XR3000 Active Monitoring Hardware

Network and application performance assessment

Introduction

The Keysight XR3000 active monitoring hardware is a turn-key appliance for both Hawkeye and IxChariot software active performance monitoring solutions. It is used to perform network and application performance assessment and monitoring for wired and wireless networks. It is designed to be portable and supports connectivity for a wide range of locations of the network (remote/retail sites, households, branch offices, headquarters, local exchanges, datacenters etc.).





XR3000 Hardware Design and Connectivity

- XR3000 is designed for fixed and Wi-Fi network connectivity. The fanless silent design makes it an ideal edge or central network monitoring turn-key appliance.
- Fixed network connectivity ranges from 10/100M copper to 10G fiber with multiple options for 1G connectivity (fiber and copper).
- Wi-Fi connectivity is supported and covers wider range available on the market for a monitoring device, with up to Wi-Fi 6 speed connectivity.
- Wi-Fi reliability and coverage is ensured with external antenna slots. Antennas are included (installation is optional, only required when operated in Wi-Fi environments).
- Rackmount and wallmount kit capabilities are available for easy integration into any remote/edge
 offices or datacenters.

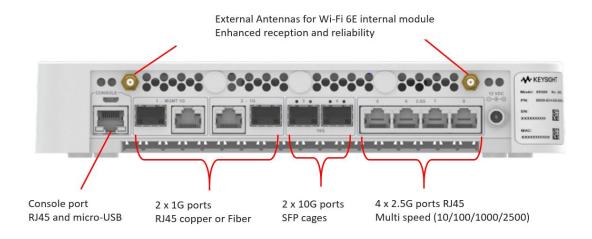


Figure 1. XR3000 connectivity

XR3000 Software

XR3000 supports endpoints compatible with both Hawkeye and IxChariot software management products. They allow active testing and monitoring of networks based on traffic injection to verify network performance and customer digital experience monitoring.

Active traffic generation capabilities

Below is a non-exhaustive list of XR3000 traffic generation capabilities:

- · Speed test from site to site with advanced configuration on traffic profiling
- Advanced bandwidth availability or verification with bit blasting or TCP-based testing
- Class of service (COS) implementation validation with oversubscription scenarios
- IP network SLA verification (one-way delay, jitter, loss)
- Unified communications tests (Teams, Zoom)
- Office 365 applications
- · Real-time streaming verification
 - Mean opinion score (MOS) for voice G711, G729, AMR, etc.
 - Media delivery index (MDI) for video streaming
- Echo tests (ICMP, TCP, UDP) and path discovery to any interface on the web
- User experience tests (downloading web pages, etc.)
- DNS response time
- · Netflix, YouTube, and any Dash/Adaptive streaming test
- Multicast video
- · Remote destination port opening verification
- Wi-Fi monitoring



XR3000 Technical Specifications

Feature	Description	
CPU	Intel® Atom® C3558, 4-core @ 2.2 GHz w/QAT	
RAM	8G	
Storage	eMMC SSD 128G	
IO Interfaces	Cisco RJ-45 and micro-USB console port (auto-detect) 2x USB-A 3.0 host ports	
LAN	2x auto media detect 1 Gbps copper RJ-45/fiber SFP ports (optional optical transceivers not included) 4x 2.5 Gbps RJ-45 ports 2x 10 Gbps ports for PON or SFP+ transceivers (not included)	
Wi-Fi	Wi-Fi 6, Wi-Fi a/b/g/n/ac IEEE 802.11 a ,b, d, e, g, h, i, k, n, r, u, v, w, ac, ax	
Power	+12 VDC locking barrel jack, external desktop PSU, regional AC cord options Consumption 60W max	
Environmental	0 to +40C operating temperature	
Console Access	Cisco RJ-45 and micro-USB console port (auto-detect)	
Remote Access	ssh cli, full remote control via Hawkeye central management once connected	
Size and Weight	256 x 200 x 44 mm W x D x H (10.1 x 7.9 x 1.7 in) 1.1 kg (2.4 lb) Single-unit kit box with accessories: 2.1 kg / 4.6 lb 412 x 293 x 77 mm (16.2 x 11.5 x 3.0 in.) 4-pack master carton: 9.1 kg / 20.1 lb 327 x 312 x 440 mm (12.9 x 12.3 x 17.3 in.)	



Ordering Information

Part number	Description IXIA XR3000 Active Hardware Endpoint; integrated hardware endpoint for Hawkeye or IxChariot; AC unit. Requires adjunct or previous purchase Hawkeye or IxChariot Licenses	
XR3000-AC		
XR3000-AC-T	IXIA TAA Compliant XR3000 Active Hardware Endpoint; integrated hardware endpoint for Hawkeye or IxChariot; AC unit. Requires adjunct or previous purchase Hawkeye or IxChariot Licenses	
WM-XR3000	IXIA wall mount kit for one XR3000 (qty 1)	
RK-XR3000	IXIA 1U 1 slot rack mount for XR3000 (940-0052)	

Supported transceivers

Part number	Speed	Form Factor
SFP-PLUS-SR-XCVR	10G	SR
SFP-PLUS-SR-XCVR	10G	SR
SFP-PLUS-SR-XCVR	10G	SR
SFP-PLUS-SR-XCVR-T	10G	SR
SFP-PLUS-LR-XCVR	10G	LR
SFP-PLUS-LR-XCVR-T	10G	LR
SFP-PLUS-LR-XCVR-T	10G	LR
SFP-PLUS-KT-LR (includes cable)	1G	SX
MM850	1G	SX
SFP-SX-I-XCVR-T	1G	LX
SM1310	1G	LX
SFP-LX-I-XCVR-T	1G	SX



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