

CIS-5009-8POE User Manual



Custom Integration Solutions

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Welcome to Custom Integration Solutions

Thank you for purchasing CIS devices. Our solutions make it easy for integrators to deploy networks in home and business settings with minimal configuration. Our support team is here to assist with setting up equipment and answering your network related questions.

Overview

The CIS-5009-8POE provides plenty of routing capability with its quad-core ARM CPU running at 1.4 GHz and 1 GB of RAM. The CIS-5009-8POE router is equipped with a 2.5 Gigabit Ethernet port, 7 Gigabit Ethernet ports and one SFP+ port, compatible with 10 Gb modules. The device is pre-configured with all ports switched together. The CIS-5009-8POE provides 802.3af/at compatible PoE on all 8 ports.

Package Contents



Router



48v DC Adapter



Rack ears (2)



Mounting Screws

Power

The CIS-5009-8POE can receive power from 3 different sources – the DC jack, the 2-pin terminal, or via PoE-in on any Ethernet port. The device accepts 24-57v of power and will use the source with the highest voltage.

PoE Output

The CIS-5009-8POE can supply PoE to external devices on all Ethernet ports. The included 48v adapter provides power to your access points, cameras, touchpads and more.

By default, the PoE mode is set to auto. It will not damage non-PoE devices and will auto-detect devices with PoE support and their required voltage. Once a PoE device is detected, it will be powered on.

The device consumes a maximum of 150w of power when fully loaded, or 15w without attachments.

Device Details

Ports

- 1 2.5 Gigabit Ethernet port.
- 7 Gigabit Ethernet ports.
- 1 SFP+ cage, which accepts 10 GB SFP modules.
- USB 3.0 Port (disabled).
- DC Jack – connect the included 48v adapter.
- 2 pin terminal – (optional) – the router can be powered by an external power supply.



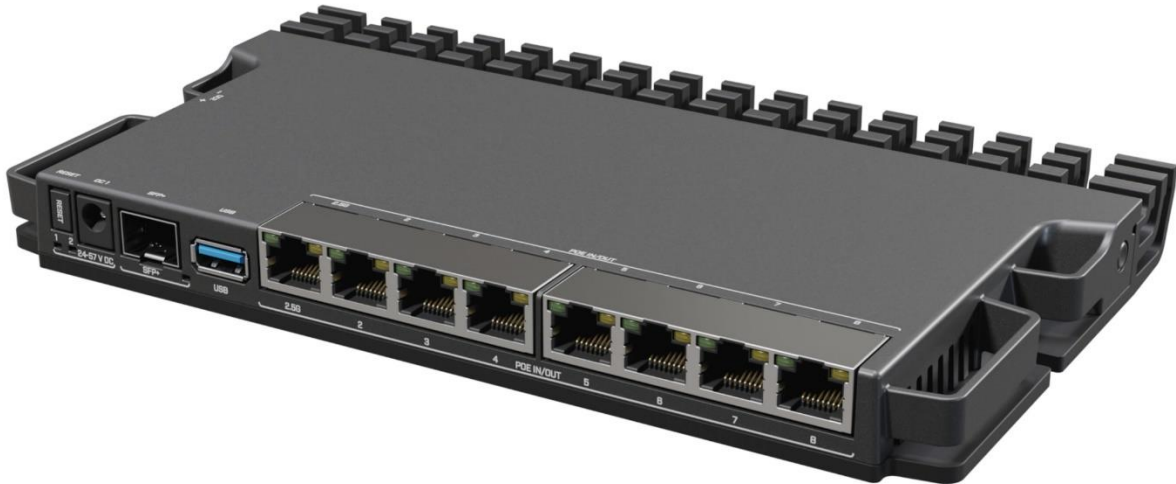
LED Indicators

- 1 – Indicates the DC jack is providing power to the router.
- 2 – Indicates the 2-pin terminal is providing power to the router.
- SFP+ – Indicates SFP+ activity.
- Ethernet 1–8 – Indicates network activity on Ethernet ports 1 through 8.

Buttons

Reset button: If you would like to reset the router, it is highly recommended you contact CIS. Resetting your CIS router will remove all custom configuration, including services you may have paid for.

Quick Setup



1. Connect the power to the DC jack on the front of the router.
2. Connect the ISP's modem to the **2.5G** port on the front of the router with an Ethernet cable.
3. Connect your remaining devices to the Ethernet ports.
4. (Optional) Use the SFP+ port to connect to a switch.

Accessing the Web Interface

1. Connect the ISP's modem to the port labelled "2.5G". Connect your laptop to any remaining port on the front of the CIS router. Ensure your computer is set to DHCP mode.
2. In a web browser, navigate to **10.100.1.1** (the default IP address). If you have requested a different network address, enter it or open a command window and use the **ipconfig** command to get the default gateway. Enter this value in the browser.
3. To login, enter the username **cis** and password **integration**.
4. Integrators may use the Get TeamViewer link if remote assistance is required.

CIS-5009-8POE Router

You have connected to a router. Administrative access only. If this device is not in your possession, please contact your local network administrator.

CIS Login:

Login:

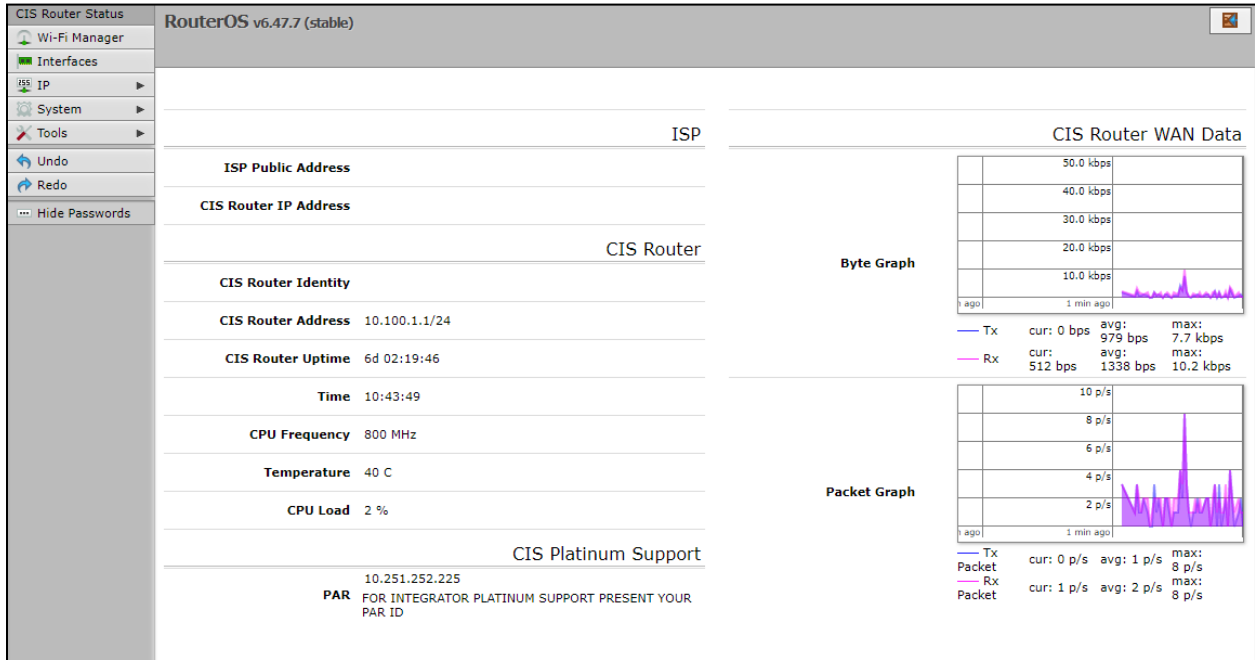
Password:

Owners Guide Get TeamViewer CIS Store Like us on Facebook!

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The Status Page

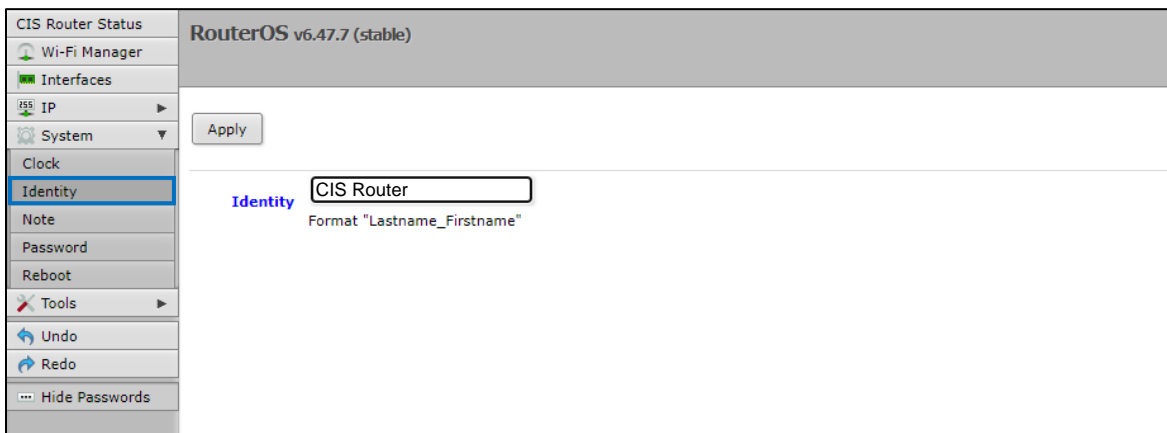
The status page provides basic diagnostic information. There is a CIS Support Address should you require assistance. The router's Identity will show you which device you are accessing on your network. You can view uptime, memory usage and load on the CPU.



Setting the Router's Identity

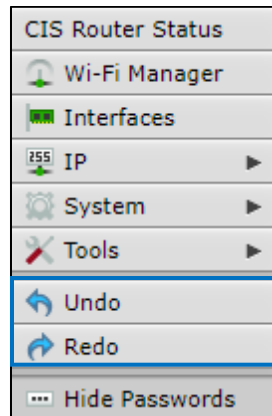
The identity is used to identify your device on the network. It is essential to set the router to the name of the client using the format below, as CIS will use it to identify the router when connecting for updates and troubleshooting.

The **Identity** setting can be found in the **System** tab in the left toolbar.



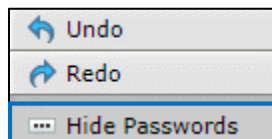
Undo / Redo

Undo and Redo buttons are located in the left toolbar. You may use them to quickly undo/redo any changes made to configuration.



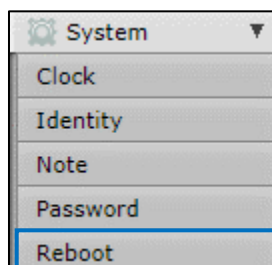
Show / Hide Passwords

Selecting the **Hide Passwords** button in the left toolbar will toggle the displaying of passwords related to Wi-Fi, Hotspot, and more.



Rebooting the Device

If you are having ongoing issues with your network and suspect a reboot will help, the **Reboot** option can be found in the **System** tab in the left toolbar. Clicking reboot will ask for confirmation before proceeding.



Changing the Default Password

After you log in for the first time, please create a new password to increase the security of the device. Enter the old password in the top field and a secure password in the new and confirm password fields.

The screenshot shows the RouterOS v6.47.7 (stable) web interface. The left sidebar menu is open to the 'System' tab, with 'Password' selected. The main content area is titled 'Change' and contains three password input fields: 'Old Password', 'New Password', and 'Confirm Password'. Below the 'Old Password' field is the text 'BE SURE TO REMOVE DEFAULT PASSWORD'. Below the 'Confirm Password' field is the text 'RECORD YOUR NEW PASSWORD'. There are 'Change' and 'Cancel' buttons at the top of the form.

Setting the Time Zone

You can find the Clock settings under the System tab in the left toolbar. Select your time zone from the drop-down menu.

The screenshot shows the RouterOS v6.47.7 (stable) web interface. The left sidebar menu is open to the 'System' tab, with 'Clock' selected. The main content area is titled 'Clock' and contains an 'Apply' button at the top. Below the button, there are two rows of information: 'Time' showing '11:08:40' and 'Date' showing 'Apr/13/2021'. Below this, there is a 'Time Zone Autodetect' checkbox which is unchecked. At the bottom, there is a 'Time Zone Name' dropdown menu currently set to 'Canada/Pacific'.

IP Addressing

View the Router's IP Addresses

To view the IP addresses assigned to the router, choose the **Addresses** tab in the **IP** section in the left toolbar. You can see the WAN address on **ether-01-gateway-WAN**, the LAN address assigned to **bridge-operations**, and either a CIS support address or a PAR address.

The screenshot shows the RouterOS v6.47.7 (stable) interface with the 'IP' section selected in the left sidebar. The 'Addresses' tab is active, displaying a table of 4 items. The table has columns for Address, Network, and Interface. The entries are:

| | Address | Network | Interface |
|---|-------------------|--------------|----------------------|
| | 10.100.1.1/24 | 10.100.1.0 | bridge-operations |
| D | 10.251.252.225/32 | 10.250.0.1 | PAR |
| D | 10.255.254.199/32 | 10.255.254.1 | CIS_Support |
| D | | | ether-01-gateway-WAN |

The DHCP Client Tab

The DHCP Client tab will present you with the IP address assigned to your router from the ISP's modem. Click on the entry to see the addresses and DNS servers assigned to your router from the ISP.

The screenshot shows the RouterOS v6.47.7 (stable) interface with the 'IP' section selected in the left sidebar. The 'DHCP Client' tab is active, displaying a table of 1 item. The table has columns for Interface, Use Peer DNS, Add Defa... Route, IP Address, and Expires After. The entry is:

| Interface | Use Peer DNS | Add Defa... Route | IP Address | Expires After |
|----------------------|--------------|-------------------|------------|---------------|
| ether-01-gateway-WAN | no | yes | | 02:34:20 |

Renewing the WAN IP Address

Once you've clicked the entry under the **DHCP Client** option, click the **Renew** button to obtain a new lease.

RouterOS v6.47.7 (stable) DHCP Client <ether-01-gateway-WAN>

Buttons: OK, Cancel, Apply, **Renew**

Status: bound | not invalid

Enabled NEVER DISABLE REMOTELY AS THIS WILL BREAK THE CONNECTION TO THE INTERNET

DHCP

Interface ether-01-gateway-WAN

Use Peer DNS

Use Peer NTP

Add Default Route yes

The DHCP Server

The main page displays the lease time for the DHCP server.

RouterOS v6.47.7 (stable) DHCP Server

Tabs: DHCP, Networks, Leases

1 item

| Name | Interface | Lease Time | Address Pool |
|------------|-------------------|-------------|--------------|
| Operations | bridge-operations | 2d 00:00:00 | Operations |

The **Leases** tab displays the IP and MAC addresses of connected devices.

The screenshot shows the RouterOS v6.47.7 (stable) DHCP Server interface. The 'Leases' tab is selected, displaying a table with 4 items. The table columns are: Address, MAC Address, Active Address, Active MAC Address, Active Host Name, and Expires After.

| | | ▲ Address | MAC Address | Active Address | Active MAC Address | Active Host Name | Expires After |
|---|---|--------------|-------------|----------------|--------------------|------------------|---------------|
| - | D | 10.100.1.100 | | 10.100.1.100 | | CIS-SW-POE4 | 1d 22:16:33 |
| - | D | 10.100.1.101 | | 10.100.1.101 | | RACK_DEMO_WAP | 1d 22:16:35 |
| - | D | 10.100.1.103 | | 10.100.1.103 | | Dylans-Phone | 1d 22:23:15 |
| - | D | 10.100.1.105 | | 10.100.1.105 | | DESKTOP-K47B36E | 1d 23:53:03 |

The **Networks** tab displays the gateway and DNS server IP addresses that the connected devices will receive.

The screenshot shows the RouterOS v6.47.7 (stable) DHCP Server interface. The 'Networks' tab is selected, displaying a table with 1 item. The table columns are: Address, Gateway, and DNS Servers.

| | ▲ Address | Gateway | DNS Servers |
|----------------|---------------|------------|-------------|
| ;;; Operations | | | |
| | 10.100.1.0/24 | 10.100.1.1 | 10.100.1.1 |

Setting a DHCP Reservation

It is highly recommended that static DHCP reservations are created for important networking devices such as switches, access points, automation controllers, NVRs, printers, etc.

1. Before assigning a static IP address, select **IP > Pool** from the toolbar. Do not assign any addresses inside of the DHCP pool range. In addition, it is recommended you perform an **IP Scan** to ensure the IP address you wish to assign is unused. See the **Tools** section for more info.

| Name | Addresses |
|------------|-------------------------------|
| Operations | 10.100.1.100-10.100.1.199 |
| VPN Pool | 192.168.15.100-192.168.15.150 |

View the **Operations** pool. You should not reserve addresses between 10.100.1.100 and 10.100.1.199 on this device.

2. Click anywhere on the table entry for the device you wish to create a reservation.

| Address | MAC Address | Active Address | Active MAC Address | Active Host Name | Expires After |
|--------------|-------------|----------------|--------------------|------------------|---------------|
| 10.100.1.100 | | 10.100.1.100 | | CIS-SW-POE4 | 1d 22:00:07 |
| 10.100.1.101 | | 10.100.1.101 | | RACK_DEMO_WAP | 1d 22:00:09 |
| 10.100.1.103 | | 10.100.1.103 | | Dylans-Phone | 1d 22:06:49 |
| 10.100.1.105 | | 10.100.1.105 | | DESKTOP-K47B36E | 1d 23:36:37 |

3. Click the **Make Static** button near the top.

Close Remove **Make Static**

Status: bound | not radius | not blocked | dynamic

Enabled

4. Select **close**, then click on the same entry in the leases table. You can now edit the IP address.

The screenshot shows the RouterOS v6.47.7 (stable) interface for editing a DHCP lease. The left sidebar is expanded to 'IP' > 'Addresses'. The main panel is titled 'DHCP Lease <10.100.1.103,10.100.1.103>'. At the top are buttons for 'OK', 'Cancel', 'Apply', and 'Remove'. Below these are three status fields: 'Status: bound', 'not radius', and 'not blocked'. A checkbox labeled 'Enabled' is checked. The 'General' section shows the 'Address' field set to '10.100.1.103' with a dropdown arrow. A warning note below reads '***Do NOT place static reservations inside the DHCP pool***'. The 'MAC Address' is 'DA:B2:D0:E6:7C:30'.

5. Once assigned you will need to renew the lease on the device, disconnect and reconnect it to the network, or reboot it for the new IP address to take effect.

| | | | | | | | |
|---|---|--------------|-------------------|--------------|-------------------|--------------|-------------|
| - | D | 10.100.1.200 | DA:B2:D0:E6:7C:30 | 10.100.1.103 | DA:B2:D0:E6:7C:30 | Dylans-Phone | 1d 21:59:08 |
|---|---|--------------|-------------------|--------------|-------------------|--------------|-------------|

The active IP address will not change until the device requests a new lease.

Changing the DNS Servers

In the **IP** section in the left toolbar, select the **DNS** tab. CIS Routers now use Google DNS by default (8.8.8.8 and 8.8.4.4). To add another server, click the down arrows, and a box will appear below the arrow you have clicked on. To remove a server, click the up arrow next to the box.

The screenshot shows the RouterOS v6.47.7 (stable) interface for editing DNS settings. The left sidebar is expanded to 'IP' > 'DNS'. The main panel is titled 'DNS'. At the top is an 'Apply' button. Below it are two 'Servers' entries, each with a dropdown arrow and a text box containing '8.8.8.8' and '8.8.4.4' respectively. Below the servers is a section for 'Dynamic Servers'.

Port Forwarding

Port forwarding allows inbound traffic to a specific port on a desired host. Be careful when using port forwarding, as each port you open may leave the host vulnerable to attack! CIS recommends using a VPN connection instead whenever possible.

By default, there is a port forwarding rule to use as a template. Select the **Firewall** section in the left tool bar. Click on the **Port-Forward** entry.

The screenshot shows the RouterOS v6.47.7 (stable) Firewall configuration page. The left sidebar has 'Firewall' selected. The main area shows a list of 3 items. The 'Port-Forward' rule is highlighted with a blue border. The table below shows the details of the rules.

| # | Action | Chain | Dst. Address | Prot... | Dst. Port |
|--|------------|--------|--------------|---------|-----------|
| ;;; CIS_CONFIGURATION***DO NOT CHANGE*** | | | | | |
| 0 | masquerade | srcnat | | | |
| ;;; CIS_CONFIGURATION***DO NOT CHANGE*** | | | | | |
| 0 | masquerade | srcnat | | | |
| ;;; Port-Forward | | | | | |
| 1 | dst-nat | dstnat | | 6 (tcp) | 2198 |

Do NOT modify the CIS_CONFIGURATION rules or you may lose internet access!

The screenshot shows the configuration form for a Port Forwarding rule. The 'Enabled' checkbox is checked. The form is divided into 'General' and 'Action' sections.

General

- Chain:** dstnat (dropdown)
- Dst. Address:** 1.1.1.1 (text input)
- Protocol:** 6 (tcp) (dropdown)
- Dst. Port:** 80 (text input)

Action

- Action:** dst-nat (dropdown)
- To Addresses:** 10.100.1.100 (text input)
- To Ports:** (dropdown)

| | |
|---------------------|--|
| Enabled | Check this box to activate the rule. |
| Chain | Set to dstnat |
| Dst. Address | The Dst. Address is your public IP address. It will be automatically updated. |
| Protocol | Select TCP or UDP based on which port you need to open. |
| Dst. Port | Enter the port(s) to open. You can enter a range (e.g., 5000-6000) or separate multiple ports with commas (e.g., 80, 443, 3389). |
| Action | Set to dst-nat . |
| To Addresses | Enter the IP address of the device on your network. |
| To ports | Optional. If you wish for the traffic to be forwarded to a different port on the device, enter it here. |
| Comment | The comment must be set to Port-Forward or the rule will not work! |

Comment

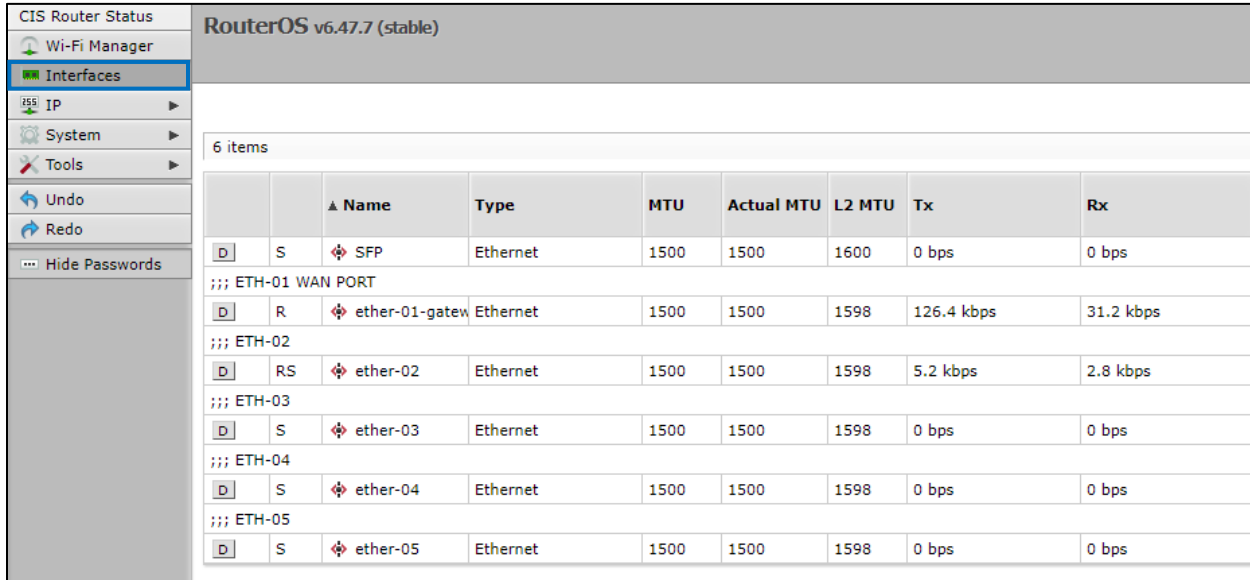
Port-Forward

Comment Must End with "Port-Forward"

The comment must end with "Port-Forward" for the rule to work!

View and Set Interfaces

The Interfaces tab provides an overview of the activity on all ports. You can view the traffic sent and received, the status of PoE, PoE settings, PoE priority and current being drawn by PoE devices.

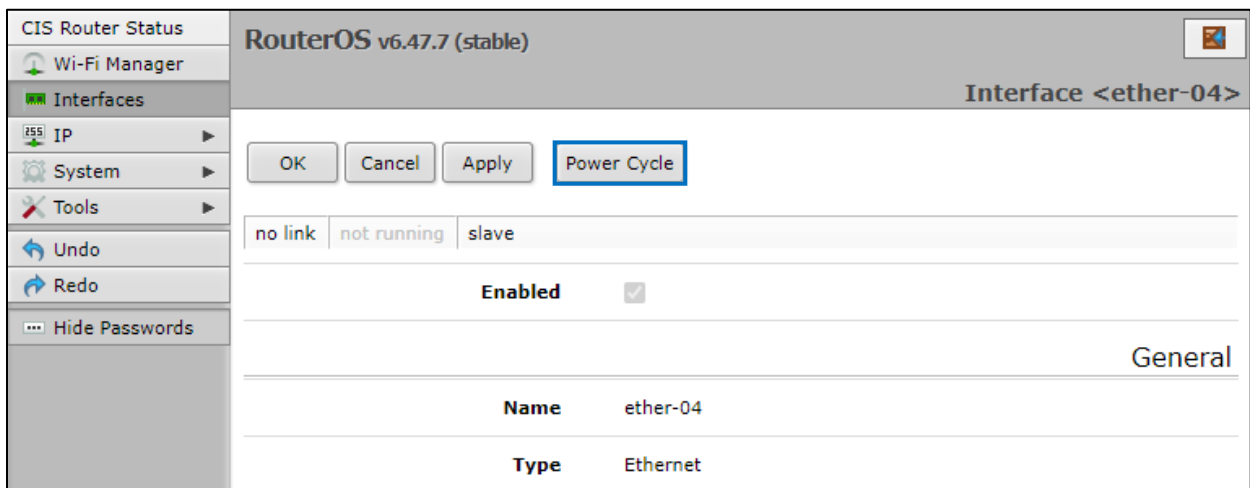


The screenshot shows the RouterOS v6.47.7 (stable) web interface. The left sidebar contains navigation options: CIS Router Status, Wi-Fi Manager, Interfaces (selected), IP, System, Tools, Undo, Redo, and Hide Passwords. The main content area displays a table with 6 items. The table has columns for Name, Type, MTU, Actual MTU, L2 MTU, Tx, and Rx. The items are: SFP (Ethernet, MTU 1500, Actual MTU 1500, L2 MTU 1600, Tx 0 bps, Rx 0 bps); ether-01-gatew (Ethernet, MTU 1500, Actual MTU 1500, L2 MTU 1598, Tx 126.4 kbps, Rx 31.2 kbps); ether-02 (Ethernet, MTU 1500, Actual MTU 1500, L2 MTU 1598, Tx 5.2 kbps, Rx 2.8 kbps); ether-03 (Ethernet, MTU 1500, Actual MTU 1500, L2 MTU 1598, Tx 0 bps, Rx 0 bps); ether-04 (Ethernet, MTU 1500, Actual MTU 1500, L2 MTU 1598, Tx 0 bps, Rx 0 bps); and ether-05 (Ethernet, MTU 1500, Actual MTU 1500, L2 MTU 1598, Tx 0 bps, Rx 0 bps).

| | | Name | Type | MTU | Actual MTU | L2 MTU | Tx | Rx |
|---------------------|----|----------------|----------|------|------------|--------|------------|-----------|
| D | S | SFP | Ethernet | 1500 | 1500 | 1600 | 0 bps | 0 bps |
| ;;; ETH-01 WAN PORT | | | | | | | | |
| D | R | ether-01-gatew | Ethernet | 1500 | 1500 | 1598 | 126.4 kbps | 31.2 kbps |
| ;;; ETH-02 | | | | | | | | |
| D | RS | ether-02 | Ethernet | 1500 | 1500 | 1598 | 5.2 kbps | 2.8 kbps |
| ;;; ETH-03 | | | | | | | | |
| D | S | ether-03 | Ethernet | 1500 | 1500 | 1598 | 0 bps | 0 bps |
| ;;; ETH-04 | | | | | | | | |
| D | S | ether-04 | Ethernet | 1500 | 1500 | 1598 | 0 bps | 0 bps |
| ;;; ETH-05 | | | | | | | | |
| D | S | ether-05 | Ethernet | 1500 | 1500 | 1598 | 0 bps | 0 bps |

Power Cycling an Ethernet Port

Select an Ethernet port in the table below to view the information for it. Click the **Power Cycle** button to disable, then re-enable the port.



The screenshot shows the RouterOS v6.47.7 (stable) web interface for the configuration of the ether-04 interface. The left sidebar is the same as in the previous screenshot. The main content area is titled "Interface <ether-04>". It features a "Power Cycle" button, along with "OK", "Cancel", and "Apply" buttons. Below the buttons, there are status indicators: "no link", "not running", and "slave". The "Enabled" checkbox is checked. The "General" tab is selected, showing the "Name" as "ether-04" and the "Type" as "Ethernet".

WireGuard



CIS is now offering an alternative to the L2TP VPN. With WireGuard, your clients can access their home network with minimal configuration on their mobile devices. Download the WireGuard app from the app store and scan the QR code provided by CIS. It also works well on Windows PCs and MacOS devices.

Call CIS to activate your WireGuard VPN. Your router will be configured for your devices, and you will be sent the required QR codes to connect them. You can monitor connectivity status and traffic from the **WireGuard** tab.

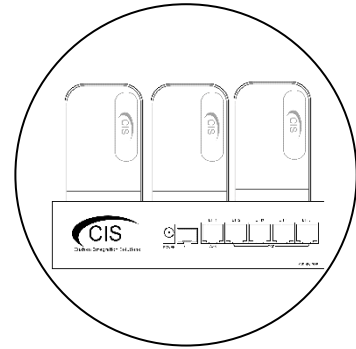


| Interface | Rx | Tx | Last Handshake |
|-----------|----|----|----------------|
| 0 items | | | |

Managing Access Points with the Wireless Manager

All CIS routers include a Wireless Manager that allows you to manage your access points from a single location. All changes to SSIDs, passwords and other options will be propagated to all CIS access points on the network.

To configure your CIS access point for use with the Wireless Manager, view the manual for the CIS-ACWAP.



Viewing the Connected Access Points

On your CIS router, select the **Wi-Fi Manager** section in the left toolbar. The active Wi-Fi radios will be displayed.

| | | ▲ Name | Tx | Rx | Tx Packet (p/s) | Rx Packet (p/s) | FP Tx |
|---|-----|-----------------|-------|-------|-----------------|-----------------|-------|
| D | RMB | CIS 2.4GHz-RACK | 0 bps | 0 bps | 0 | 0 | 0 bps |

If you select the **WiFi Access points** tab, you'll be able to view the identity, MAC address and other information of the individual access points.

| ▲ Address | Version | Identity | State | Radios |
|-------------------|---------|----------|-------|--------|
| 6C:3B:6B:EA:36:1E | 6.47.7 | Rack | Run | 1 |

Viewing Connected Devices

Select the **Registration Table** tab to view the connected devices.

The screenshot shows the RouterOS v6.47.7 (stable) interface. The 'Wi-Fi Manager' section is active, and the 'Registration Table' tab is selected. A 'Channel Scanner' button is visible. Below it, a table displays 1 item:

| Interface | SSID | MAC Address | Tx Rate | Rx Rate | Tx Signal | Rx Signal | Uptime |
|-----------------|-----------|-------------|-----------|-----------|-----------|-----------|-------------|
| CIS 2.4GHz-RACK | CIS Guest | | 52Mbps-20 | 65Mbps-20 | 0 | -66 | 00:02:49.24 |

Changing the SSID of Managed Access Points

Select the **SSID-Channel** tab in the **Wi-Fi Manager** section. Click on the 2.4GHz network.

The screenshot shows the RouterOS v6.47.7 (stable) interface. The 'Wi-Fi Manager' section is active, and the 'SSID-Channel' tab is selected. A table displays 2 items:

| Name | SSID | Hide SSID | Channel |
|---------------------|-------------------|-----------|-------------------|
| CIS 2.4GHz Wireless | CIS Guest | | 2.4GHz Channel 02 |
| CIS 5GHz Wireless | CIS 5GHz Wireless | | 5GHz Channel 5180 |

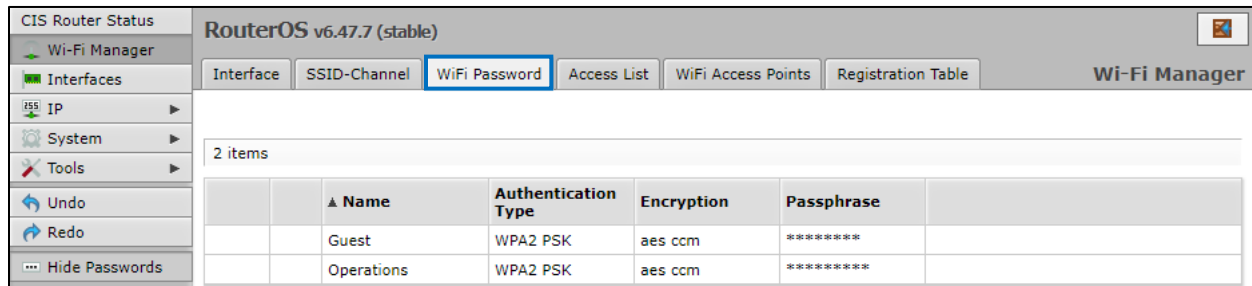
Copy and paste the SSID so that the 5GHz network has the same SSID.

The screenshot shows the configuration dialog for the 'CIS 2.4GHz Wireless' network. The 'Name' is 'CIS 2.4GHz Wireless', the 'SSID' is 'CIS Guest', and 'Hide SSID' is unchecked.

The screenshot shows the configuration dialog for the 'CIS 5GHz Wireless' network. The 'Name' is 'CIS 5GHz Wireless', the 'SSID' is 'CIS Guest', and 'Hide SSID' is unchecked.

Changing the Wi-Fi Password of Managed Access Points

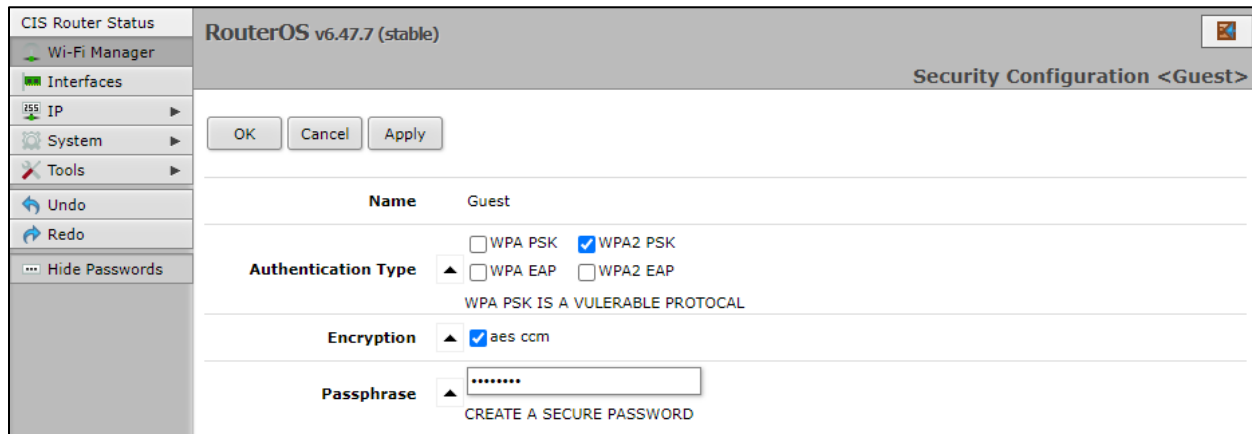
Select the **Wi-Fi Password** tab. Click on the network that you'd like to change the password for. If you've purchased a guest network, it will appear here.



The screenshot shows the RouterOS v6.47.7 (stable) interface. The left sidebar contains navigation options: CIS Router Status, Wi-Fi Manager, Interfaces, IP, System, Tools, Undo, Redo, and Hide Passwords. The main content area is titled "Wi-Fi Manager" and has tabs for Interface, SSID-Channel, WiFi Password (selected), Access List, WiFi Access Points, and Registration Table. Below the tabs, it says "2 items" and displays a table with the following data:

| Name | Authentication Type | Encryption | Passphrase |
|------------|---------------------|------------|------------|
| Guest | WPA2 PSK | aes ccm | ***** |
| Operations | WPA2 PSK | aes ccm | ***** |

Click on the network you'd like to set the password for, then enter the passphrase in the box below. It is highly recommended you use only **WPA2 PSK** for security purposes. WPA is vulnerable to password cracking.



The screenshot shows the "Security Configuration <Guest>" dialog box in RouterOS v6.47.7 (stable). The dialog has "OK", "Cancel", and "Apply" buttons at the top. Below the buttons, the "Name" field is set to "Guest". The "Authentication Type" section has radio buttons for WPA PSK, WPA2 PSK (selected), WPA EAP, and WPA2 EAP. A warning message "WPA PSK IS A VULNERABLE PROTOCOL" is displayed. The "Encryption" section has a radio button for aes ccm (selected). The "Passphrase" section has a text input field containing "*****" and a "CREATE A SECURE PASSWORD" button.

PoE Information and Settings

PoE-Out Modes:

Auto-on mode (default)

When selected, auto-on mode checks for resistance on the host device and will automatically supply power to devices that require it. It will not damage non-PoE devices.

Forced-on mode

When selected, the router applies power on pins 4,5 (+) and 7,8 (-), even if no cable is attached.

Be careful plugging non-PoE devices into a port when Forced-on is selected. **You may damage your device!**

Off mode

When selected, the router will not supply power to connected devices.

PoE-Out limitations

The CIS-5009-8POE provides up to 420mA output on each port when supplying 48v power.

Enable/Disable PoE

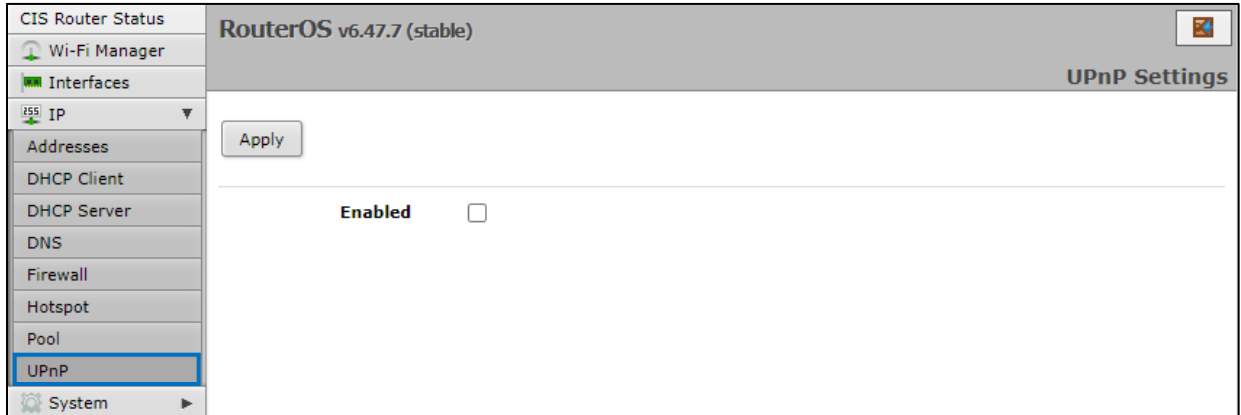
Select the port from the **Interfaces** tab. Change the PoE Out option accordingly.

| | | PoE |
|--------------------------|--------------------------|-----|
| PoE Out | auto on | ▼ |
| PoE Priority | 10 | |
| Power Cycle Ping Enabled | <input type="checkbox"/> | |
| Power Cycle Interval | | |
| PoE Out Status | powered on | |
| PoE Out Current | 120 mA | |
| PoE Out Voltage | | |
| PoE Out Power | 6.7 W | |

Tools

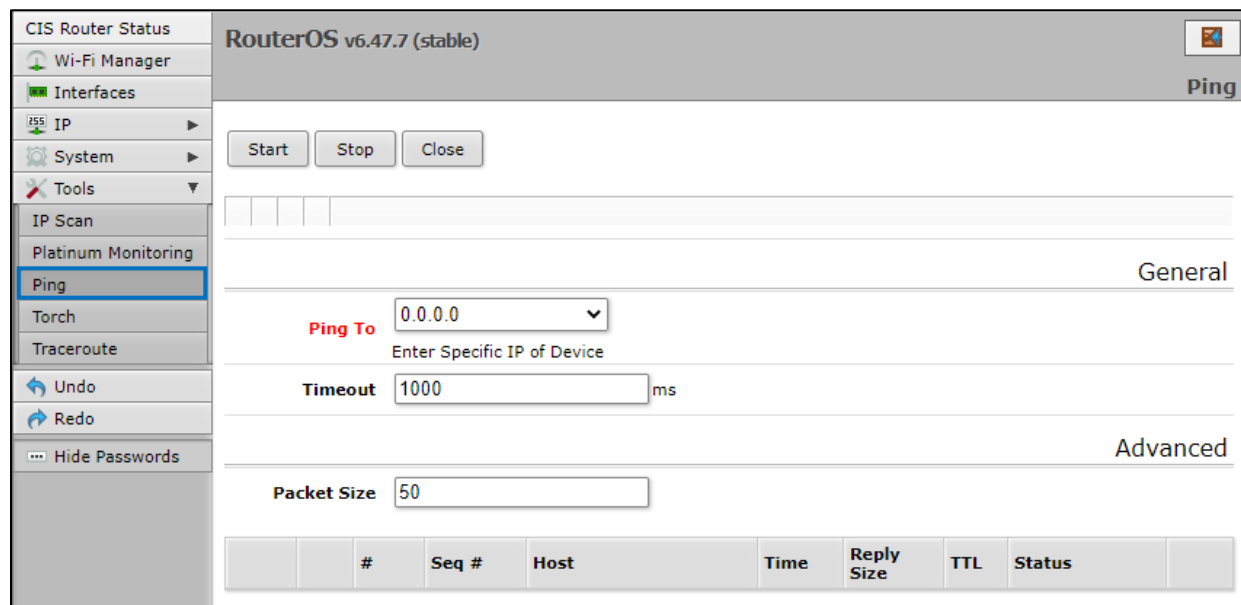
UPnP

Universal Plug and Play enables your router to easily discover other devices located on the network and vice-versa. If you require UPnP, select it under the **IP** tab in the toolbar, then enable it. UPnP has implications on the security of the device, and it is recommended you leave it disabled unless required.



Ping

Ping uses Internet Control Message Protocol (ICMP) echo messages to determine if a remote host is active. It will also provide the round-trip time between the hosts. Enter the IP address of the device and select Start to begin.



IP Scan

The IP scan tool locates devices on the network. It can also locate devices that have a static IP set internally if they are on the same network as the router.

To use the IP scan tool, select the network you wish to scan on (bridge-operations is default), then enter the network address and subnet mask using CIDR notation.

The screenshot shows the RouterOS v6.47.7 (stable) IP Scan tool interface. The left sidebar contains a menu with options: CIS Router Status, Wi-Fi Manager, Interfaces, IP, System, Tools, IP Scan (highlighted), Platinum Monitoring, Ping, Torch, Traceroute, Undo, and Redo. The main panel is titled "IP Scan" and features a "Start", "Stop", and "Close" button. Below the buttons, there is a dropdown menu for "Interface" set to "bridge-operations" and a text input field for "Address Range" containing "10.100.1.0/24". A table below the input fields has columns: #, Address, MAC Address, Time (ms), DNS, SNMP, and Netbios.

Select **bridge-operations** and enter **10.100.1.0/24** as the address range. You may have multiple interfaces and address ranges depending on your configuration. Most use a /24 network size.

Traceroute

The traceroute tool is used to view the network hops between your router and a destination IP. For basic use, enter the IP address of the host to perform the trace on and click Start.

The screenshot shows the RouterOS v6.47.7 (stable) Traceroute tool interface. The left sidebar contains a menu with options: CIS Router Status, Wi-Fi Manager, Interfaces, IP, System, Tools, IP Scan, Platinum Monitoring, Ping, Torch, Traceroute (highlighted), Undo, Redo, and Hide Passwords. The main panel is titled "Traceroute" and features a "Start", "Stop", and "Close" button. Below the buttons, there is a "Basic" tab. The "Traceroute To" field contains "8.8.8.8". Other fields include "Packet Size" (56), "Timeout" (1000 ms), "Protocol" (icmp), and "Port" (33434). On the right side, there are dropdown menus for "Count", "Max Hops", "Src. Address", "Interface", "DSCP", and "Routing Table". A "Use DNS" checkbox is also present.

Platinum Monitoring

If the client has a Platinum or PlatinumDN service, they will receive the Platinum Monitoring service, which will send email alerts when key networking equipment at a specified IP address goes offline. You can enable and disable notifications by clicking the **D** or **E** buttons on the left.

| | | ▲ Host | Status | Since |
|-------------------------|---|--------------|---------|----------------------|
| ;;; CIS_Router_Doe_Jane | | | | |
| [E] | X | 🔌 10.100.1.1 | unknown | Apr/14/2021 06:55:22 |
| [E] | X | 🔌 10.100.1.2 | unknown | Apr/14/2021 06:55:22 |
| [E] | X | 🔌 10.100.1.3 | unknown | Apr/14/2021 06:55:22 |

Torch

Torch allows you to view packets flowing through an interface. You can obtain information such as the IP addresses, ports, and protocols in use. You can select the interface, and which information to collect. You can specify a source or destination address range or leave these fields blank for all addresses. You can specify by port or protocol as well.

| # | Eth. Protocol | Pro... | Src. | Dst. | VLAN Id | DSCP | Tx Rate | Rx Rate | Tx Packet Rate | Rx Packet Rate |
|---|---------------|--------|------|------|---------|------|---------|---------|----------------|----------------|
|---|---------------|--------|------|------|---------|------|---------|---------|----------------|----------------|

Troubleshooting

| Symptom | Possible causes |
|---|--|
| The PoE access point, switch, or other powered device will not turn on. | <ul style="list-style-type: none"> • Try changing the PoE mode to “forced on” from the interfaces menu. Remember, never force PoE on a non-PoE device! |
| I cannot access my system using the VPN. | <ul style="list-style-type: none"> • Ensure the username, password, and secret were copied and pasted correctly and contain no extra characters or spaces. • It is recommended you use a DNS name to connect instead of an IP address, as they are prone to change from time to time. • Your ISP’s provided gateway must be in bridge mode for VPN access to work. Consider a PlatinumDN service if this is not possible. |
| Port Forwarding does not work. | <ul style="list-style-type: none"> • Review the manual to ensure the configuration is set correctly or call CIS for support. • The ISP’s gateway must be in bridge mode or have extra configuration applied. |
| The client is not getting the speed they are paying the ISP for. | <ul style="list-style-type: none"> • If you are connected wirelessly, the speed will be affected by the distance from the access point, interference from neighboring networks, the number of devices connected to the access point, the environment surrounding the access point, the device used, and other factors. <ul style="list-style-type: none"> • With current technologies, wireless access points are not able to perform at the speed of a Gigabit internet connection, especially in a crowded environment. • Ensure the wired devices you are using support Gigabit ethernet and not 10/100 mbps. |
| I cannot access the router’s web interface. | Ensure your device is set to receive an IP address via DHCP. If your router’s IP address is different than the default, obtain the default gateway address and use that to connect. You can do this using ipconfig in a command prompt in Windows. |
| The router has no internet access. | <ul style="list-style-type: none"> • Check connections and reboot the router and ISP’s gateway. • If the ISP requires a static IP address or PPPoE connection, contact CIS for assistance. |

Warranty Information

Custom Integration Solutions™ products have a 2-Year Limited Warranty. This warranty includes parts and labor repairs on all components found to be defective in material or workmanship under normal conditions of use. This warranty shall not apply to products that have been abused, modified, or disassembled. Products to be repaired under this warranty must be returned to Custom Integration Solutions™ or a designated service center with prior notification and an assigned return authorization (RA) number.

Contact Information

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The CIS-5009-8POE is in compliance with the essential requirements and other relevant provisions of Directive 2014/53/EC.