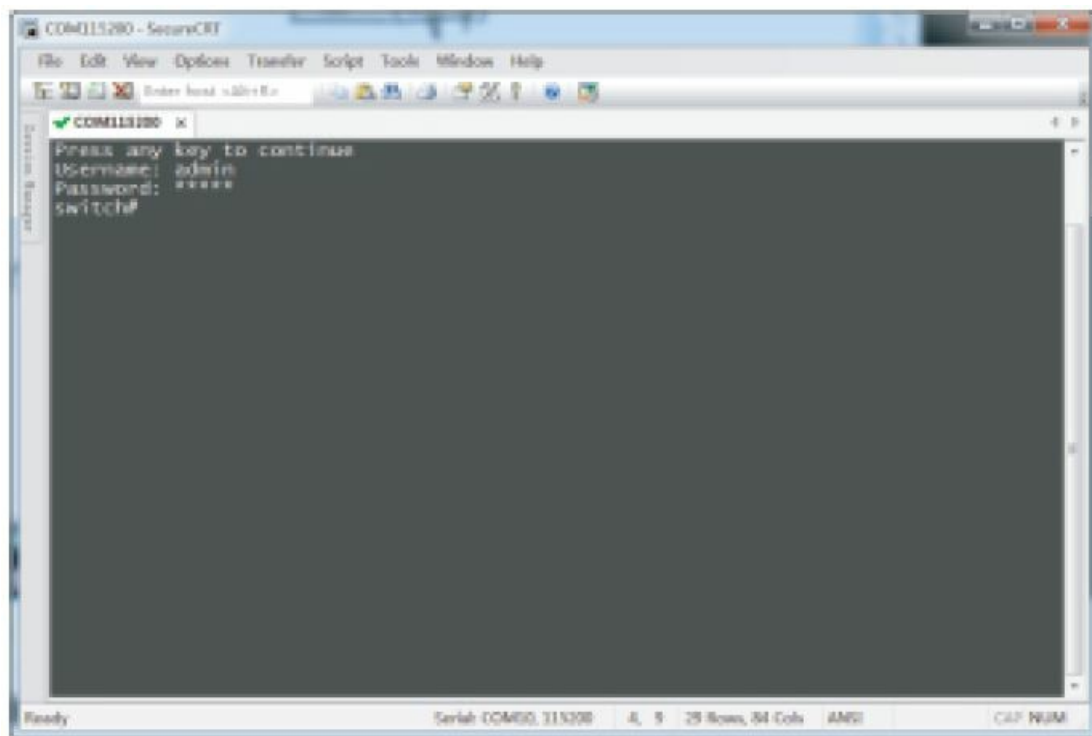
1. Use a Console cable to connect the PC to the Console port of the switch.
2. Open the terminal simulation software on the PC, create a new connection, and set the connection port and communication parameters. The communication parameter configuration of the PC terminal should be consistent with the default configuration of the switch console port. The default configuration of the switch console port is as follows:
   - **Transmission rate:** 115200
   - **Data bits:** 8
   - **Verification method:** None
   - **Stop bit:** 1
   - **Flow control mode:** None
3. Press the Enter key until the simulation terminal displays the following display, prompting the user to enter a user name and password. The default user name for the first login is admin and the password is admin.

Appendix

Appendix: Technical parameter

Network Protocol	IEEE 802.3: Ethernet Media Access Control (MAC) Protocol IEEE 802.3i: 10BASE-T Ethernet IEEE 802.3u: 100BASE-X Fast Ethernet IEEE 802.3ab: 1000BASE-T Gigabit Ethernet IEEE 802.3az: 1000BASE-T Gigabit Ethernet (optical fiber) IEEE 802.3bz: 2.5G/5GBASE-T 5G Ethernet IEEE 802.3cb: 2500BASE-X Ethernet (fiber optic) IEEE 802.3an: 10GBASE-T Ethernet IEEE 802.3ae: 10GBASE-SR/LR 10G Ethernet (fiber optic) IEEE 802.3x: Flow Control
POE Protocol	IEEE 802.3af; IEEE 802.3at; IEEE 802.3b
Data transfer rate	Fast Ethernet 100Mbps half duplex, 200Mbps full duplex; Gigabit Ethernet 2000Mpbs full duplex; 2.5G Ethernet 5000Mpbs Full Duplex; 10G Ethernet 20000Mpbs full duplex.
Packet forwarding rate	10BASE-T: 14881 pps/port 100BASE X: 148810 pps/port 1000BASE-T: 1488095 pps/port 2.5GBASE-T: 3720238 pps/port 10GBASE-T: 14880952 pps/port
Network Media	10Base-T: 2 pairs of Cat3 or above UTP/STP (≤ 100m) 100Base-TX: 2 pairs of Cat5 or abov UTP/STP(≤ 100m) 1000Base-T: 4 pairs of Cat5e or above UTP/STP (≤ 100m) 2.5GBASE-T: 4 pairs of Cat5e or above UTP/STP(≤ 100m) 1000BASE-SX 62.5μm MMF (Minimum range: 2m~275m) or 50μm MMF 1000BASE- LX 62.5μm/50μm MMF (Minimum range: 2m~550m) or 10μm SMF (Minimum range: 2m~5km) 2500BASE-X: G.652D SMF (Minimum range: 2m~500m or 2m~5Km) 10GBASE-SR: OM1/OM2/OM3 or above MMF (Operating range: 2m~300m) 10GBASE- LR:IEC B1.1 and B1.3 SMF (Minimum range: 2m~10km)
Power input	100-240V 50/60Hz
Working temperature	-10℃~50℃
Storage temperature	-40℃~70℃
Operating humidity	10%~90% RH, non-condensing
Storage humidity	5%~95%RH, non-condensing

More Information

Get Help: http://www.mokerlink.com/support/ or Scan QR Code

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- **http://www.mokerlink.com**
- **support@mokerlink.com**

Documents / Resources

MokerLink 2.5G/10G Series Ethernet Switch User Manual	**MokerLink 10G Series Ethernet Switch** [pdf] User Manual 10G Series Ethernet Switch, 10G Series, Ethernet Switch, Switch

References

- **User Manual**