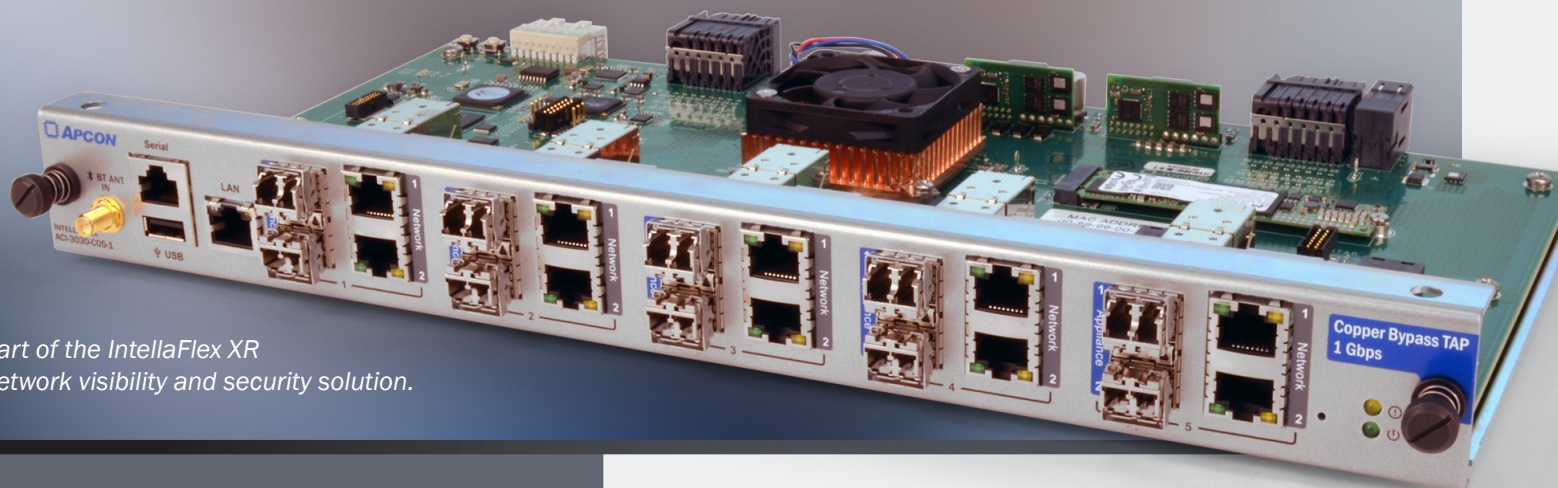


# IntellaFlex XR

## Copper Bypass TAP Blade

Active network protection from inline security tool failure



Part of the IntellaFlex XR network visibility and security solution.

### FEATURES

- Monitor security tool health with heartbeat detection and automatic failover recovery
- High density fail-safe monitoring of up to five inline security and monitoring tools
- Five 100M/1G copper network ports paired to five 100M/1G/10G SFP appliance ports
- Data aggregation, filtering and load balancing
- Configuration and management made easy with WebXR graphical user interface
- Leverage IntellaFlex XR for advanced traffic filtering features such as deduplication, protocol stripping, and time stamping

### Increase Network Reliability by Utilizing Bypass Protection

To combat the many types of network threats, enterprises have added more security protection utilizing multiple defenses including firewalls, intrusion protection (IPS), data loss prevention (DLP), flow analytics and other advanced threat protection devices. The growing number of deployed security devices also increases the risk of network downtime when an inline security device fails.

#### Keep Traffic Flowing When Inline Tools Fail

APCON's Copper Bypass TAP Blade combines an inline fail-safe security solution and intelligent network monitoring in one blade to protect traffic flow and increase visibility. The Copper Bypass TAP can be installed directly in any IntellaFlex XR chassis and connected to any security or monitoring tool that receives live network traffic. The Copper Bypass TAP maintains high network availability by allowing traffic to flow unimpeded when inline security tools suffer a failure, degrade in performance or require maintenance.

#### High Density Bypass TAP

APCON's Copper Bypass TAP provides five individual bypass TAPs to connect up to five inline network security tools in a single blade. The five TAPs operate independently allowing individual tools to be configured, maintained or removed without affecting operations of the remaining TAPs.

## Monitoring the Health of Security Appliances

The Copper Bypass TAP provides heartbeat functionality to automatically detect a tool failure. It does this by inserting heartbeat packets into the network traffic going to the network tool from both directions. The Copper Bypass TAP then continually monitors the attached devices at very short intervals. If the expected number of packets are not returned within the specified interval, the blade assumes that a failover condition has occurred and quickly switches to Bypass mode. While in Bypass mode, network traffic is diverted around the unresponsive tool reducing the risk of lost network data. If the condition that caused the port to switch to Bypass mode corrects itself within the specified timeframe, then the mode could automatically switch back to the normal Monitor mode. Alternatively, users can specify that the network ports remain in Monitor mode during failover, but their transmit signals are disabled. The disabled transmit signals notify any external monitoring device that a failover condition has occurred for those network ports. This allows the external monitoring device to reroute the network traffic away from the current network ports.



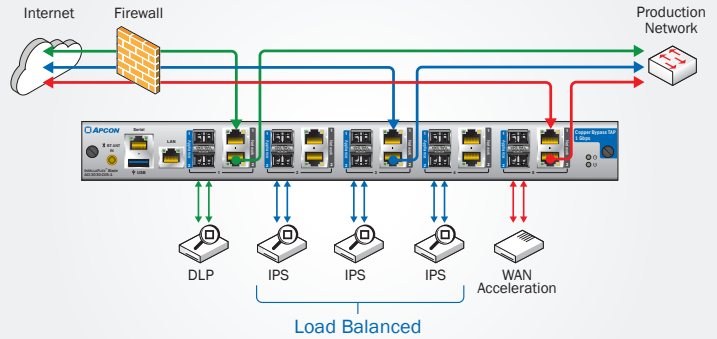
**Monitor mode** — network traffic going to the tool from both directions, heartbeat detected.



**Failover condition** — faulty heartbeat link detected and switches to Bypass mode.

## Load Balancing Supports Tool Redundancy

A load balancing use case might include a network that is distributing traffic across multiple IPS security appliances. If one system goes down, the Copper Bypass TAP will redistribute traffic across the remaining systems. This results in minimal loss of network traffic and recovery would be automatic.



## Leverage IntellaFlex XR Advanced Filtering Features

The Copper Bypass TAP is fully compatible with APCON's IntellaFlex XR network security and visibility solutions ranging from 1RU to 14RU systems. When integrated into an IntellaFlex system, the Copper Bypass TAP can mirror traffic via the backplane for access to advanced traffic monitoring features such as deduplication, packet slicing, and protocol stripping before sending traffic to external monitoring tools. It also allows bi-directional network traffic between a pair of network ports and a pair of appliance ports to be mirrored to an out-of-band tool via a port or Load Balance Group.

## Copper Bypass TAP Blade Specifications

<b>Network Ports</b>	5 pairs 100M/1G Copper Bypass TAPs Bypass mode: traffic bypasses the appliance Monitor mode: traffic is sent to the appliance for analysis Drop TX Signal mode: network ports remain in Monitor mode, but their transmit signals are disabled
<b>Appliance Ports</b>	5 pairs 100M/1G/10G Ethernet (SFP/SFP+) Enable up to 5 inline appliances Enable up to 10 monitor ports
<b>SFP/SFP+</b>	100MBase-FX, 1000BASE-T/SX/LX, 10GBASE-SR/LR
<b>Heartbeat</b>	Monitors appliance health Bypass when Heartbeat fails Select interval 100 ms to 5 sec Select missed Heartbeat packet threshold Select from 2 different Heartbeat packet types (ARP/UDP)
<b>Management</b>	Easy-to-use WebXR GUI plus CLI 1 LAN management port 1 CLI management port HTTPS and SSH for secure access TACACS+, Radius and LDAP authentication
<b>Filtering</b>	Filter traffic on Network Ports
<b>IntellaFlex Features</b> (unpaired appliance ports only)	Aggregation, Filtering, Load Balancing, Trunking, Any-to-Any and Multicast Connections, Multi Stage Filtering, and Port Tagging

<b>Size (H×W×D)</b>	14.45 × 8.0 × 1.5 in (36.7 × 20.3 × 3.8 cm) 1RU
<b>Weight</b>	4 lbs (1.81 kg)
<b>Power</b>	150 W / 550 BTU/hr without transceivers*
<b>Power Status LEDs</b>	Blade Power, Status, Port Link, and Tx/Rx activity
<b>Operating Temp</b>	32 to 122 °F (0 to 50 °C)
<b>Storage Temp</b>	-40 to 158 °F (-40 to 70 °C)
<b>Relative Humidity</b>	Operating: 0-85% noncondensing Storage: 0-95% noncondensing
<b>Safety</b>	UL 60950, EN 60950, CSA C22.2 60950
<b>EMC</b>	EN 55022, EN61000, FCC part 15, ICES 003
<b>Compliance</b>	CE mark and ROHS compliant

## Ordering / Part Number

<b>ACI-3030-T05-C</b>	IntellaFlex Copper Bypass TAP Blade
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\* Power requirement with transceivers will vary based on the actual transceivers being used, refer to transceiver data sheet for exact calculation.