

### INTRODUCTION

The Pulse-Eight OneIP Transceiver is an ultra-low latency, AV-over-IP solution capable of distributing UltraHD 4K HDMI 2.0 video (18Gbps), with support for HDR, over a 1Gbps Ethernet network.

The following is a step-by-step tutorial for configuring the Cisco CBS350 series switch for use with Pulse-Eight OneIP (TRX/TX/RX) units. Please follow the instructions below before connecting any OneIP devices to the switch.



## SUPPORTED PRODUCTS

• Cisco CBS350 series switches

#### **IMPORTANT NOTES!**

Do **NOT** connect any OneIP devices to the switch before configuration is complete, doing so may cause the switch to run slow or crash due to multicast data flooding the network. Ensure that Querier IP address is pointing at the AV Switch.





# CORE SWITCH (OR SINGLE SWITCH) CONFIGURATION

Log into the Cisco Switch web interface, the Cisco CBS350 switches are set to DHCP by default, you will need to scan the network or check DHCP server to find IP address, if no DHCP server is available the switch will default to 192.168.1.254

- 1. Log into the Web UI. Default credentials are **cisco** and **cisco**.
- 2. Create a new secure Username and Password and click Apply at top right hand side of screen
- 3. Log in with New Credentials
- 4. In the top right drop down menu change access from **Basic** to **Advanced**

Q	admin	English	~	Advanced	~]	3	0	•



5. Navigate to **Port management > Green Ethernet > Properties** Disable 802.3 EEE and click apply

For the functions and/or para	meters configured on this page to become effective,
you may have to configure the	e corresponding port based parameters on Port Settings page.
Energy Detect Mode:	Enable
Short Reach:	Enable
Port LEDs:	C Enable

6. Navigate to **Multicast > Properties** and set Bridge Multicast Filtering Status to Enable click apply

		Bridge Multicast Filtering Status: 🗹 Enable
7.	Navigate to <b>M</b> a. b. c.	ulticast > IPv4 Multicast Configuration > IGMP Snooping Enable IGMP Snooping Status Enable IGMP Querier Status Click Apply

IGMP Snooping Status:	🕑 Enable	
IGMP Querier Status:	🕑 Enable	

8. From the same page click select the radio button in the IGMP snooping table next to Entry No.1 and click the edit button (pencil icon)

IGMP S	Snooping Tal	ole
2	Ø	
	Entry No.	VLAN ID



- 9. Adjust the following settings
  - a. Enable IGMP Snooping Status
  - b. Enable Immediate Leave
  - c. Enable IGMP Querier Status
  - d. Enable IGMP Querier Election
  - e. Set IGMP Querier to V2
  - f. Set Querier Source IP Address to Auto

VLAN ID:	1	
IGMP Snooping Status:	🕑 Enablo	
MRouter Ports Auto Learn:	C Enable	
Immediate Leave:	C Enable	
· Last Member Query Counte	🕆 💿 Use Query Robustness (2)	
	O User Defined	(Range: 1 - 7
IGMP Querier Status:	C Enable	
IGMP Querier Election:	C Enable	
IGMP Querier Election: IGMP Querier Version:	<ul> <li>✓ Enable</li> <li>◆ v2</li> </ul>	
IGMP Querier Election: IGMP Querier Version:	<ul> <li>✓ Enable</li> <li>● v2</li> <li>○ v3</li> </ul>	

#### 10. Click Apply

11. Navigate to **Multicast > Unregistered Multicast** and set all ports to Filtering and click Apply

Unregis	ster	ed I	Mult	ica	st						
Filter: Inte	rface	Type	equal:	s to	Port 、		Go				
Port	GE1	GE2	GE3	GE4	GE5	GE6	GE7	GE8	GE9	GE10	
Forwarding	0	0	0	0	0	0	0	0	0	0	
Filtering	۲	۲	۲	۲	۲	۲	۲	۲	۲	۲	

12. Navigate to **Multicast > Multicast router port** and set port connected to core switch or router to 'Forbidden' click apply

Filter: VL	AN ID	equa	ls to	1 ~	AND	IP Vé	ersion	equa	s to	Version 4 $\sim$
Port	GE1	GE2	GE3	GE4	GE5	GE6	GE7	GE8	GE9	GE10
Static	$^{\circ}$	0	0	0	0	0	0	0	0	0
Dynamic										
Forbidden	$\bigcirc$	0	0	0	0	0	0	0	0	۲
None	۲	۲	۲	۲	۲	۲	۲	۲	۲	0

13. Once configuration is complete select the red save icon at the top of the screen



13. Switch configuration is now complete you can go ahead and connect the OneIP devices