

Catapult C20 Packet Capture Appliance

Key Features



- 100% packet capture to host memory on two 10 Gbps ports, with very low CPU utilization
- 64 fully programmable hardware filters operating at full line rate on both ports
- Four 3GHz CPU Cores for multi-threaded processing and load-balancing
- 16 GBytes DDR2 memory
- 6 Terabytes of RAID5 storage
- Up to 800Mbytes/sec (over 6Gbps) write-to-disk throughput
- Highly redundant design to ensure survivability and data integrity

The Catapult C20 Packet Capture Appliance is designed to support ultra-high performance packet capture applications such as security, monitoring or intercept. It delivers the CPU power needed for real-time deep packet inspection or complex pattern search, combined with the deep storage capacity for high data rate capture and post-analysis. The C20 incorporates an advanced cooling design and built-in redundancy to ensure long-term survival in even the harshest environments.

The Catapult C20 uses our 2-port 10Gbps programmable adapter hardware to capture 100% of all packets on each of its ports, and streams this data directly across the PCI bus into its 16Gbyte host memory space. With precise time-stamping, checksums and advanced filtering operations also offloaded into hardware, the server's four Intel "Woodcrest" cores, are completely freed up to focus on deep analysis of the captured data stream, greatly accelerating the performance of host applications.

Where high-fidelity data capture and recording is required over an extended time, for later analysis, the Catapult C20 provides 6 Terabytes of storage. Data can be written to disk at more than 6 gigabits per second, and the RAID5 disk controller architecture ensures no data loss even in the event of up to four drive failures.

System Specifications

CPU	Four Intel Woodcrest 3.0GHz Cores (SpecINT: 3061)
RAM	16GByte FB-DDR2
Disk	16 x 500GByte drives 1 million hour MTBF 6 TByte RAID5 Configuration plus 500GByte RAID1 for OS Survive up to 4 drive failures without data loss PCI-e RAID5 Controller with Battery
Management ports	2 x 10/100/1000 (RJ45) Ethernet Ports 1 x 10/100/1000 (RJ45) IPKVM and IPMI 2.0 for Remote Monitoring, Power and Reboot
Data capture ports	2 x 10Gbps Advanced Programmable Adapter (see over page for full adapter specifications)
Other ports	4 x USB 2.0, 2 x PS2, VGA, 2 x Serial, Parallel
Removable media	DVD-ROM (Read-only)



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Using the advanced features of our 10Gbps NT Series Adapter Card, all captured traffic can be streamed to host memory, or just the most relevant portions can be selected by applying up to 64 dynamically programmable hardware filters. Entire packets can be captured or just the headers, or any part of the payload. Every incoming packet is marked on arrival with a highly-accurate timestamp, and the card's clock can be precisely synchronized to an external GPS or CDMA time source.

Total visibility into network traffic and behavior is critical to high-performance security and monitoring solutions. The Catapult C20 ensures that no malicious or anomalous activity goes undetected, regardless of network loading or traffic mix, even with both 10Gbps ports running at line rate.

No matter what the application, the Catapult C20 from nPulse Networks has the world-leading performance, the complete flexibility and the optimized development environment to support your solution needs.

Hardware-based Packet Processing Features

Time-stamping precision	10 ns
HW packet-filtering speed	10Gbps wire speed for all packet sizes on 2 ports
Number of filters	64 fully programmable filters; mixed filters; Boolean operators
Predefined filters	IPv6, IPv4, VLAN, IP
Filter change on the fly	Yes, without data loss
Optical interfaces	Multimode SR
Ports	2 XFP modules

System Specifications

Power	3 x 700W hot-swap, N+1 redundant
Cooling	3 x 120mm high-speed fans 4 x 60mm high-speed fans
Size	3U rack mount 5.75" (H) x 16.6" (W) x 26.6" (D) 14.6cm x 42.1cm x 67.6cm
Weight	105lbs / 48kg
Certifications	FCC A, UL, CE
Warranty	12 months

Ordering Information

Model	Product Description
C6200	Catapult C20 Fully integrated, dual-port 10Gbps Packet Capture Appliance

Contact Details

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