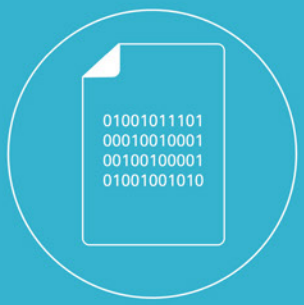
CUBRO
NETWORK VISIBILITY

CUBRO OMNIA 10



DATA SHEET

Omnia

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 10

- √ Portable
- √ Quad-Core ARM CPU
- √ 16GB Memory
- √ Integrated Copper TAP
- √ Internal 1TB SSD
- √ Multiple expansion options
- √ Support for any SFP and SFP+ (also 10 Gbit BASE-T)
- √ No additional port licensing fees.
- √ 2-year warranty period

Product Overview

The Omnia 10 is a multi-function network appliance perfect for SMBs, branch offices, and remote deployments. With built-in, passive tapping capability, 10G interfaces, on-board storage, and a diverse set of software options to choose from, it is a device capable of addressing a multitude of network and security challenges.

By pairing a unique hardware feature-set with functions from Cubro's PacketMaster, SessionMaster, and AppMaster feature stacks, the Omnia 10 can take on the roles of an Aggregation TAP, Advanced Network Packet Broker, DPI Probe, Capture appliance, and more.

The Omnia 10 features 8 1GbE copper interfaces with built-in bypass capability that supports fail-safe tapping of up to 4 bidirectional links. It also features 2 10GbE SFP+ interfaces. A quad-core ARMv8 CPU and 16GB of memory provide ample processing capability while a 1TB M.2 SSD, mini-PCI slot, two USB 3.0 type A connectors, and a MicroSD card slot provide expansion and connectivity options.

The Omnia 10 is an affordable, high-performance, customizable network appliance with a unique design and flexible feature set. The Cubro Omnia 10 is the only network visibility probe of its kind in the market due to its compact size, built-in TAP, and powerful CPU, all at a compelling price.

Functions / Benefits:

> Versatile device with multiple software options to fill many roles
> Built-in tapping and aggregation
> Local Packet Capture and Analysis
> NetFlow generation and collector
> Deep Packet Inspection
> Advanced Network Packet Broker
> Supports third-party software and custom applications

Product Capabilities / Features

Link/ Port Aggregation	Aggregation of up to 8 ports links or 4 links 10/100/1000 Mbit to 2 x 1/10 Gbit to a single output port.
Jumbo Frame Support	The Packetmaster supports jumbo Ethernet frames with a size of up to 9000 bytes.
Ports	8 x 10/100/1000 Base-T 2 x SFP+ 1/10 Gbit 1 x 10/100/1000 Base-T (Management) 1 x RS232 Console
Configuration / Communication	WEB GUI CLI
Capture Performance	Up to 2.5 Gbit/s for 1518-byte frame
Aggregation latency	Average 700 ns for 64-byte frames
MTBF	198,185 hours

Technical Data / Specifications:

Operating specifications:

Operating Temperature: 0ºC to 40ºC
Storage Temperature: -10ºC to 70ºC
Relative Humidity: 10% min, 95% max
Non-condensing

Mechanical specification:

Dimension (W x D x H): 220 x 330 x 44 mm
Weight: 2,95 kg

Electrical specifications:

Input Power: 1 x 230V AC
Maximum Power Consumption: 25W

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

8 X 10/100/100 full duplex Base-T
2 x 1/10 Gbit full duplex SFP/SFP + Ports for any kind of SFP/SFP+

Performance

Performance up to 20 Gbit
2.5 million packets/sec
Boot time from power on to working 120 sec
Packet delay through processing less than 700 ns

Management

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

Indicators

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

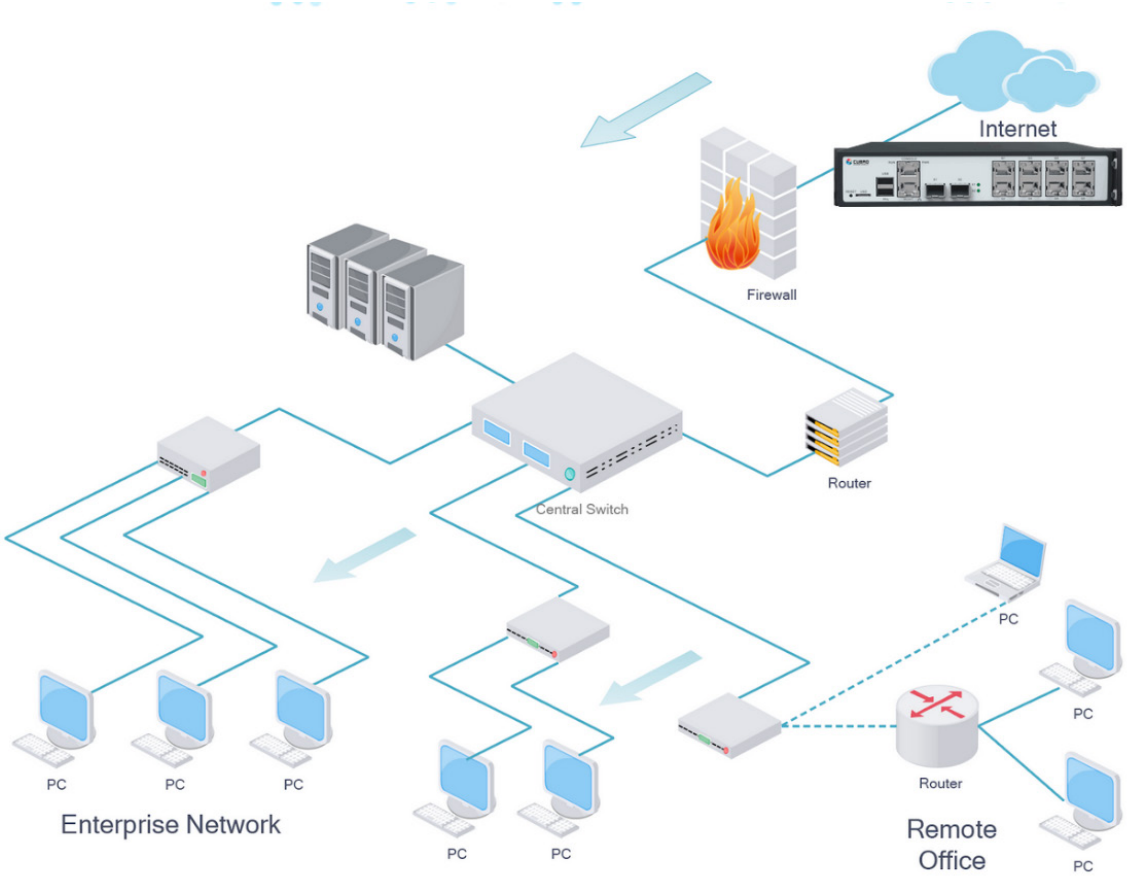
Applications / Solutions

Aggregation TAP

The Omnia 10 supports fail-safe tapping of up to four copper links. The traffic from these links can then be aggregated to the 10G interfaces for output to monitoring and security tools. Alternatively, the 1G copper interfaces can be used as inputs for traffic feeds from SPAN or Mirror ports or a combination of tapping and SPAN inputs. For easier analysis, it is possible to push VLAN tags per input port to identify the traffic's ingress port.

Traffic Capture and Analysis

The Omnia 10 can capture traffic directly from tapped links or SPAN ports directly to disk. A rolling capture dashboard allows the user to navigate through the historical capture data and drill down to the traffic of interest using various filters and real-time feedback such as IP addresses, protocols, and ports present in the selected traffic. PCAP files can be extracted and downloaded for analysis or opened directly on the device using WebShark, a web-based protocol analyzer.



Deep Packet Inspection

The Omnia 10 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 10 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 10 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 10 also features a ReST API further enhancing the ability to automate tasks and integrate functions with other devices within the network.

Ordering Information

Part Number	Description
CUB.OM-10	Omnia 10 Appliance
CUB.OM-10-SW-A	Omnia 10 Aggregation License
CUB.OM-10-SW-AC	Omnia 10 Aggregation and Capture License
CUB.OM-10-SW-ACD	Omnia 10 Aggregation, Capture and 1 year DPI License
CUB.OM-10-SW-SM	Omnia 10 Sessionmaster License
CUB.OM-10-SW-SMD	Omnia 10 Sessionmaster and 1 year DPI License

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