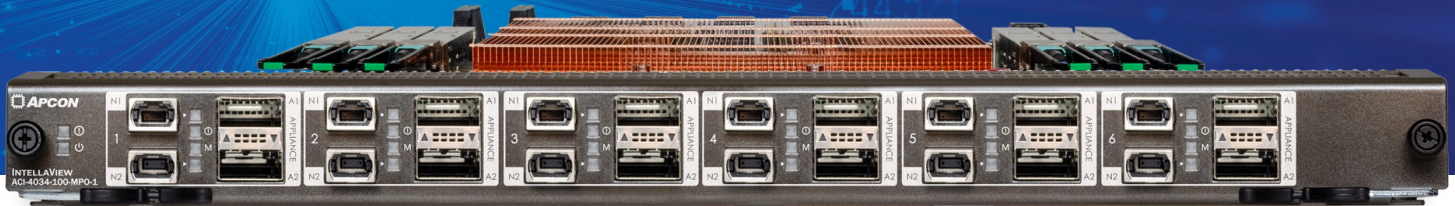


OPTICAL BYPASS TAP FOR NETWORK SECURITY

IntellaView Bypass TAP Blade



PRODUCT BENEFITS

Tap six 10G | 25G | 40G | 100G segments on a single blade.

Eliminate network downtime.

Achieve network performance and uptime goals with automatic tool failover and failback.

Improve security tool ROI.

Delay replacing legacy tools and increase return on investment.

Detect tool failover in milliseconds.

Monitor the health of tools with heartbeat monitoring with automatic detection if a security tool loses power or malfunctions.

Provide tool redundancy.

Distribute traffic to other security tools in the same load balance group (LBG).

Traffic Mirroring.

Mirror traffic to other ports in the IntellaView platform to utilize other advanced features and load balance groups.

Easily distribute 10G | 25G | 40G | 100G traffic with Load Balance Groups.

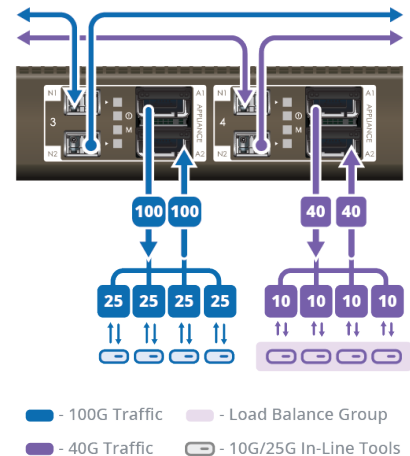
The challenges and costs that come with increased traffic are manageable — even with 10G and 25G tools. Distribute traffic with load balance groups. The Optical Bypass TAP blade provides security tool redundancy. It automatically distributes traffic to other appliances in the same load balance group and connects to other lower-bit-rate tools with rate conversion using load balance groups.

Eliminate single-point failures for networks with a fail-safe solution.

Security appliances and devices provide critical network protection, detection, and insight, but any tool can become a single point of failure.

The Optical Bypass TAP blade diverts 100G traffic around offline security tools with six bypass taps to protect traffic and networks from interruption.

If a connected appliance experiences trouble or loses power, a **Failover** trigger is automatically generated, so traffic bypasses the tool and eliminates downtime. Return to normal operation, or **Failback**, happens automatically after the system reverts to normal mode or manually after all triggers are cleared, and a user initiates a return to a normal state.

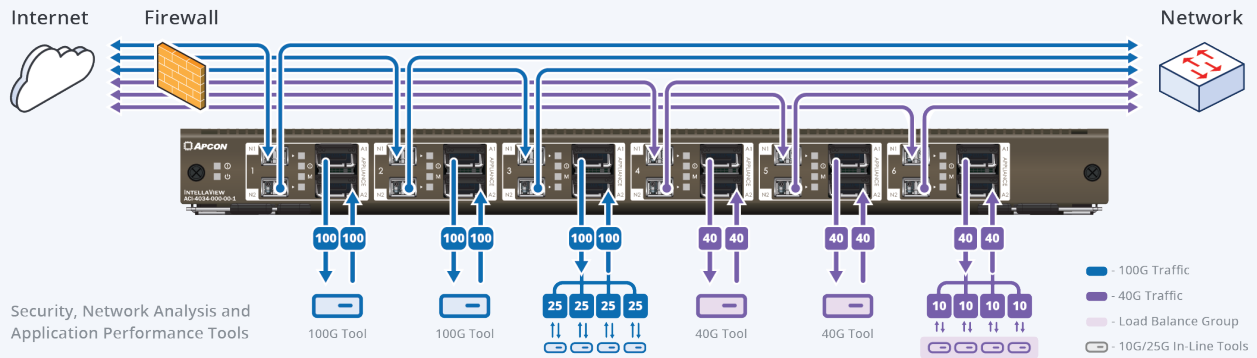


Squeeze more ROI from the 10G/25G/40G tools you already own.

The value a security tool provides is high, and so is the cost to purchase and maintain it. Older, lower-bit-rate tools struggle with growing network traffic speeds and feeds but are too expensive to replace.

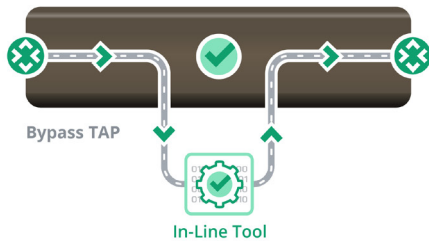
The six segments of 40G/100G Bypass Tap ports on the IntellaView blade expand to 24 x 10G/25G ports allowing older equipment to continue operating in a higher-speed network.

IT teams can control the time frame of migrating their tools to 40G and 100G networks while having the ability to use the 10G tools they already own.

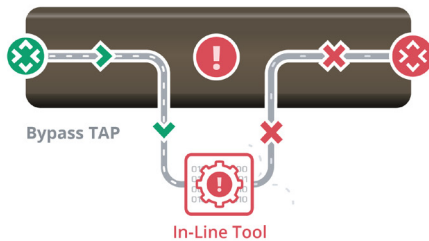


Extend the lifespan of
10G | 25G | 40G tools

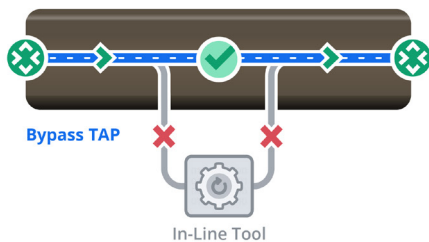
NORMAL MODE



TOOL FAILURE



BYPASS MODE



Bypass Mode

The bypass mode bypasses the failed tool to provide uninterrupted traffic flow.

How are your tools holding up in today's 100G network environment?

When push comes to shove, can high-speed network traffic bypass your lower-rate inline appliances if one malfunctions or loses power? Or, does the increased bandwidth result in loss of data and poor performance of the slower tools?

The IntellaView Optical Bypass TAP Blade provides advanced features and functionality so IT organizations can continue to use existing tools with high-speed traffic from multiple sources.

Don't miss a beat with Heartbeat Monitoring.

Data moving across the network is dependent on multiple factors — tool failure, power loss, etc. The IntellaView Bypass TAP provides a solution that removes obstacles mechanically instead of relying on configurations or power.

The IntellaView Bypass TAP is unmatched with heartbeat and link-state monitoring and automatic failover triggers.

When there's a tool failure or loss of power, the blade automatically passes network traffic between network ports. The failover triggers also provide alerts to the loss of a signal and heartbeat error, allowing corrective actions to be taken.

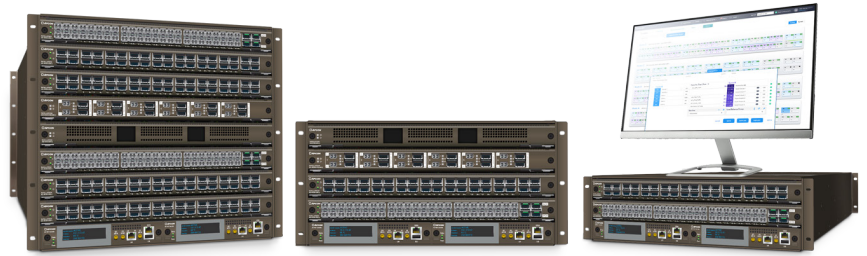
Don't wait or worry when a security tool is offline.

When a tool loses power or fails, speed matters to get the network back online. The ability to improve monitoring health and quickly detect if an inline appliance fails in milliseconds puts control back in the hands of the IT team. The IntellaView Bypass TAP blade enables network and security teams to monitor security tools' health and automatically bypass a tool. IT teams gain awareness and flexibility to take corrective action and automatically reroute traffic if necessary.

Mirror traffic to ports on the IntellaView platform for advanced features.

Take the IntellaView Optical Bypass TAP 1RU blade to the next level by integrating it into the IntellaView platform. This new platform is APCON's hybrid visibility solution for 40G and 100G networks with chassis ranging from 3RU to 9RU. Utilizing the IntellaView platform, IT teams can mirror traffic from the Optical Bypass Tap to ports on other blades in the chassis to perform monitoring, traffic logging, and other advanced features, all while having the ability to use 10G/25G tools through load balance groups.

Multi-site visibility can be achieved through IntellaView's network management software or Titan — APCON's centralized software solution for enterprise-wide, multi-switch management.



APCON's next-generation network visibility solutions
IntellaView Platform Chassis and IntellaView Management Software

IntellaView Advanced adds the capability to manage various settings of up to five IntellaView switches with a single user login. It allows users to clone settings and permissions to multiple IntellaView switches for easy setup.

The IntellaView software offers streamlined switch-level maintenance including routine tasks such as backing up and restoring switch settings and pushing a scheduled software upgrade to a maximum of five IntellaView switches.

IntellaView Bypass Tap Specifications

Failover Options

Optical Bypass: traffic is sent between the two network ports bypassing inline security tools and mirror ports

Drop TX signal: the TX lasers are disabled on the network ports signaling the failure to the connected network devices

Failover Triggers

Loss of signal on the appliance port

Heartbeats:

- Internal: internally-generated packets that are expected to be passed by the inline tool
- External: packets generated by the inline tool that are expected to be received at a regular frequency*
- Negative: internally-generated packets that are expected to be dropped by the inline tool*

Power Loss:

A loss of power to the Bypass Tap blade puts all six segments in Optical Bypass Mode.

Heartbeat Interval

100 msec to 5 sec, with a configurable trigger threshold

Switch Times

Monitor to Optical Bypass: <10 msec

Optical Bypass to Monitor:

100s of msec. Link re-establishment time depends on the connected network devices.

Filtering

Send just the traffic needed to the inline tools or mirror ports.
All other traffic can be sent directly between network ports.

Load Balancing

Load balance to inline tools or mirror ports on the bypass tap blade or to ports on other blades in the chassis.

Link State Propagation

Propagate a link fault received on one network port to the downstream network device connected to the partner network port.

* The items with the asterisk are not supported in the initial release.

IntellaView Bypass TAP Specifications Continued

Network Links	Six Optical Bypass Taps
Network Ports	Six pairs of 40G or 100G ports Fixed Multimode (MPO or LC) or Single mode (LC) connectors (model specific)
Appliance Ports	Six pairs of 40G/100G QSFP28 ports 24 pairs of 10G/25G ports in breakout mode
Blade Size	17.24" W × 17.46" D × 1.63" H (43.78 W × 44.32 D × 4.11 H cm)
Blade Weight	17 lbs (7.7 kg) with no transceivers installed
Operating Temp	32 to 113°F (0 to 45°C)
Storage Temp	-40°F to 158°F (-40°C to 70°C)
Relative Humidity	Operating: 10-85% non-condensing; Storage: 0-95% non-condensing
Blade Power	350 Watts with no transceivers installed
Thermal Load	1,194.2 BTU/hr with no transceivers installed
LEDs	Blade Power, Status, Port Link/Activity, Trigger Status, and Mode

IntellaView Bypass TAP Models

Bypass TAP Models	Description	Network Ports				
		Ethernet Standard	Connector	Fiber	Wavelength(nm)	Max. Distance
ACI-4034-040-MM-1	40G LC Multimode Optical Bypass	40GBASE-LX4	LC Duplex	MMF	1270,1290, 1310,1330	100m OM3 150m OM4
ACI-4034-040-MM-2	40G LC Multimode Optical Bypass (BiDi)	40GBASE-SR-BD	LC Duplex	MMF	832, 918	100m OM3 150m OM4
ACI-4034-040-SM-1	40G LC Single mode Optical Bypass	40GBASE-LR4	LC Duplex	SMF	1271,1291, 1311,1331	10km SMF
ACI-4034-040-MPO-1	40G MPO Multimode Optical Bypass	40GBASE-SR4	MPO	MMF	850	100m OM3 150m OM4
ACI-4034-100-MM-1	100G LC Multimode Optical Bypass	100GBASE-SWDM4	LC Duplex	MMF	850,880, 910,940	75m OM3 100m OM4
ACI-4034-100-SM-1	100G LC Single mode Optical Bypass	100GBASE-LR4	LC Duplex	SMF	1296,1300, 1304,1309	10km SMF
ACI-4034-100-MPO-1	100G MPO Multimode Optical Bypass	100GBASE-SR4	MPO	MMF	850	70m OM3 100m OM4

The IntellaView Optical Bypass TAP is compatible with all IntellaView chassis; see the IntellaView series for a complete list of chassis, blades and management software.