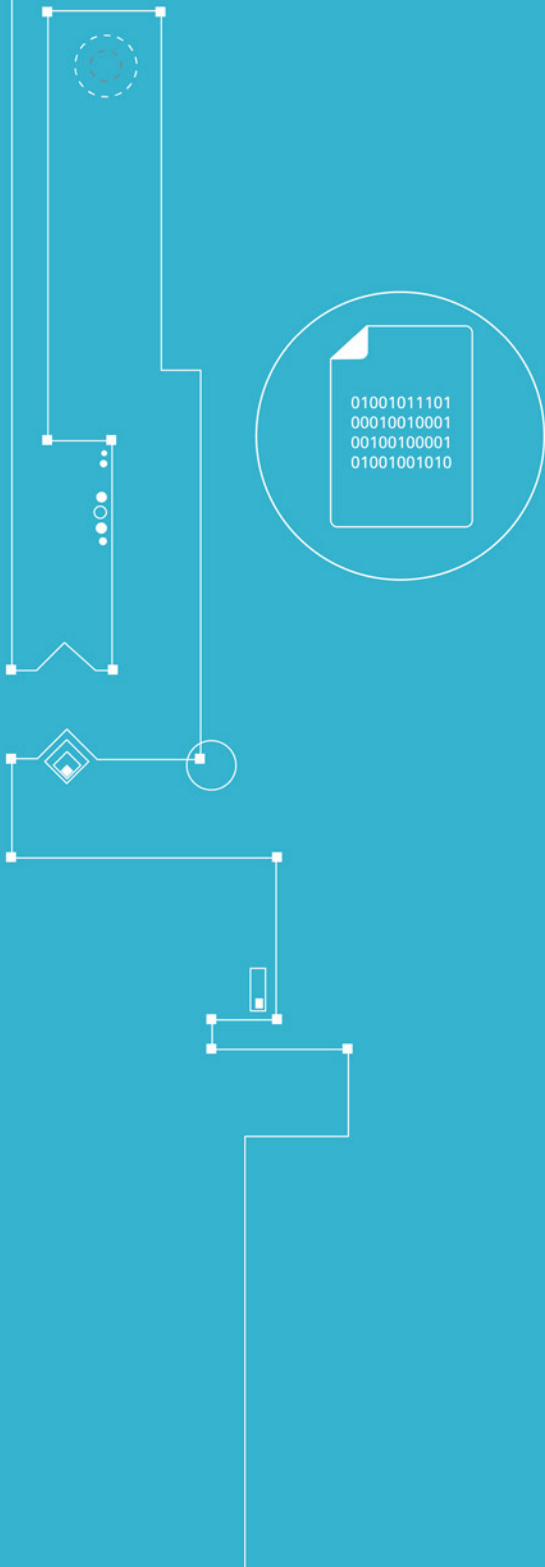




CUBRO
NETWORK VISIBILITY

CUBRO OMNIA 120

PRELIMINARY DATA SHEET



Omnia 120 At a glance

Definition

The Omnia line is a collection of purpose-driven visibility and monitoring hardware paired with feature stacks developed over years of experience and engineering that encompass Cubro's PacketMaster (L2-4), SessionMaster (L5+), and AppMaster (3rd party software) functionality.

Advantages of Omnia 120

- Aggregate, filter, and load-balance traffic from 1, 10, 25, 40 or 100 Gbps links to multiple monitoring tools
- 2 x 24-Core ARM CPU
- 16GB Memory per CPU
- Internal M.2 SSD
- Multiple expansion options
- Support for any SFP and SFP+ (also 10 Gbit BASE-T)
- Flexible prices model due to port licensing.
- 2-year warranty period

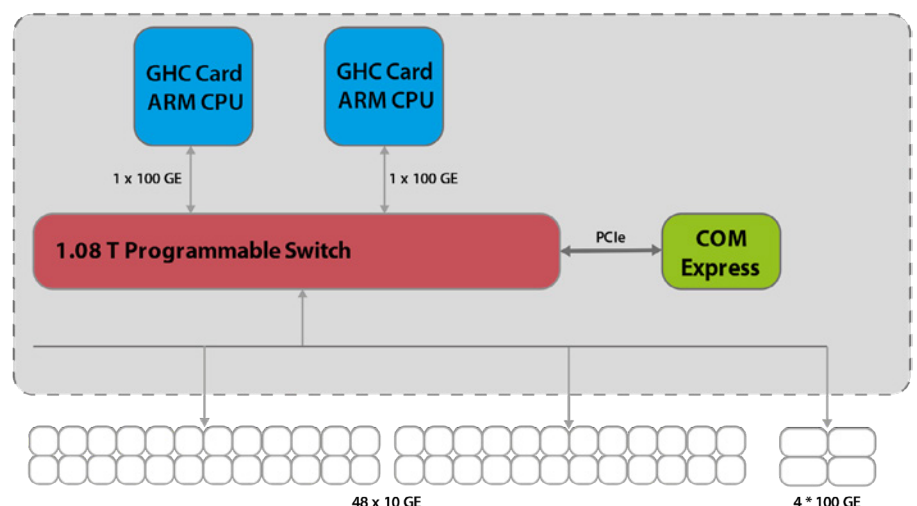
Product Overview



Omnia takes Cubro's experience in Network Visibility and Monitoring and pairs it with an evolution of the EXA8 platform design. The result is a lineup of purpose-driven hardware with units covering applications of 10Gbps up to multi-100Gbps performance. Omnia combines feature stacks developed over years of experience and engineering, such as those of Advanced Network Packet Brokers, with high-performance multicore CPUs allowing for numerous first-party and third-party software applications, including those from partners and the open-source community. This approach offers customers greater choice and more functionality.

Omnia 120 is an Enterprise Visibility node with high end L5 packet forwarding silicon, in combination with two ARM multicore CPUs for advanced visibility and security applications. The unit comes with 48 x 10/1 Gbit SFP+ and 4 x 100/40 QSFP28 or 4 x 4 10/25 Gbit with breakout. The port licensing model allows running the Omnia 120 also as a 24 x 10/1 SFP+ unit with or without the 4 x QSFP28 ports.

Each of the two ARM CPUs are connected via a full duplex 100 Gbit interface for maximum application performance.

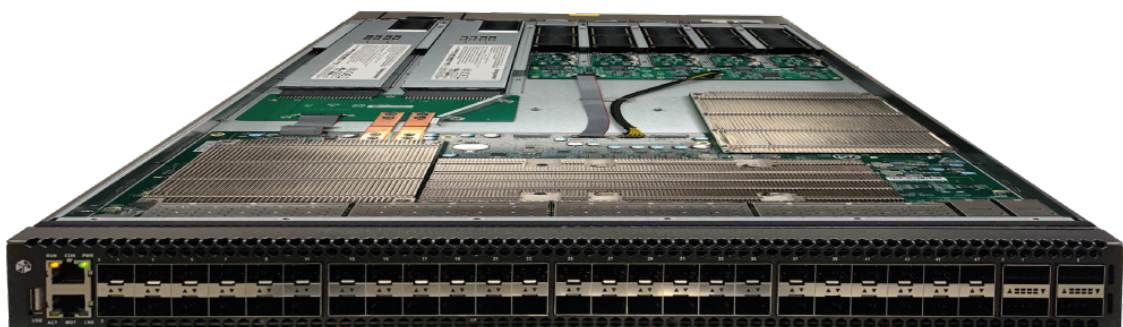


Functions / Benefits:

- Versatile device with multiple software options to fill many roles
- NetFlow generation and collector
- Deep Packet Inspection (DPI)
- Advanced Network Packet Broker
- Network analytics + Threat Detection
- Supports third-party software and custom application

Product Capabilities / Features

Link/ Port Aggregation	Aggregation many to any, and any to many at all link speeds
100G distribution/load balancing	Traffic can be easily distributed across 1G, 10G, 25G, and 40G links to monitor highly loaded 100 Gbps links
Jumbo Frame Support	The Omnia 120 supports jumbo Ethernet frames with a size of up to 16000 bytes on the Silicon switch and up to 9000 bytes on the ARM CPUs
Support of IPv4 and IPv6	Yes
Ports	48 x 1/10G SFP/SFP+ and 4 x QSFP 40 Gbps or QSFP28 100 Gbps 1 x 10/100/1000 Base-T (Management) 1 x RS232 Console
Configuration / Communication	WEB GUI, CLI, REST API
Aggregation latency	Average < 700 ns for 64-byte frames
MTBF	160.098
Packet Buffer	24MB on switch layer
Different Power Versions	100-252 V AC power supply (DC power modules available)



Technical Data / Specifications:

Operating specifications:

Operating Temperature: 0°C to 45°C
Storage Temperature: -10°C to 70°C
Relative Humidity: 10% min, 95% max (non-condensing)

Mechanical specification:

Dimension (HxWxD): 440 x 560 x 44
Weight: 12,9 kg
Airflow: Front-back

Electrical specifications:

Input Power: 100-240V, 2A, 47-63 Hz (AC version)
Maximum Power Consumption: 550W

Certifications:

Fully RoHS compliant CE compliant
Safety - UL 60950-1 / CSA C22.2 60950-1-07 / IEC 60950-1 (2005) EN 60950-1 (2006)

Ports

48 x 1/10 Gbps full duplex Ports for
any kind of SFP/SFP+

4 x 40/100 Gbps full duplex ports
for any kind of QSFP/QSFP28

- Each port can be input and / or output depending on the application and configuration
- All QSFP/ QSFP 28 ports support breakout cables to 4x10G or 4x25G interfaces

Management

Management Port: (1) RJ45 10/100/1000 Mbit Configuration (CLI) Port: (1) RS-232 DB9 USB

Indicators

(All ports) Link LEDs (All ports) Activity LEDs

Applications / Solutions

Deduplication

The Omnia120 is capable of finding and deleting duplicate packets. Duplicates can cause a lot of issues. The obvious issue is that double the amount of data requires double the amount of processing power, memory, power, etc. However, the main issue is false positives: errors that are not really errors or threats that are not actually threats. One common way that duplicates effect analysis is by an increase in TCP out-of-order or retransmission warnings.

Debugging these issues takes a lot of time, usually the time an overworked, understaffed network operations or security team does not have. In addition, any analysis performed based on this information is probably not reliable, so this only exacerbates the issue. The Cubro Omnia 120 offers a deduplication function to eliminate duplicated packets and protect monitoring equipment from getting overloaded.

Deep Packet Inspection

The Omnia 120 is capable of performing Deep Packet Inspection using Cubro's custom DPI engine. Ever-increasing amounts of encrypted network traffic has created a situation where IP address and port numbers are no longer sufficient for identifying traffic and what protocols are in use. Cubro's DPI engine can identify 4000 different applications, even when they are ciphered, providing invaluable information to analytics, policy enforcement, and security tools.

Advanced Network Packet Broker

The Omnia 120 can be utilized as a full-featured advanced network packet broker incorporating the functions of Cubro's PacketMaster and SessionMaster feature stacks. Such functions include aggregation, traffic replication, filtering, header stripping, active tunnel termination, load-balancing, deduplication, and much more.

Additional Information

AppMaster, custom applications, and scripting.

The Omnia 120 takes advantage of Cubro's AppMaster, a full-fledged Ubuntu Linux environment capable of supporting a wide range of open-source software as well as applications from Cubro's AppMaster partners, such as NTOP and QXIP.

AppMaster also allows users to build custom applications with various programming and scripting languages. The Omnia 120 also features a ReST API further enhancing the ability to automate tasks and integrate functions with other devices within the network.



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Ordering Information

Part Number	Description
Omnia 120	Available Q1 2021
CUB.OM-120	Omnia 120 Appliance, 24 x 10G, 2 x CPU
CUB.OM-120-24x10	Additional 24 x 10G for Omnia 120
CUB.OM-120-4x100	Additional 4 x 100G for Omnia 120
CUB.OM-120-SW-SM1	Omnia 120 Sessionmaster License for CPU1
CUB.OM-120-SW-SM2	Omnia 120 Sessionmaster License for CPU2

For more information please check our website www.cubro.com