

Network Visibility Products Catalog

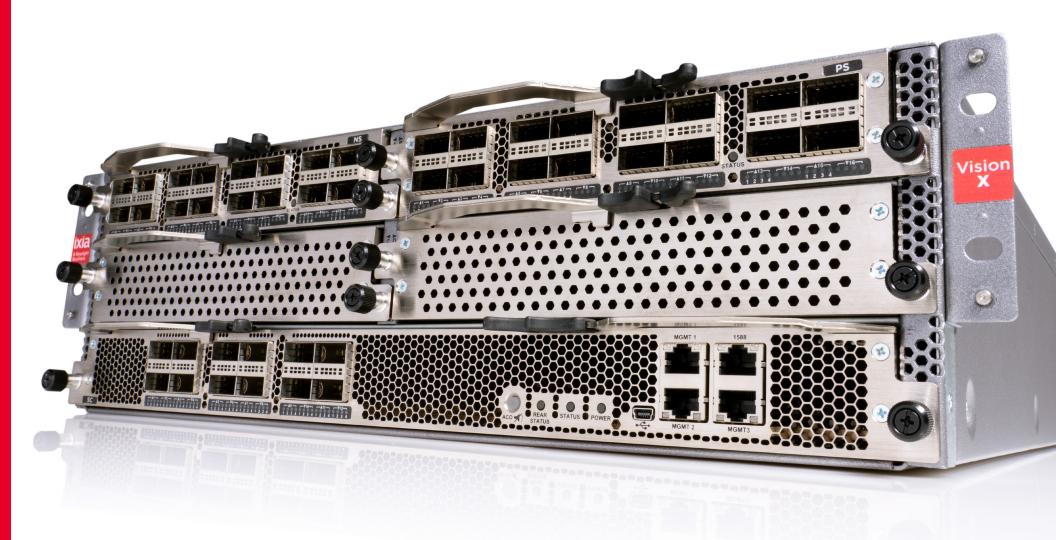


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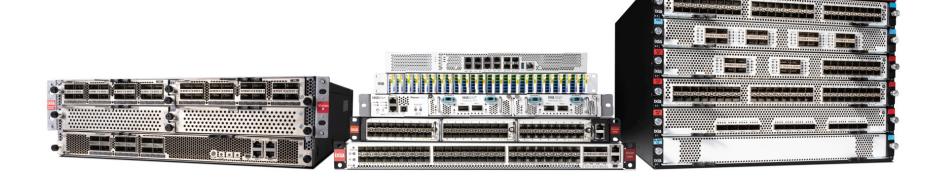
Connect and Secure the World with Dynamic Network Intelligence

The need for always-on networks is pervasive, and expectations are high when it comes to keeping them connected and secure. As technologies advance, edge computing, cloud environments, sophisticated security threats, increasing bandwidth requirements, and demanding compliance regulations make it challenging to extract actionable insight from your network.

Keysight can help. Customers rely on our solutions to deliver rich data about network traffic, applications, and users across any networking environment. This deep insight is what we call dynamic network intelligence. It helps you continuously innovate, meet aggressive service-level agreements, and keep applications running smoothly and securely.

Delivering dynamic network intelligence relies on network visibility, and Keysight provides a complete suite of products. Keysight Vision network packet brokers (NPBs) are at the core. They help you get the most out of your security and network monitoring tools by delivering filtered, streamlined traffic. External bypass switches, such as the Keysight iBypass, enable high availability and inline failover to keep your network online. And taps provide a pure and unedited view into traffic on the network, forming the foundation of dynamic network intelligence. Together, Keysight's network visibility products enable you, and all your network tools, to be more efficient and effective so you can keep performance high and security tight.

GET A CRASH COURSE IN NETWORKING FUNDAMENTALS.



Network Packet Brokers: The Right Data for the Right Tools

NPBs are central to providing dynamic network intelligence throughout your network. Using application-aware traffic filtering, decryption, and deduplication, NPBs enable your security and monitoring tools to be more efficient and effective by ensuring that each tool gets the right data — nothing more, nothing less. Furthermore, unlike many competitive offerings, Keysight NPBs offer hardware acceleration enabled by field-programmable gate arrays (FPGAs). This functionality is a key consideration for any visibility deployment supporting mission-critical security or network monitoring because it allows the application of features and filters at line rate without lost traffic, blind spots, or dropped packets.

Keysight NPBs offer these key features:

- zero-loss architecture
- load balancing for multiple monitoring or security tools
- centralized decryption, including advanced TLS 1.3
- dynamic filter compiler reduces operational complexity
- easy-to-use graphical user interface (GUI)



VISIBILITY FOR FINANCE

TradeVision is a unique product for financial services organizations. It combines market-feed health monitoring with best-in-class functionality that enables it to monitor 240 million trade/quote messages a second. That's 12 times more than the entire US equities and options markets combined. With lossless FPGA-based hardware acceleration, precision time-stamping, and tap aggregation capabilities, TradeVision reduces the time required to address potentially costly issues. Additional features include:

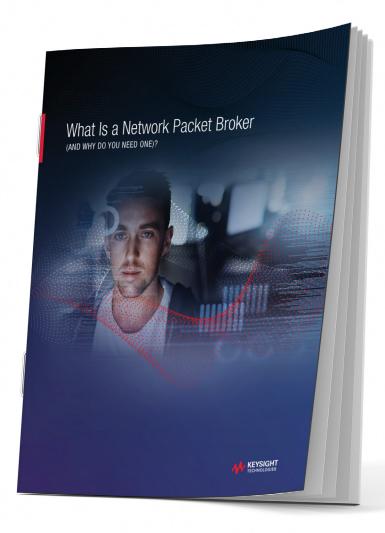
- Multicast gap detection
- Advanced latency analytics
- Micro-burst alerting
- High-resolution traffic statistics
- Simplified feed management

ACCREDITED SECURITY FOR US FEDERAL AGENCIES

Government agencies, military, and other security-conscious organizations require the highest standards of security integrity. That's why all of our NPBs are Common Criteria, FIPS 140-2 and DoDIN APL listed. And, the most recent certifications utilize a software module approach, which means they will always benefit from the latest software enhancements.

WANT TO KNOW MORE?

Learn more about NPBs — what they do, and why you need one.



Product	Vision X	Vision ONE	Vision 7300	Vision Edge 100	Vision Edge 40	Vision Edge 10S	Vision Edge 1S	Vision Edge OS	TradeVision
Description	High-performance, high-density, modular, scalable 3RU chassis for 10 / 25 / 40 / 50 / 100G networks	Full-featured, turnkey 10 / 40G visibility in a 1RU form factor	Highly scalable, modular, 7RU chassis supporting 10 / 40 / 100G networks	Cost-effective, high-density rack- level visibility for 10 / 25 / 40 / 50 / 100G	Cost-effective rack-level visibility for 1 / 10 / 40G	Ideal for remote site deployments supporting 1 / 10G networks	Compact, cost- effective visibility for branch sites	Disaggregated visibility OS for open switch hardware	Market-feed monitoring and tap aggregation for financial markets
Zero-packet-loss architecture	✓	✓	✓	✓	✓	✓	-	✓	✓
Dynamic filter compiler	√	✓	✓	✓	✓	✓	-	✓	✓
System Height (RU)	3	1	7	1	1	1	1	Switch dependent	1
AC redundant power supply (hot swap)	✓	✓	✓	✓	✓	✓	√	Switch dependent	√
DC redundant power supply (hot swap)	√	✓	✓	✓	✓	✓	-	Switch dependent	✓
Max backplane capacity (Gbps)	6400	640	3840	3200	720	480	12	Switch dependent	640
Max number of 1G ports	0	64	288	0	48	48	10	Switch dependent	64
Max number of 10G ports	108	64	384	128	72	48	4	Switch dependent	64
Max number of 25G ports	108	0	288	128	0	0	0	Switch dependent	0
Max number of 40G ports	76	16	96	32	18	0	0	Switch dependent	16
Max number of 50G ports	108	0	144	64	0	0	0	Switch dependent	0
Max number of 100G ports	60	0	72	32	0	0	0	Switch dependent	0

Bypass Switches: Ensure Uptime and Network Availability

External bypass switches are the key to high availability and ease of maintenance for network monitoring and security deployments. While everyone recognizes the need for tools such as intrusion prevention and firewalls, the inline deployment models of these tools can create risk or downtime when it is time for reboots, maintenance, or replacement. External bypass switches, such as Keysight iBypass, provide automated failover, which prevents tool updates or downtime from bringing down the network.

Keysight iBypass offers these key features:

- supports redundant and serial architectures
- high availability: active-active or active-standby
- preconfigured heartbeat
- centralized management
- easy-to-use GUI





Product	iBypass 100G	iBypass 40G	iBypass DUO	iBypass VHD	iBypass HD	iBypass 3 Copper
Description	Single-segment 100G intelligent bypass	Single-segment 40G intelligent bypass	High-density bypass with redundant management	Very-high-density, 12-segment intelligent bypass	High-density, 8 segment intelligent bypass	Single-segment intelligent bypass for copper networks
Speed	100G	40G	1G / 10G	1G / 10G	10 / 100 / 1G	10 / 100 / 1G
Media type	Fiber	Fiber	Fiber	SFP+ / SFP	Copper or fiber	Copper
Networks per device	1 or 2 segments	1 segment	1 or 2 segments	12 segments	8 segments	1 segment
High availability	-	-	Active-active / active- standby	Active-active / active- standby	Active-standby	-
Configurable	✓	✓	✓	/	✓	✓
Link fault detection	LFD	LFD	LFD / LFDC	LFD / LFDC	LFD	LFD / LFDC

AN OLD BYPASS SWITCH CAN BE A LIABILITY. LEARN WHY AN UPGRADE IS WORTH THE INVESTMENT.





Network taps, and the pure, unfiltered visibility into network traffic they provide, are the foundation of dynamic network intelligence. Unlike SPAN ports or port mirroring, taps provide a view of all traffic — including malformed traffic and errors that typically would get dropped. This true visibility facilitates troubleshooting, as well as security and forensics.

Keysight offers the broadest selection of taps for any network, including Flex Tap optical taps, Flex Tap Secure+ enhanced security taps, copper taps, and aggregation taps.

Keysight taps offer these key features:

- plug and play
- no IP address
- secure and unhackable
- copper and fiber
- speeds up to 400 Gbps



LEARN MORE ABOUT TAPS AND WHY THEY ARE CRITICAL TO NETWORK VISIBILITY.



Product	Flex Tap	Flex Tap Secure+	Patch Tap	Copper Tap	Tap Aggregators
Description	Modular, passive fiber taps	Modular, passive fiber taps with optical diode	Low-latency, passive fiber taps	Active copper taps	Active copper taps with aggregation mode
Speeds	1G to 400G	1G to 400G	1G to 200G	10 / 100 / 1000 Mbps copper	10 / 100 / 1000 Mbps copper
Port types	LC and MTP	LC	LC	RJ45	RJ45
Unique features	 40 / 100G BiDi PSM4, SR4, SR10, and QSFP+ 40G-LX4 multiple split ratios and fibers OM1, OM2, OM4, and OS2 	 advanced security prevents accidental or intentional light or data injection ideal for lawful intercept, government, military, and other high- security deployments 	 low latency bend-insensitive multi-mode OM4 single-mode OS2 	 independent autonegotiate (tap low-speed networks and send data to higher-speed tools) air-gapped monitor ports for enhanced security wide flexibility and coverage 	 monitors full-duplex traffic with a single NIC sends two copies to your monitoring tools



Ixia Fabric Controller Centralized Manager: Single-Pane-of-Glass Network Visibility

Networks are growing increasingly complex, as is the task of extracting dynamic network intelligence information from them. Having a visibility fabric consisting of NPBs, bypass switches, and taps is a good start. What comes next is managing and coordinating all these systems. That is where Keysight's Ixia Fabric Controller Centralized Manager (IFC CM) comes in.

IFC CM enables you to manage hundreds of devices with monitoring, scheduled configuration changes, and bulk software upgrades. You can import or export configurations, run scripts, view bandwidth utilization, and more. Additionally, you can customize dashboards and integrate with other network management systems via northbound interfaces.

Keysight IFC CM offers these key features:

- single-pane-of-glass management
- device auto-discovery
- SSO and zero-touch provisioning
- physical or virtual form factors
- high availability with floating primary / backup IP
- RADIUS, TACACS+, and LDAP authentication



