

City of Aurora

Nimble All Flash Primary Array for CAD/RMS

Presented By:
Steve Tyriver
Sr. Sales Executive
Sentinel Technologies, Inc.
630.769.8583
styriver@sentinel.com

Architect:
Bill Laflamme
Team Lead, Data Center Solutions
Sentinel Technologies, Inc.
630.769.4337
wlaflamme@sentinel.com

Nimble Hardware and Software

Nimble AF3000 Storage Solution	Extended Price 137,364.00
<i>IOPS = 50,000; Raw Capacity = 23TB; Usable Capacity = 16TB; Estimated Effective Usable Capacity after 2:1 Data Reduction = 32TB</i>	
Hardware and Software Total	<hr/> 137,364.00

Solution Maintenance & Support - 5 Years

Hardware Maintenance - Five (5) Years	Extended Price 31,869.00
Maintenance & Support Total	<hr/> 31,869.00

Total Project: Based on the combined purchase of all Hardware, Software, Professional Services, and Solution Maintenance from Sentinel as detailed in the attached Bill of Materials. Unbundling or materially reducing any of these essential elements of the solution may result in modifications to the cost of the remaining elements.

Nimble Hardware and Software	Extended Price 137,364.00
Solution Maintenance & Support - 5 Years	31,869.00
Project Total	<hr/> \$ 169,233.00

City of Aurora
Nimble All Flash Array



Nimble for CAD/RMS				
Part Number	Description	Qty	Unit Price	Ext Price
Nimble AF3000 Storage Solution				
AF3000-2P-23T-1	AF3000 DUAL 10GBE OPTICAL ONLY QTY 1 QTY 1 X 23TB FLASH PACK	1	132,364	132,364
PRO-INSTALL- ARRAY2	INSTALLATION FOR NIMBLE ARRAY (CS235/300/500/700)	1	5,000	5,000
Hardware and Software Sub-Total		\$	137,364	

City of Aurora
Nimble Maint & Support - 5 Year



Hardware Maintenance					
Part Number	Description	Qty	Special Notes	Unit	Ext. Price
Maintenance					
SLA-4HR-AFA	4HR PARTS DEL SW SUP & INFOSIGHT AFA	1	60 Months Duration	31,869	31,869
Maintenance Sub-Total					\$ 31,869

General Proposal Assumptions

Product Lead Times

Depending on the technologies quoted, orders may be direct or through distribution. Lead times should be expected to be 8 weeks but can exceed 8 weeks. Should expedited equipment requirements arise, there could be an additional charge to source through a warehousing distribution partner.

Site Readiness and Site Survey Requirement:

Every effort has been made to ensure that proper power cords and patch cables have been included to match your environment's infrastructure. The notes section of the Bill of Materials (BOM) explicitly states the quantity and type of cords quoted.

Customer waives the opportunity to complete a site/closet checklist, has reviewed the BOM and agrees to quantity, type and length of the power and patch cables provided. Financial obligation for labor and materials for changes identified post order will be Customer's responsibility.

Fiber

It is assumed that Customer's existing fiber will support proposed transmission speeds (i.e. 1GB, 10GB, 40GB, etc.). Customer must ensure that the fiber optic cabling is within manufacturer tolerances for distance and loss in order to support the required transport speeds. In some cases specialized equipment such as attenuators and mode conditioning cables may be required to properly support these speeds. This equipment will be at the expense of Customer.

Optics (SFP, SFP+, GBIC, etc.)

Every effort was made in the pre-sales process through white board sessions, BOM reviews and diagrams to identify any and all optics required. **OPTICS AS QUOTED AND SOLD ASSUME A STAND ALONE SYSTEM UNLESS OTHERWISE NOTED.** Migration items and integration items to existing equipment, if not noted, are not included nor is time for the interconnection, planning or design of same. Should any question exist as to the total number, types and use of the optics, Sentinel can set up a design review and white board session prior to the order upon request.

It may be determined during the blueprint process that additional connections are required or recommended. These will require an additional purchase cost to Customer. Sentinel makes a best effort to avoid any foreseeable additional purchases, but in most cases the final connectivity varies slightly either for a technical reason or due to a physical requirement and this is beyond the fixed price solution design.

Power, Racks and Cooling

Like the optics, Sentinel has made a best effort to match any power requirements and answer any requests of the Customer related to equipment specifications, power cables included or other physical requirements. Any adjustments to fit in racks, connect to specific power terminal types, or secure electrician services to run a new service are beyond the fixed bid project price. Sentinel will respond to any inquiry and provide product literature. Any sizing charts provided are done so as a convenience to the client and DO NOT represent a commitment by Sentinel that, as sold, the equipment is ready for Customer site. Sentinel offers Technology Area Design (TAD) consulting services should Customer prefer a more formal and accurate solution.

Patch Cables/Cable Lengths

In most cases the BOM includes any note(s) on cable lengths included. Without the design validation of a formal TAD engagement, only a best effort is made to match the site requirements. Any changes to the cord lengths, connectors or other site readiness items will be in addition to the solution once the order is placed with the manufacturer(s). Many of the vendors offer the ability to select the appropriate items prior to order, but will charge for any replacements needed after the order and this offer will be extended to Customer through the Sentinel Project Change Request (PCR) process. Unless specified, Sentinel assumes Customer will provide all patch cables needed and can provide the product literature on any devices upon request.

Labor Union Requirements

Sentinel has **NOT** included any parameters for Union workers. Any requirement would require a subcontract arrangement to be determined up front and would increase the cost of deployment.

Permits & Access

Unless otherwise agreed, all permits, variances, access to facilities, roof access, building warranty concerns or other site specific information and procedures are the responsibility of the Customer. Sentinel can assist as needed, but will need to be informed of any requirements prior to the site survey to consider these within the validation process.

Remote Support

Sentinel's service estimate assumes remote access support through IP VPN or IP PPP connection. Without this access, additional services may be incurred for optimization and tuning required pre and post installation.

Project Changes Request

Sentinel assumes, unless noted here, that the Customer will patch in all equipment to the cabling plant within the facility. Sentinel can perform this connection service at an additional charge with an approved PCR.

Cisco Data Center – UCS & MDS

Cisco UCS

Cisco UCS sizing has been estimated to the best of Sentinel's ability. Without a complete data center assessment of the current virtual and non-virtual servers as well as planned projections of requirements, the UCS system has been included as a best effort only and changes are subject to financial investment through the project change process.

Unified Fabric

Sentinel has made a best effort to confirm optics and cables required. Patch cables required between the FlexPod and the networks are the responsibility of Customer.

Pricing

Pricing is valid for 30 days from date of quote delivery unless otherwise noted.

Pricing assumes payment via company check or electronic funds transfer. Alternate payment methods may incur an additional charge.