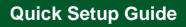


Edge Core Network Switch ECS2100 Series



Version: 20240919



Table of Contents

Modify computer IP address	2
Windows IP Setup	2
MAC IP Setup	4
Switch Requirement	5
Feature explanation	6
Connecting to the switch Web GUI Interface	6
Configuration Jumbo Frame	7
Configure IGMP Snooping	7
Configure Vlan IGMP	8



Modify computer IP address

Windows IP Setup

- 1. Connect the PC to network setting (Windows 11)
- 2. Go to Network & Internet and select Ethernet or Wi-Fi

Net	work & internet		
	Wi-Fi (TP-Link_20EC)	Properties Public network S GHz	Data usage > 10.58 GB, last 30 days >
ŵ	Wi-Fi Connect, manage known networks, metered network		0n 💽 >
Ç	Ethernet Authentication, IP and DNS settings, metered network		>
ŧ	VPN Add, connect, manage		>
((y))	Mobile hotspot Share your internet connection		Off • >
\$	Airplane mode Stop wireless communication		Off •>
ļ	Proxy Proxy server for Wi-Fi and Ethernet connections		>

3. Go to Ethernet and Edit

Network & internet > Ethernet

Authentication settings		Edit
Metered connection Some apps might work differ	ently to reduce data usage when you're connected to this network	Off
Set a data limit to help co	ontrol data usage on this network	
IP assignment:	Manual	
IPv4 address: IPv4 mask:	169.254.1.40 255.255.0.0	Edit
DNS server assignment:	Automatic (DHCP)	Edit
Manufacturer:	Realtek	Сору
Description:	Realtek PCIe GbE Family Controller	
Driver version:	10.50.511.2021	
Physical address (MAC):	E4-A8-DF-C3-D2-8B	



4. Select IP setting From DHCP to Manual and setup IP Address to make sure with the same subnet as switch

← Settings		Edit IP settings		- 0 ×
HPC-研發 Local Account	Netv	Manual		
Find a setting Q		IPv4		Edit
		On		Off
A Home		IP address	work	
System		169.254.1.40	-	
Bluetooth & devices		Subnet mask		
♥ Network & internet		255.255.0.0		Edit
Personalization		Gateway		
Apps 1				Edit
Accounts		Preferred DNS		Сору
🕤 Time & language				
🐲 Gaming		DNS over HTTPS	-	
🕇 Accessibility				
Privacy & security	Get	Save Cancel		
🗢	🖌 Giv			



MAC IP Setup

- 1. Connect the Mac to network switch via Ethernet or Wifi
- 2. Go to Wifi / Ethernet interface and select detail

•••	< > Wi-Fi	
Q Search	🛜 Wi-Fi	
Sign in with your Apple ID	TP-Link_20EC Connected	🔒 🔶 Details
Wi-Fi Bluetooth	Known Networks	
🛞 Network	✓ TP-Link_20EC	≜ ∻ ⊡
Notifications Sound	TP-Link_box01_5G	≜ 奈 …
C Focus	Other Networks	
General	aegis-WiFi	₿ ବ
Appearance	AIAP03-2.4(Ext)	≜

3. Go to TCP/IP and Select Configure IPV4 from DHCP to Manually. Setup IP Address to make sure with the same subnet as switch



Configure IPv4	Manually 😂
IP address	169.254.3.100
Subnet mask	255.255.0.0
Router	0.0.0.0
Configure IPv6	Automatically 😂
Router	Router
	TP-Link_20EC Configure IPv4 IP address Subnet mask Router Configure IPv6

Switch Requirement

The following features need to be enabled on the network switch being used for a Switch

- 1. Multicast
- 2. Jumbo Frames / Frame Size / MTU over 9000
- 3. IGMP Management / Snooping
- 4. PoE (where being utilised)



Feature explanation

- Multicast : (one-to-many or many-to-many distribution) is a group communication where information is addressed to a group of network devices simultaneously
- Jumbo Frames / Frame Size / MTU : are Ethernet frames with more than 1,500 bytes of payload. Conventionally, jumbo frames can carry up to 9,216 bytes of payload and must be activated in order to send large packets of data for HDMI distribution
- IGMP Management / Snooping : Internet Group Management Protocol (IGMP) snooping is a feature that allows switches to intelligently forward multicast traffic to avoid broadcasting the traffic to all ports to improve network performance..
- POE : (Power over Ethernet) devices are all capable of being powered by PoE. Power Supply Units are available for devices, however, the products are not sold with these included. PoE can be disbaled on the switch if external PSU's are being used

Connecting to the switch Web GUI Interface

- 1. Open your internet browser (Google Chrome, Mozilla, Internet Explorer etc)
- 2. Type the network switch default IP address into the web browser bar
- 3. Enter the default user name and password

Default IP address: 192.168.2.10

User: admin

Password: admin



Configuration Jumbo Frame

To Enable Jumbo Frame

Under "System"

Under "Capability

Enable Jumbo Frame and Apply

System > Capability © 0 Openeral Console Switch Jumbo Frame Switch Jumbo Frame Console Bridge Extension Traffic Classes Enabled Console Taffic Classes CPU Utilization Static Entry Individual Port VLAN Variant Version Number VLAN Configurable PVID Togging VLAN Configurable PVID Togging VLAN Max Supported VLAN ID Spanning Tree Max Supported VLAN ID Traffic 4094		ECS2100-28P Link Up Link Dov	nn = Admin Down	Unit 1 V Mode Active V Lang English V
■ Dashboard ▼ System ● General ■ Switch ■ Switch ■ Time ■ Extended Multicast Filtering Services ■ Console ■ CPU Utilization ● CPU Utilization ■ Memory Status ■ Reset ■ Could Munage ■ Interface ■ Congurable PVID Tagging ■ VLAN ■ Mac Zadress ■ Spanning Tree ■ Spanning Tree ■ Security		System > Capability		820
© General General Capability © Switch Jumo Frame © Capability Bridge Extension © Time Extended Muticast Filtering Services No © Console Traffic Classes Enabled © Console Taffic Classes Enabled © CPU Utilization Static Entry Individual Port Yes © CPU Utilization VLAN Version Number 2 ® Memory Status VLAN Learning IvL © Cound Munage Local VLAN Capabile No > Interface Configurable P10 Tagging Yes > VLAN Max Supported VLAN ID 4094 > Sparring Kevent Apply	Dashboard			
© General Jumbo Frame © Switch Jumbo Frame © Capability Bridge Extension © Time Extended Multicast Filtering Services No © Console Taffic Classes Enabled © Capulative Static Entry individual Port Yes © CPU Utilization Static Entry individual Port Yes © CPU Utilization VLAN Version Number 2 © Memory Status VLAN Learning IVL © Coloud Manage Local VLAN Capable No Interface Configurable PVID Tagging Yes > VLAN Configurable PVID Tagging Yes > MACA Address Max Supported VLAN Numbers 4094 > Taffic Spanring Tree Max Supported VLAN ID 4094		General Canability		
• Capability Bridge Extension • File Time • Time Extended Multicast Filtering Services No • Console Tanfic Classes Enabled • Console Static Entry Individual Port Yeis • CPU Utilization VLAN Version Number 2 • Memory Status VLAN Learning IVL • Cond Manage Local VLAN Capabile No • Interface Configurable PTUD Tagging Yes • VLAN Max Supported VLAN Numbers 4094 • Spanning Tree Max Supported VLAN ID 4094			Cookied	
File Bridge Extension Time Extended Multicast Filtering Services No © Console Traffic Classes Enabled © Console Traffic Classes Enabled © CPU Ubication Static Entry Individual Port Yes © CPU Guard VLAN Version Number 2 © Memory Status VLAN Learning I/L © Cloud Manage Local VLAN Capable No > Interface Configurable PVID Tagging Yes > VLAN Max Supported VLAN Numbers 4054 > Spanning Tree Max Supported VLAN ID 4094		Jumbo Frame	C Enabled	
Time Extended Multicast Filtering Services No Console Tanfic Classes Enabled Teinet Static Entry Individual Port Yes CPU Utilization VLAN Version Number 2 Memory Status VLAN Learning IvL Coloud Manage Local VLAN Capable No Interface Configurable PTUD Tagging Yes VLAN Max Supported VLAN Imbers 4094 Spanning Tree Max Supported VLAN ID 4094		Bridge Extension		
^o Console Telefet Telefet CPU Ublication CPU Suard CPU Suard VLAN Version Number Port Suard VLAN Version Number Could Manage Coold Manage Local VLAN Capable No Interface Conduct Manage VLAN Max Supported VLAN Numbers Spanning Tee Max Supported VLAN ID Security			No	
Tehet Irane Cusses Tane Cusses Trane Cusses Trane Cusses Trane Cusses Trane Cusses Trane CPU Utilization Static Entry Individual Port Yes CPU Utilization VLAN Version Number 2 Could Manage VLAN Learning VL Could Manage Cooffigurable PVID Tagging Yes VLAN Max Supported VLAN Numbers 4094 Traffic Security Apply Revert		-		
© CPU Utilization Static Entry Individual Port Yes © CPU Utilization VLAN Version Number 2 © CPU Utilization 2 2 • Memory Status VLAN Learning IVLAN • Reset VLAN Capable No • Interface Configurable PVID Tagging Yes • VLAN Max Supported VLAN Numbers 4054 • Spanning Tee Max Supported VLAN ID 4054		Traffic Classes	Enabled	
Kernory Status VLAN Learning VLAN Learning VLAN Learning VLAN Learning VLAN Learning VLAN Cooligurable P100 Tagging Ves VLAN Max Supported VLAN Numbers 4054 Spanning Tree Max Supported VLAN ID Traffic Security Revert		Static Entry Individual Port	Yes	
Reset VLAN Learning IVL Cloud Manage Local VLAN Capable No Interface Configurable PvID Tagging Yes VLAN MAC Address Max Supported VLAN Numbers 4094 Spanning Tree Max Supported VLAN ID 4094 Traffic Security Apply Revent		VLAN Version Number	2	
Reset Cloud Manage Local VLAN Capable No Interface Configurable PVID Tagging Yes VLAN Max Supported VLAN Numbers 4094 Spanning Tree Max Supported VLAN ID 4094 Traffic Security Apply Revert		VI AN Learning	M	
Volkor Interface Configurable PVID Tagging Yes VLAN MAC Address Max Supported VLAN Numbers 4094 Spanning Tree Max Supported VLAN ID Apply Revert		-		
> VLAN Comparison First ranging Tes > MAC Advess Max Supported VLAN Numbers 4094 > Spanning Tree Max Supported VLAN ID 4094 > Traffic Security Apply		Local VLAN Capable	No	
MAC Address Max Supported VLAN Numbers 4094 Security Apply Revert		Configurable PVID Tagging	Yes	
Spanning Tree Max Supported VLAN ID 4094 Traffic Security Apply Revert		Max Supported VLAN Numbers	4094	
Traffic Security Apply Revert		Max Supported VLAN ID	4094	
	> Security		Apply Revert	
	Administration			
Tools				
▼ qi <				

Configure IGMP Snooping

You can configure the parameters for IGMP snooping, which is used to build forwarding lists for multicast traffic.

Note:

You must log in as the admin user, which has read/write access privileges to change the data on this page.

To configuration IGMP Snooping Under Multicast Under IGMP Snooping Under General Enable below feature and Apply



	ECS2100-28P Link Up Link Down	Admin Down	Unit 1 V Mode Active V Lang English V
	ulticast > IGMP Snooping > General		820
Interface	IGMP Snooping Status	C Enabled	
✓ VLAIN	Proxy Reporting Status	Enabled	
Spanning Tree	TCN Flood TCN Query Solicit	Enabled	
➤ Security	Router Alert Option	Enabled	
 Administration Tools 	Unregistered Data Flooding	Enabled	
> IP	Version Exclusive	Enabled	
	IGMP Unsolicited Report Interval (1-65535)	400 seconds	
V Multicast	Router Port Expire Time (1-65535)	300 seconds	
General	IGMP Snooping Version (1-3)	2	
 Multicast Rout IGMP Member 	Querier Status	Enabled	
 Interface Forwarding Er 		Apply Revert	
Filter Statistics			
MLD Snooping *			

Configure Vlan IGMP

To Configuration Vlan IGMP

Under Multicast

Under IGMP Snooping

Under Interface

Enable below feature and Apply

	ECS2100-28P Link Up Link Down	Admin Down	Unit 1 V Mode Active V Lang English V
	Multicast > IGMP Snooping > Interface		8 ? 0
Dashboard System Interface	Action: Configure VLAN		
≻ VLAN	VLAN	1.	
 MAC Address Spanning Tree 	IGMP Snooping Status	Z Enabled	
 Spanning Tree Traffic 	Version Exclusive	Using Global Status 🗸	
Security	Immediate Leave Status	C Enabled By-Group	
 Administration Tools 	Multicast Router Discovery	Enabled	
> IP	General Query Suppression	Enabled	
IP Service	Proxy Reporting	Using Global Status 🗸	
V Multicast	Interface Version	Using Global Version 🗸	
General	Query Interval (2-31744)	125 seconds	
 Multicast Rout 	Query Response Interval (10-31740)	100 (1/10 seconds, multiple of 10)	
 IGMP Member Interface 	Last Member Query Interval (1-31744)	10 (1/10 seconds, multiple of 10)	
Forwarding Er	Last Member Query Count (1-255)	2	
Filter Statistics	Proxy (Query) Address	0.0.0.0	
MLD Snooping *		Apply Revert	