



## Technical Bulletin

### Plus-X Communication and Managed Network Switches

#### Scope

This document outlines how to ensure that Plus-X to ARC Plus communications are not disrupted when using managed network firewalls and switches like the Cisco Meraki series or Fortinet Fortigate series.

#### Plus-X Protocol

The Plus-X line of products uses a custom protocol that transfers information to the ARC Plus remote - control system. The Plus-X protocol uses UDP (user datagram protocol), a transport layer protocol in the IP (internet protocol) suite and operates at 10Base T or 10Mbps (megabits per second).

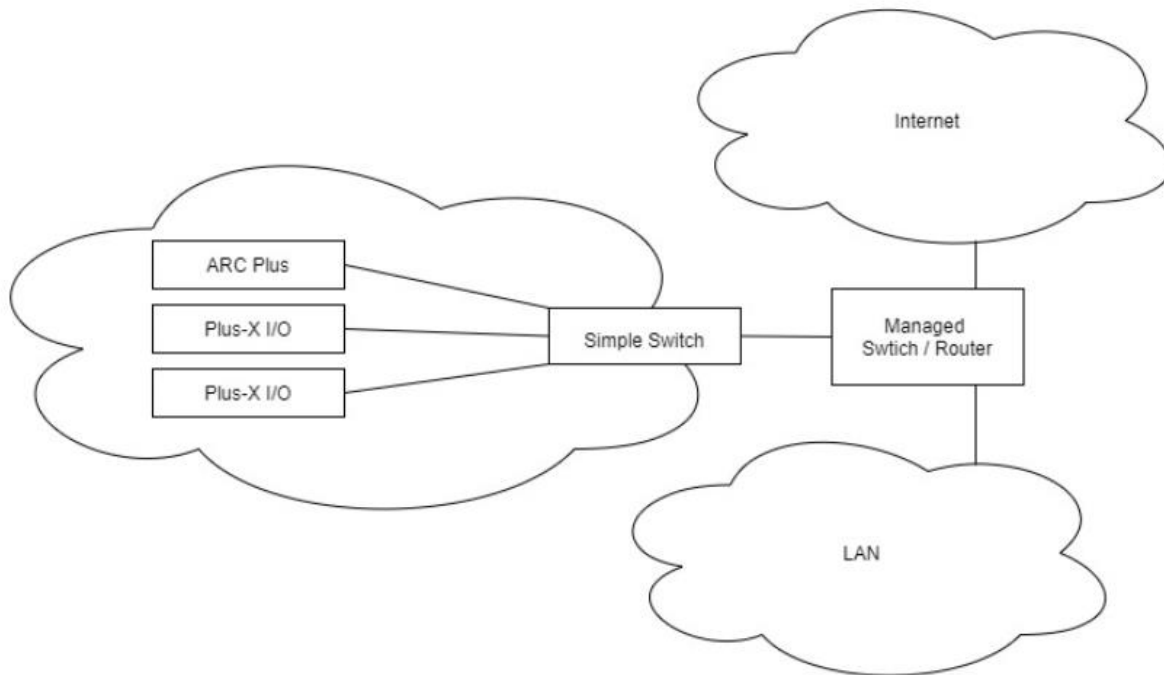
#### Managed Switches

Managed switches can handle Plus-X UDP traffic in a way that can disrupt communications to the ARC Plus. In certain cases, your IT department may have to adjust settings on the managed switch so that the Plus-X protocol can reliably deliver packets to ARC Plus and reduce or eliminate the connection disruptions. The network connection between the ARC Plus and the Plus-X should allow for UDP packets to freely transfer between the two devices or disruptions may occur resulting in "Lost Plus-X" alarms.

It has been found that in the case of Cisco Meraki switches using the first 8 physical ports for Plus-X devices has significantly improved the communication link to the ARC Plus.

## Solution

The simple solution is to isolate all the Plus-X devices and ARC Plus on a simple unmanaged switch. You can then connect the isolated switch to the managed switch on a single port that will connect with the rest of the network. If a simple switch cannot be used it is recommended that the Plus-X devices be plugged into the first 8 physical ports on the managed switch.



By isolating the ARC Plus and Plus-X I/O devices from the managed switch, this allows the Burk devices to communicate freely without interruptions.

We are committed to providing you with the best possible service and support for your Burk Technology product. If you should have any concerns or questions, please call us at 978-486-3711.

Thank you,  
Burk Technology Support Team  
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