

# OVERVIEW

## Helium™ Network Recorder

### Industry First Multi-Terabit Network Recorder Appliance

Store and playback up to 4.4Tbps of network data in real-time with zero packet loss.

### FIRST LINEARLY SCALABLE CAPTURE SOLUTION

Helium™ is the new name in the next generation of network recorder performance. Helium™ provides uncompromising hardware accelerated scalability, from the entry level 20Gbps, up to 4.4Tbps and 6.5Gpps in a single appliance. Storage options range from 48TB up to 1,000PB (1 Exabyte) of the highest end RK10000 series model.

The unparalleled scalability and performance of Helium™ is perfectly suited for the next generation of cloud and big data applications with SDN configurability.

### FLEXIBLE AND EXPANDIBLE

Helium™ appliances are field upgradeable<sup>1</sup> for the ultimate in flexibility. Start with the size and performance you need today and upgrade as your demand grows by adding additional Helium™ RA storage nodes. Helium™ lets you select customized throughput and storage parameters independently, giving you flexibility to match your network.

#### Helium™ RH SERIES NETWORK RECORDER

##### Multi-Gigabit Capture

Perfect fit for any data-center, the Helium™ RH Series is designed in 2U and 4U form factors and scales from 20Gbps up to 400Gbps capture speeds. Capture at zero packet loss and retrieve at your convenience for post processing such as monitoring, forensic analysis, compliance and security.

#### Helium™ RK SERIES NETWORK RECORDER

##### Multi-Terabit Capture

Blast beyond 400Gbps capture with Helium™ RK Series. Helium™ RK is a multi-rack system with a flexible Helium™ RT<sup>2</sup> SDN<sup>3</sup> real-time multi-terabit capture controller.

Helium™ RK offers up to 44 x 100GbE interfaces, supporting up to 4.4Tbps of sustained write to disk. Retrieval speeds of captured data with sustained speeds of up to 26Tbps for large distributed SDN clients. Total storage of over 1EB (1,000,000 TB) for even the most demanding of environments.



**Helium™ RH320-A192  
Network Recorder Appliance**

### HELIUM™ APPLICATIONS

- Network Security and Intrusion Detection Systems (IDS)
- Defense Systems
- Financial Markets
- Audit and Compliance Applications
- Infrastructure Management
- Content Delivery and Caching

### FEATURE HIGHLIGHTS

- |   |   |
|---|---|
| • Full speed playback and replay                                  | • Data queries and retrieval  |
| • Standard PCAP file format for data access                       | • Low CPU utilization even at highest capture rates   |
| • Zero packet loss and full write to disk performance             | • CLI and GUI for appliance management and configuration  |
| • Indexing and compression available in customized firmware       | • Available port configurations: <ul style="list-style-type: none"> <li>• 10GbE</li> <li>• 25GbE</li> <li>• 40GbE</li> <li>• 50GbE</li> <li>• 100GbE</li> </ul> |
| • Custom application development available in customized firmware |   |

<sup>1</sup>Certain restrictions apply <sup>2</sup>Helium RT is a multi-terabit single chassis controller included with certain RK models  
<sup>3</sup>SDN means Software Defined Network

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## Helium™ RH Series, Multi-Gigabit 2U/4U Capture Appliances

Helium™	RH20	RH40D	RH40	RH100	RH200D	RH200	RH400
<b>Max Packets</b> (Mpps @ 64B)	30	60	60	120	240	240	480
<b>Form Factor</b>	2U	2U	2U	2U	2U	4U	4U
<b>Storage Capacity</b>	48TB – 2PB	48TB – 2PB	88TB – 2PB	180TB – 2PB	180TB – 2PB	360TB – 5PB	360TB – 5PB
<b>Capture to Disk</b> (Peak/Sustained)	20/20 Gbps	40/20 Gbps	40/40 Gbps	100/80 Gbps	200/80 Gbps	200/160 Gbps	400/320 Gbps
<b>Capture Port Options</b>	2 x 10GbE	4 x 10GbE 1 x 40GbE	4 x 10GbE 1 x 40GbE	8 x 10GbE 2 x 40GbE 1x 100GbE	16 x 10GbE 4 x 40GbE 2 x 100GbE	16 x 10GbE 4 x 40GbE 2 x 100GbE	32 x 10GbE 8 x 40GbE 3 x 100GbE 4 x 100GbE
<b>Upgrade Options</b>	RH40D, RH40	RH40	RH100	RH200D		RH400	

## Helium™ RK Series, Multi-Terabit Rack Systems\*

Helium™	RK2016	RK2016-AT360	RK2066	RK4066	RK6032	RK8100	RK8116	RK8132
<b>Max Packets</b> (Mpps @ 64B)	240	240	750	750	480	1,500	1,500	1,500
<b>Form Factor</b> (1 Rack = 42RUs)	1 Rack	1 Rack	1 Rack	1 Rack	2 Racks	1 Rack	1 Rack	1 Rack
<b>Included Storage</b>	1.4PB	360TB	360TB	720TB	4.3PB	8.6PB	1.4PB	2.9PB
<b>Switching Fabric</b>	6.4 Tbps	6.4 Tbps	6.4 Tbps	6.4 Tbps	6.4 Tbps	12.8 Tbps	12.8 Tbps	12.8 Tbps
<b>Performance</b> (Peak/Sustained)	160/160 Gbps	160/160 Gbps	500/160 Gbps	500/160 Gbps	320/320 Gbps	1/1 Tbps	1,000/160 Gbps	1,000/320 Gbps
<b>Capture Port Options</b>	16 x 10 Gbps 4 x 40 Gbps	16 x 10 Gbps 4 x 40 Gbps	5x100 Gbps	5x100 Gbps	32 x 10 Gbps 8 x 40 Gbps	10 x 100 Gbps	10 x 100 Gbps	10 x 100 Gbps

\*Additional configurations available. 2Tbps to 4Tbps models available in 2017, accepting pre-orders now

## Helium™ RA Series, 4U RAID Array Storage Nodes\*\*

Helium	RA48	RA96	RA144	RA192	RA240	RA88	RA176	RA264	RA352	RA440	RA180	RA360	RA540	RA720	RA900
<b>HDDs</b>	24					44					90				
<b>Size</b>	2TB	4TB	6TB	8TB	10TB*	2TB	4TB	6TB	8TB	10TB*	2TB	4TB	6TB	8TB	10TB*
<b>Capacity</b>	48TB	96TB	144TB	192TB	240TB	88TB	176TB	264TB	352TB	440TB	180TB	360TB	540TB	720TB	900TB*

\* Configurations based on 10TB HDDs available in Q3 2016 \*\* Multiple Helium™ RA nodes can be combined with RH and RK models

Sly Technologies™ Inc, specializes in multi-gigabit and multi-terabit FPGA accelerated software and appliance solutions for working with high speed network communication protocols and data. We develop, market and support software and hardware solutions to solve the most complex network data problems. Sly Technologies enables businesses to create or update their solutions with realtime network capture, analysis and reporting capabilities quickly and easily.