

## Endace Systems



Endace Systems are purpose built for monitoring and recording high-speed network traffic with 100% accuracy; they are the product of more than 10 years of development, testing, and optimization. Endace Systems are designed specifically to provide predictable, high-speed packet capture and open analysis. They can be found deployed inside large networks, being used for everything from basic network traffic analysis and forensics to application performance monitoring.

Endace Systems leverage the unique power of the Endace platform, which brings together proprietary DAG® I/O technology — a carefully selected and tuned set of commercially available server components — and Endace's own purpose-built Operating System (OSm), which has been developed and refined by Endace engineers in New Zealand over the past four years. Amongst other things, OSm enables central management of all Endace Systems and the unique multi-application open-hosting environment. Integrated together, the components create the only truly predictable high-performance monitoring and recording systems commercially available today.

At the heart of all Endace Systems is DAG technology, which was invented as part of a university research project

more than 10 years ago. DAG (Data Acquisition and Generation) is the key to 100% accurate continuous high-speed packet capture. The technology uses FPGA technology (programmable silicon) and DMA to move packets directly from the wire into memory — timestamping them on the way — with minimal processor overhead. This hardware technique means that Endace Systems are not only extremely accurate and scalable, but the vast majority of the processing power in the system is available for analysis rather than capture.

Recognizing that one size doesn't always fit all, Endace Systems are available in a range of different shapes and sizes to meet the needs of different deployment scenarios. Systems are designed to be deployed as a Monitoring and Recording Fabric, which stretches from the core network to the perimeter of the network, generating a complete picture of every packet as close to its source as possible. To provide complete coverage and ensure that the system is right sized for the segment being analyzed, Endace Systems are split into two product families: EndaceProbes™ and EndaceSensors™. Both families leverage the Endace Platform and share the same central management capabilities that enable hundreds of systems to be managed from a central console.



## EndaceProbes

EndaceProbes are designed to support both real-time and retrospective analysis of packets. They support up to 32TB of SATA disk that can be written at line rate at speeds of up to 10Gb/s without packet loss. Applications running on the EndaceProbe (either in the Application Dock or natively as part of an Endace Network Visibility module) can access packets in real time or stored in memory on the local disk for post-event troubleshooting and forensics.

There are four types of EndaceProbes: the Series 100, Series 300, Series 3000, and Series 7000. The Series 100, 300, and Series 3000 are all 1U units. The 100 has up to 2TB of local

storage, the 300 up to 4TB, and the 3000 up to 8TB. The 7000 is a 3U system with up to 32TB (SATA) or 9.6TB (SAS) of local storage, with a higher traffic-throughput capability, making it the flagship Endace System.

EndaceProbes are by definition 'multi-function.' They support the Endace Application Dock, EndaceVision and the Endace Network Visibility modules, which ensures they deliver immediate out-of-the box value.

## EndaceProbes Specifications

MODEL	EP100	EP300	EP3000	EP7000
Purpose	Multi-function monitoring and recording system	Multi-function monitoring and recording system	Multi-function monitoring and recording system	Multi-function monitoring and recording system
Applications	Endace Network Visibility modules and Application Dock	Endace Network Visibility modules and Application Dock	Endace Network Visibility modules and Application Dock	Endace Network Visibility modules and Application Dock
Monitoring Ports	4x 1Gb Ethernet	8 x 1Gb Ethernet	4-8x 1Gb Ethernet or 2-4x 10Gb Ethernet	8-20x 1Gb Ethernet or 4-10x 10Gb Ethernet
Storage	2TB	4TB	8TB	32TB (SATA) 9.6TB (SAS)
Combined Processing Performance*	500Mb/s	5Gb/s	10Gb/s	20Gb/s
write-to-disk speed	500Mb/s	1Gb/s	1Gb/s	7Gb/s (SATA) 10Gb/s (SAS)
HBA Support	No	No	No	Yes
Max Virtual Machines per System	1	3	6	6

\* Specifics depend upon customer deployment scenario and individual rule sets

EP = EndaceProbe



## EndaceSensors

Endace recognizes that towards the edge of the network (often behind EndaceProbes deployed closer to the core), it's not always necessary to capture every packet to local disk storage – pure 'on-the-fly' packet analysis is all that's required. So Endace has developed the EndaceSensor. Similar to EndaceProbes, the Sensor series leverages the power of the Endace Platform to deliver lossless capture and real-time analysis of traffic.

Unlike EndaceProbes, EndaceSensors are single-application systems, which means that they are only capable of performing one type of analysis at a time (either IDS, NetFlow or an application running in the Endace Application Dock).

To meet the needs of different deployment scenarios, there are three types of EndaceSensors: a Series 100, a Series 300, and a Series 3000. All are 1U units, but have different throughput capabilities and port configurations.

### EndaceSensors Specifications

MODEL	ES100	ES300	ES3000
Purpose	Single-application, real-time monitoring and recording system	Single-application, real-time monitoring and recording system	Single-application, real-time monitoring and recording system
Applications	NetFlow or ESM or Application Dock	NetFlow or ESM or Application Dock	NetFlow or ESM or Application Dock
Monitoring Ports	4 x 10/100/1Gb Ethernet	8 x 1Gb Ethernet	4x 10Gb Ethernet
Storage	None	None	None
Combined Processing Performance*	500Mb/s	5Gb/s	10Gb/s
Write-to-disk speed	N/A	N/A	N/A
Max Virtual Machines per System	1	3	6

\* Specifics depend upon customer deployment scenario and individual rule sets  
 ES = EndaceSensor / ESM = Endace Security Manager

For more information on Endace products visit: [endace.com](http://endace.com)  
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