

ZyPerUHD Network Switch Configuration Checklist



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Basic Switch Requirements

The ZyPerUHD requires that network switches meet the following basic requirements.

1. Must support layer 2 / layer 3 IPV4 protocols
2. Must support 1Gb minimum bandwidth per port
3. Must be a fully “non-blocking” switch
4. Multicast support
5. IGMP v2 with IGMP snooping
6. Must support Jumbo Frames (Frame size 8000 bytes or larger)

Switch Configuration Checklist

Some Switches will work directly out of the box with zero configuration required. Nearly all switches however will provide the user some ability to customize the configuration. The list below includes various switch configuration options that ZeeVee has encountered. Look for these or similar options when configuring your switch.

1. Enable IGMP Snooping
 - a. Must be enabled
2. Enable IGMP Snooping on VLAN used by ZyPerUHD
 - a. Must be enabled when all ports default to VLAN1
3. Filter/Drop unregistered Multicast traffic
 - a. If not applied, the behavior of the switch will be to broadcast multicast packets if the switch has no known destination for that packet.
 - b. Must be enabled if found
4. Unregistered Multicast Flooding
 - a. Must be disabled if found
5. Filter Unregistered Multicast (different wording than number 4 above)
 - a. Must be enabled if found
6. Disable IGMP Query
7. Disable IGMP Query on VLAN used by ZyPerUHD
8. Validate IGMP IP Header
 - a. Must be **disabled** if found
9. Set IGMP Version to IGMP V2

- a. Must be set if found
- 10. Enable FASTLEAVE on port X
 - a. Should be enabled, if found
- 11. Enable FASTLEAVE for VLAN used by ZyPerUHD
 - a. Should be enabled if found
- 12. Jumbo Frame or (Frame Size)
 - a. Enable or set to 8000 bytes or larger
- 13. Disable Multicast Storm Control on **Netgear ProSafe XS708T**. (*Security-Traffic Control-Storm Control-Status=Disable*)

Appendix 1: Recommended Switches

The following 1Gbit switches are recommended for use with the ZyPerUHD. Please note this is not an all-inclusive list. There are many other switches available that will function with the ZyPerUHD.

Manufacturer	Model #	Number of 1Gbit Ports	Notes
Netgear	M4300-28G	24	Includes two 10Gbit RJ45 and two 10Gbit SFP+ Ports
Netgear	M4300-52G	48	Includes two 10Gbit RJ45 and two 10Gbit SFP+ Ports
Netgear	M4300-28G-PoE+	24	Supports PoE
Netgear	M4300-52G-PoE+	48	Supports PoE
Arista	7010T-48	52	Includes four 10Gbit SFP+ ports
Cisco	SG300-28	24	
Cisco	SG300-28MP	24	Supports PoE
Cisco	SG300-52	48	
Cisco	SG300-52MP	48	Supports PoE