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Network and Data Center

High Level Drawing and Quotes

Proposed Architecture Existing Capital Plan Backup Sub-System Existing Storage Sub-System Physics Lab WWW Via CUNY Central CS & Math Existing Existing Data Center <u>NET-2</u> Network Core Nexus Firewall Switches Switches **AC - 1H07** Data Center 1 (1st Floor) Biology Net-1 Network Distribution AC - 2H03 Data Center 2 (2nd Floor) Existing Switches / Racks / Data Center Cables Switches Existing Firewall Giology / Enviromenta Health NET-2 Network Core Nexus Existing Switches Storage Sub-System Foreign Language

Chemistry

Existing

Backup Sub-System



QUOTE:

2003316621845-04

DATE: 07/18/2017 PAGE: 1 of 2

TO:

York College Mohammad Ahsan 94 - 20 Guy R. Brewer Blvd Jamaica, NY 11451

kahsan@york.cuny.edu (p) 718-262-2754 FROM:

Presidio Networked Solutions Group, LLC Adelina Mauceri 110 Parkway Drive South Hauppauge, NY 11788

amauceri@presidio.com (p) 631.656.7654 (f) 631.716.7457

 Customer#:
 YORKC002

 Account Manager:
 Andrew Chris

 Inside Sales Rep:
 Adelina Mauceri

 Title:
 York College APC

#	Part #	Description	List Price	Unit Price	Qty	Ext List Price	Ext Price
1	SRT5KRMXLT	SMARTUPS SRT 5000VA RM 208V	\$4,150.00	\$4,133.45	20	\$83,000.00	\$82,669.00
2	AP9571A	PDU 208V 10 C13 30A RACK BASIC	\$239.99	\$223.86	20	\$4,799.80	\$4,477.20
3	SRT6KRMXLT	SMART UPS SRT 6000VA RM 208V	\$4,775.00	\$4,726.84	10	\$47,750.00	\$47,268.40
4	AP9571A	PDU 208V 10 C13 30A RACK BASIC	\$239.99	\$223.86	10	\$2,399.90	\$2,238.60

Total List Price: \$137,949.70
Sub Total: \$136,653.20
Grand Total: \$136,653.20



QUOTE:

2003316621845-04

PAGE: 2 of 2

Quote valid for 30 days from date shown above. Prices may NOT include all applicable taxes and shipping charges. All prices subject to change without notice. Supply subject to

- Quoted prices exclude applicable federal, state or local taxes. Invoicing will include applicable taxes unless a valid tax exempt certificate is provided.
 The price included herein reflects a 3% discount for payment by cash, check or wire transfer. This discount will not apply in the event that customer pays using a credit card or debit card.
- Prices exclude freight, handling or insurance (unless itemized in the quote).

- A customer purchase order infers acceptance of Presidio Networked Solutions Group, LLC's terms & pricing per the applicable quote.
 Warehousing fees are charged at 1% per month of the list (selling) price for goods held in warehousing at customers request or failure by customer to accept delivery.
 Fees for international delivery are determined at the time of sale dependant on customer's service requirements as well as customers import registration status in the destination country.

- Freight, Handling, Shipping
 Customer is responsible for all freight charges and will be billed accordingly.
- Title/Risk of loss passes to customer Freight on Board (FOB) origin unless otherwise agreed to in writing by Presidio Networked Solutions Group, LLC
- Presidio Networked Solutions Group, LLC accepts no responsibility / liability in connection with the shipment.
 International delivery services include (i) Consolidated billing in USD for all international deliveries (ii) Consolidated contracting with one entity, namely Presidio Networked Solutions. Group, LLC (iii) Single point of contact (iv) Freight forwarding including exportation permits, application of tariff headings, customs clearance (including import permits, licenses, certificates) (v) Asset Management, Tracking & Reporting.

Payment Policy

- Payment of invoices are due within 30 days from date of invoice unless other terms are issued.
- Presidio Networked Solutions Group, LLC has the right to charge a late payment charge of 2% of the outstanding balance per month for any invoice that remains unpaid beyond its due
- · Customer is billed upon shipment from the manufacturer.
- Customer shall accept and pay for partial shipment of products.
- · Customer understands and agrees to its obligation, that applicable sales tax will apply to the quoted services on a by site location basis.

Return Policy

- Customers return rights are subject to the return policies (& fees including restocking) of the applicable manufacturer
 A Presidio Networked Solutions Group, LLC issued Return Material Authorization (RMA) is required & needs to accompany returned items before any credit is issued to a customer
- · Customers have 15 calendar days from original ship date to request a RMA (unless shorter period is required by manufacturer)
- Items returned must be in original shipping cartons, unused, undamaged and unaltered failing which Presidio Networked Solutions Group, LLC is entitled to reject acceptance of items or charge further fee's
- The customer is responsible for shipping fees to the destination highlighted in the RMA
- · Opened software cannot be returned

· Customers cancellation of purchase order rights are subject to the cancellation policies (& fees) of the applicable manufacturer

- Software is subject to the license terms that accompany it.
- · License terms are established between the customer & owner of the software
- Unless Presidio Networked Solutions Group, LLC is the owner or licensor, Presidio Networked Solutions Group, LLC makes no reps and/or warranties relating to its operation, ownership

SmartNet (Third party Maintenance)

• Customers rights are subject to the terms provided by the applicable manufacturer. (per website address)

Limitation of liability

· As per MSA

Please remit payment to: Presidio Networked Solutions Group, LLC PO 677638, Dallas, TX, 75267-7638

Wire Instructions:

PNC Bank Beneficiary: Presidio Networked Solutions Group, LLC

Beneficiary Account# 8616159745 ABA: 031000053

Customer hereby authorizes and agrees to make timely payment for pro- rendered, including payments for partial shipments	ducts delivered and services		
Customer Signature	Date		





Price Estimate for planning and information purposes only and is not a binding offer from Cisco.

 Date: 25-Aug-2017
 Estimate ID:
 AD74495181HZ

 Deal ID:
 NA

All prices are shown in USD

		Service	Lead	Unit List		Unit Net		Extended Net
Part Number	Description	Duration (Months)	Time	Price	Qty	Price	Disc (%)	Price
WS-C3850-48F-S Cisco Catalyst 3850 48 Port Full PoE IP Base			14	14,000.00	83	9,520.00	32	790,160.00
S3850UK9-36E	CAT3850 Universal k9 image		14	0.00	83	0.00	32	0.00
CAB-C15-CBN	Cabinet Jumper Power Cord, 250 VAC 13A, C14-C15		8	0.00	83	0.00	32	0.00
STACK-T1-50CM	50CM Type 1 Stacking Cable		14	100.00	83	68.00	32	5,644.00
CAB-SPWR-30CM	Catalyst Stack Power Cable 30 CM		14	95.00	83	64.60	32	5,361.80
PWR-C1-BLANK	Config 1 Power Supply Blank		14	0.00	83	0.00	32	0.00
PWR-C1-1100WAC	1100W AC Config 1 Power Supply		14	0.00	83	0.00	32	0.00
C3850-NM-BLANK	Cisco Catalyst 3850 Network Module Blank		14	0.00	83	0.00	32	0.00
C3850-NM-2-10G=	Cisco Catalyst 3850 2 x 10GE Network Module		14	2,500.00	76	1,700.00	32	129,200.00
WS-C3850-12X48U-S	Cisco Catalyst 3850 48 Port (12 mGig+36 Gig) UPoE		14	15,300.00	35	10,404.00	32	364,140.00
PWR-C1-1100WAC	1100W AC Config 1 Power Supply		14	0.00	35	0.00	32	0.00
C3850-NM-BLANK	Cisco Catalyst 3850 Network Module Blank		14	0.00	35	0.00	32	0.00
S3850UK9-37E	CAT3850 Universal k9 image		14	0.00	35	0.00	32	0.00
PWR-C1-1100WAC/2	1100W AC Config 1 Secondary Power Supply		14	1,900.00	35	1,292.00	32	45,220.00
CAB-C15-CBN	Cabinet Jumper Power Cord, 250 VAC 13A, C14-C15		8	0.00	70	0.00	32	0.00
STACK-T1-50CM	50CM Type 1 Stacking Cable		14	100.00	35	68.00	32	2,380.00
CAB-SPWR-30CM	Catalyst Stack Power Cable 30 CM		14	95.00	35	64.60	32	2,261.00
STACK-T1-1M=	1M Type 1 Stacking Cable		14	200.00	10	136.00	32	1,360.00
STACK-T1-3M=	3M Type 1 Stacking Cable		14	300.00	10	204.00	32	2,040.00
CAB-SPWR-150CM=	Catalyst Stack Power Cable 150 CM Spare		14	195.00	12	132.60	32	1,591.20
C3850-NM-4-10G=	Cisco Catalyst 3850 4 x 10GE Network Module		14	4,000.00	4	2,720.00	32	10,880.00
R-L-PI2X-U-K9	LMS to Cisco Prime Infrastructure 2.x Upgrade		2	0.00	1	0.00	32	0.00
L-L-PI2X-300-U	LMS to Prime Infrastructure 2.x Upgrade 300 Device		2	5,695.00	1	3,872.60	32	3,872.60
R-PI22-SW-K9	Prime Infrastructure 2.2 Software		2	25.00	1	17.00	32	17.00
L-PI2X-BASE	Prime Infrastructure 2.x Base License		2	95.00	1	64.60	32	64.60
L-PILMS42A-300-M	Prime Infrastructure LMS 4.2A - 300 Device Upgrade		2	0.00	1	0.00	32	0.00
L-PILMS42-KIT	Prime Infrastructure - LMS License Kit		2	0.00	1	0.00	32	0.00

42% volumen discount not reflected on Vendor Quote							
Projected Volume Discount (%)	Volume Discount Unit Price	Volume Discount Extended Price					
42%	8,120.00	673,960.00					
42%	-	-					
42%	-	-					
42%	58.00	4,814.00					
42%	55.10	4,573.30					
42%	-	-					
42%	-	-					
42%	-	-					
42%	1,450.00	110,200.00					
42%	8,874.00	310,590.00					
42%	-	-					
42%	-	-					
42%	-	-					
42%	1,102.00	38,570.00					
42%	-	-					
42%	58.00	2,030.00					
42%	55.10	1,928.50					
42%	116.00	1,160.00					
42%	174.00	1,740.00					
42%	113.10	1,357.20					
42%	2,320.00	9,280.00					
42%	-	-					
42%	3,303.10	3,303.10					
42%	14.50	14.50					

Projected Actual Cost calculated based on

Valid through:

FOB Point: None

 Product Total
 1,364,192.20

 **** Service Total:
 192,000.00

 Subscription Total
 0.00

 Total Price:
 1,556,192.20

 Product Total
 1,163,575.70

 Service Total :
 192,000.00

 Subscription Total

 Total Price:
 1,355,575.70

55.10

55.10

-

42%

42%

42%

*** Notes

This estimate, calculated by YORK, is based on Ciscos's Partner Professional Services Implementation on NYS OGS Contract Number: PM20800. The Projected Actual Cost were calculated based on a 42% volumen discount the vendor provides beyond the 32% discount in NYS OGS contract.

Manufacturer Part Number (SKU)	Product Description	List Price Qty Total Price		
PS-SNY-ADV	Advanced Daily Install	1,200.00 160	192,000.00	



Pricing Proposal

Quotation #: 13677226 Created On: 6/21/2017 Valid Until: 6/30/2017

NY-York College

Inside Account Manager

Stephen Yu

94-20 GUY R. BREWER BLVD. ATTN: ACCOUNTS PAYABLE JAMAICA, NY 11451

United States

Phone: (718) 262-2739

Fax:

Email: syu@york.cuny.edu

NY SLED

280 Davidson Ave Somerset Ave, 08873 Phone: 1-888-744-4084 Fax: 732-868-8982 Email: NYSLED@shi.com

All Prices are in US Dollar (USD)

	Product	Qty	Your Price	Total
1	Veeam Availability Suite Enterprise Plus for VMware - Public Sector Veeam Software - Part#: P-VASPLS-VS-P0000-00 Contract Name: Distributor Based Software and Hardware Contract #: PD67647	16	\$2,081.87	\$33,309.92
			Total	\$33,309.92

Additional Comments

Thank you for choosing SHI International Corp! The pricing offered on this quote proposal is valid through the expiration date listed above. To ensure the best level of service, please provide End User Name, Phone Number, Email Address and applicable Contract Number when submitting a Purchase Order. For any additional information including Hardware, Software and Services Contracts, please contact an SHI Inside Sales Representative at (888) 744-4084.

SHI International Corp. is 100% Minority Owned, Woman Owned Business. TAX ID# 22-3009648; DUNS# 61-1429481; CCR# 61-243957G; CAGE 1HTF0

The Products offered under this proposal are subject to the SHI Return Policy posted at www.shi.com/returnpolicy, unless there is an existing agreement between SHI and the Customer.

CISCO Daniel Charles II

Cisco Systems, Inc.

Price Estimate

OGS State Contract number PM20800

Price Estimate for planning and information purposes only and is not a binding offer from Cisco.

 Date: 25-Aug-2017
 Estimate ID:
 QV74495159WT

 Deal ID:
 NA

 All prices are shown in USD

Part Number	Description	Service Duration (Months)	Lead Time	Unit List Price	Qty	Unit Net Price	Disc(%	Extended Net Price
N9K-C9508-B2	Nexus 9508 Chassis Bundle with 1 Sup, 3 PS, 2 SC, 6 FM, 3 FT		21	100,000.00	2	68,000.00	32.00	136,000.00
N9K-C9500-LC-CV	Nexus 9500 Linecard slot cover		21	0.00	14	0.00	32.00	0.00
N9K-C9500-P-CV	Nexus 9500 Power Supply slot cover		21	0.00	4	0.00	32.00	0.00
NXOS-703I4.3	Nexus 9k/3K NX-OS Maintenance Software Rel 7.0(3)l4.3		2	0.00	2	0.00	32.00	0.00
N9K-C9500-ACK	Nexus 9500 Accessory Kit		21	0.00	2	0.00	32.00	0.00
N9K-C9500-RMK	Nexus 9500 Rack Mount Kit		21	0.00	2	0.00	32.00	0.00
N9K-C9508-FM	Fabric Module for Nexus 9508 chassis		21	0.00	12	0.00	32.00	0.00
N9K-C9508-FAN	Fan Tray for Nexus 9508 chassis, Port-side Intake		21	0.00	6	0.00	32.00	0.00
CAB-C19-CBN	Cabinet Jumper Power Cord, 250 VAC 16A, C20-C19 Connectors		8	0.00	12	0.00	32.00	0.00
N9K-SC-A	System Controller for Nexus 9500		21	0.00	4	0.00	32.00	0.00
N9K-SELECT-SUP-A	PID to Select Default Supervisor: N9K-SUP-A		21	0.00	2	0.00	32.00	0.00
N9K-SUP-A	Supervisor for Nexus 9500		21	0.00	2	0.00	32.00	0.00
N95-LIC-PAK	N9500 License PAK Expansion		21	0.00	2	0.00	32.00	0.00
N95-LAN1K9	LAN Enterprise License for Nexus 9500 Platform		21	15,000.00	2	10,200.00	32.00	20,400.00
N9K-DCNM-PAK	N9000 DCNM License PAK Expansion		21	0.00	2	0.00	32.00	0.00
DCNM-LAN-N95-K9	DCNM for LAN Advanced Edt. for Nexus 9500 switches		21	10,000.00	2	6,800.00	32.00	13,600.00
N9K-NFM1K9	Cisco Nexus Fabric Manager License for N9K Switch		21	2,000.00	2	1,360.00	32.00	2,720.00
N9K-SUP-A	Supervisor for Nexus 9500		21	10,000.00	2	6,800.00	32.00	13,600.00
N9K-SELECT-C95PAC	PID to Select Default Power Supply: N9K-PAC-3000W-B		21	0.00	6	0.00	32.00	0.00
N9K-PAC-3000W-B	Nexus 9500 3000W AC PS, Port-side Intake		21	0.00	6	0.00	32.00	0.00
N9K-PAC-3000W-B	Nexus 9500 3000W AC PS, Port-side Intake		21	3,000.00	6	2,040.00	32.00	12,240.00
N9K-X9464PX	Nexus 9500 linecard, 48p 1/10G SFP+ & 4p QSFP		21	15,000.00	2	10,200.00	32.00	20,400.00
N1K-VLCPU-96-ESSTL	Nexus 1000V Essential Edition Paper Delivery License Qty 96		14	0.00	2	0.00	32.00	0.00

Projected Actual Cost calculated based on 42% volumen discount not reflected on Vendor Quote						
Projected Volume Discount (%)	Volume Discount Unit Price	Volume Discount Extended Price				
42%	58,000.00	116,000.00				
42%	-	-				
42%	-	-				
42%	-	-				
42%	-	-				
42%	-	-				
42%	-	-				
42%	-	-				
42%	-	-				
42%	-	-				
42%	-	-				
42%	-	-				
42%	-	-				
42%	8,700.00	17,400.00				
42%	-	-				
42%	5,800.00	11,600.00				
42%	1,160.00	2,320.00				
42%	5,800.00	11,600.00				
42%	-	-				
42%	-	-				
42%	1,740.00	10,440.00				
42%	8,700.00	17,400.00				

SFP-10G-LRM=	10GBASE-LRM SFP Module	 14	995.00	160	676.60	32.00	108,256.00
SFP-10G-LR=	10GBASE-LR SFP Module	 14	3,995.00	36	2,716.60	32.00	97,797.60
SFP-10G-SR=	10GBASE-SR SFP Module	 14	995.00	36	676.60	32.00	24,357.60
GLC-TE=	1000BASE-T SFP transceiver module for Category 5 copper wire	 21	395.00	24	268.60	32.00	6,446.40
QSFP-40G-SR-BD=	QSFP40G BiDi Short-reach Transceiver	 14	1,095.00	12	744.60	32.00	8,935.20
QSFP-40G-LR4-S=	QSFP 40GBASE-LR4 Trnscvr Mod, LC, 10km, Enterprise- Class	 14	10,900.00	8	7,412.00	32.00	59,296.00

42%	577.10	92,336.00
42%	2,317.10	83,415.60
42%	577.10	20,775.60
42%	229.10	5,498.40
42%	635.10	7,621.20
42%	6,322.00	50,576.00

Valid through: Product Total 446.982.80 Product Total 524,048.80 FOB Point: Service Total: None *** Service Total : 60,000.00 60,000.00 **Subscription Total** 0.00 Subscription Total **Total Price:** 584,048.80 **Total Price:** 506,982.80

Notes

^{***} This estimate, calculated by YORK, is based on Ciscos's Partner Professional Services Implementation on NYS OGS Contract Number: PM20800. The Projected Actual Cost were calculated based on a 42% volumen discount the vendor provides beyond the 32% discount in NYS OGS contract.

Manufacturer Part Number (SKU)	Product Description	List Price	Qty	Total Price:	
PS-SNY-ADV	Advanced Daily Install	1,200.00	50	60,000.00	

This Price Estimate does not constitute an offer by Cisco to sell products, but is instead an invitation to issue a purchase order to Cisco until the valid date specified in this Price Estimate. Such a purchase order will be subject to Cisco standard procedures, terms and conditions for the acceptance of purchase orders. This order may subject to sales tax, VAT, duty and freight charges even if not noted on this estimate.

riverbed*

Pro-Forma Quotation

York College

Kamrul Ahsan 94-20 Guy R. Brewer Blvd., Jamaica, NY 11451 From: Riverbed SE Name Sales Name

Trish.Caldiero@riverbed.com jmow@riverbed.com

Riverbed SteelCentral for Performance Management

212-520-8938 212-520-8913

July 5, 2017

Description: SteelCentral Standard NetProfiler

LIST PRICE PER UNIT EXTENDED PRICE HARDWARE / SOFTWARE
 Standard NetProfiler Appliance & Flow Capacity License

 SCNP-02270-B010
 1
 SteelCentral Standard NetProfiler SCNP-02270-B010, 2U

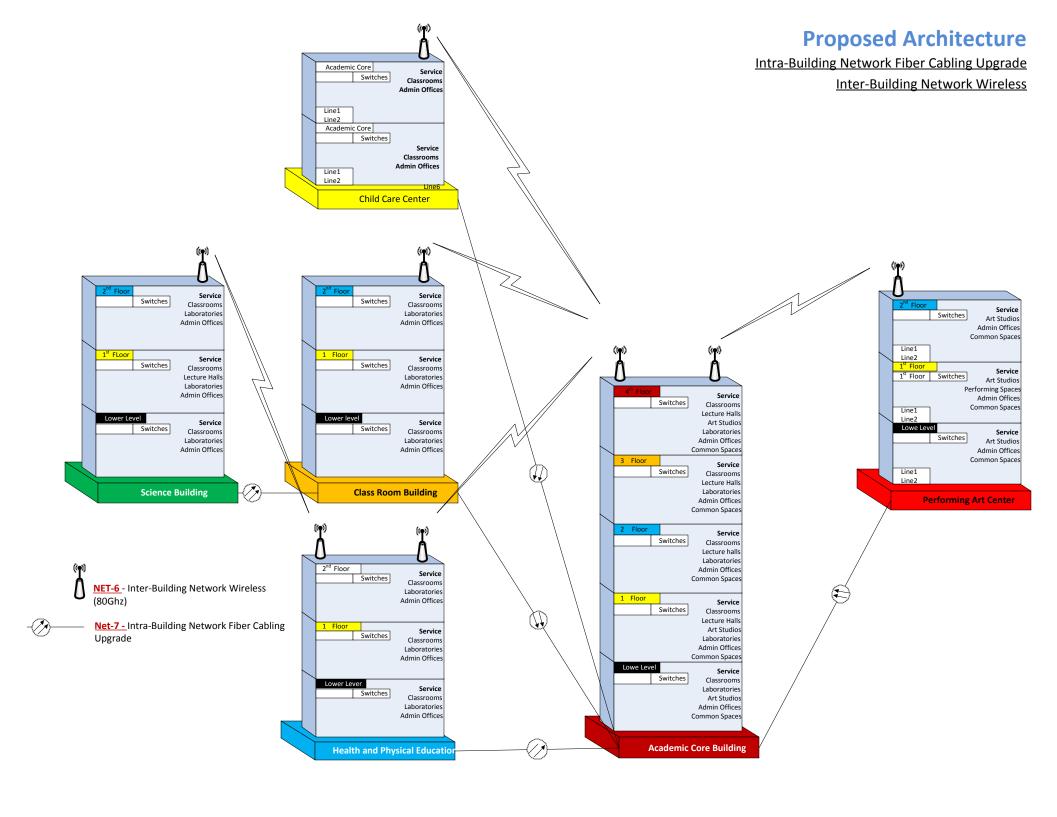
 LIC-SCNP-02270-F1
 1
 SteelCentral Standard NetProfiler License for 200K FPM
 94,495 \$ 10,500 \$ 94,495 10,500 61,422 6,825 \$ 35% \$ 35% \$ NetShark Physical Appliance SCAN-02170-B010-C (up to 1 NIC) LIC-SCAN-02170 1U 8TB Base SteelCentral NetShark model 2170; up to 1Gbps write-to-disk, 400K FPM SteelCentral NetShark model 2170 license Quad 1GbE Fiber SFP Capture NIC SFP - 1GbE SX Fiber for NIC-1-001G-4SFP-C (requires qty 4 for each NIC) 21,000 4,000 35% \$ 35% \$ 13,650 1 21,000 4,000 2,600 NIC-1-001G-4SFP-C 8,495 \$ 195 \$ 35% \$ 35% \$ 5,522 507 1 8.495 TRC-1-SFP-SX-C 780

INSTALLATION AND SERVICES						
SVC-PSD-00215	5	NPM SteelCentral Time & Material Consulting Day. For project planning, technical design,	\$ 2,400	\$ 12,000	5%	\$ 11,400
		implementation, best practice sharing, environmental review or knowledge transfer (excludes T&E)				
SVC-PJM-00002	8	NPM Hourly Time & Materials for SteelCentral Project Mangement Consulting Charges (excludes T&E)	\$ 300	\$ 2,400	5%	\$ 2,280

NOTES

- Pricing contained herein is for budgetary purposes only.
- Pricing subject to change without notice.
 Pricing information is confidential to Riverbed and York College

Hardware / Software Subtotal: 90,526 Maintenance Subtotal: 13.680 Installation and Services Subtotal: 104,206 Total:



ESS, Inc. Headquarters 250 Clearbrook Road Elmsford, NY 10523 Contact us at : ESS, New York 141 River Road #6 Nutley, N.J. 07070 (877) 359 5350 Remit To Address PO Box 3051 West Caldwell, NJ 07007 Website: www.gotoess.com

June 28, 2017

Mr. Peter Tighe Chief Information Officer York College 9420 Guy R Brewer Boulevard Jamaica, NY 11451

Dear Peter,

Thank you for your continued interest in ESS. The following is a revision of our quotation dated June 16, 2016, for 80 Ghz links to connect the 5 buildings on your campus. This revision includes the revised diagram which shows the relocation of the antennas which would have been obstructed by the tree and now has an unobstructed path in the new design.

This revision will give you 5Gb between the Academic Core building and building 3, between buildings 3 and 4 and between building 5 and the Academic Core building. (see the map enclosed). The other links will be 2 Gb links.

Additionally, we relinquished some of the installation responsibilities to the college so as to reduce the cost of the installation. We have detailed what the college will be responsible for in this revision of the proposal.

The following is a System Map, Scope of Work and the Equipment List and Quotation for the system as we discussed. Please review this quote at your first convenience. If you have any questions or concerns, feel free to call me anytime. I am happy to assist you in any way possible.

Respectfully,

Joanna Harrington Sr. Account Executive ESS, Inc.

Remit To Address PO Box 3051 West Caldwell, NJ 07007 Website: www.gotoess.com



Statement of Work

York College SIAE 80GHz Microwave System Installation/Optimization

ESS, Inc will supply the materials and align the dishes to connect the five field studies of the microwave links between the six York College Campus Buildings.

ESS, Inc will register the links with the FCC under the ESS, Inc Nationwide License.

ESS, Inc will need the licensee information: name, address, phone numbers, and other information for the FCC Form 601 preparation.

ESS, Inc will stage the equipment in our Nutley, NJ facility. Staging includes provisioning the RF frequencies, installing the optional software licenses (ACM, Data Rate), incorporating the most recent firmware upgrades, and operational testing of the Ethernet links.

ESS, Inc will install the new SIAE equipment. York College will be responsible for properly ground the equipment to existing ground systems at each site. York will also install all cabling between the ODU and Indoor equipment, including power supplies, UPS, Surge Arresters, grounding of all equipment to a building ground and optimization of the radio link Ethernet connection.

York College will need to provide IP address for all the radio equipment network management in the same subnet. Additionally, this equipment should be connected to emergency power. It is York College's responsibility to provide a dedicated 20 amp receptacle connected to emergency power to support each radio. It is the also the responsibility of York College to provide a building ground conductor within 15 feet of the radio for our installers to connect ground wire to. This is necessary to minimize damage due to potential lightning strikes.

ATP testing and documentation will be provided in Adobe Acrobat format.

ESS. New York (877) 359 5350 Remit To Address PO Box 3051 West Caldwell, NJ 07007 Website: www.gotoess.com

York College Scope of Work

York College expressed an interest in linking the five buildings on campus with licensed point to point 80 Ghz microwave. An initial budgetary quote was provided, however, as a result of a proposal review meeting, it is the desire of York college to assume some of the installation responsibility in order to reduce costs. The following information will equip the college with the requirements for assuming those portions of the installation that ESS will relinguish to York. Please review the following information and call me with any questions you may have. We have provided a detailed Scope of Work because Microwave installation requires percission. My engineer is also available to answer any questions.

Wall Mount Bracket Specifications

The wall mount bracket must be secured with through the wall with galvanized steel hardware a minimum of 5/8" size rod.

The 4 1/2" pipe must be vertical and perpendicular to the ground. That is, checked for plumb at 90 degree intervals around the pipe. The mounting pipe must be plumb for antenna alignment.

The mounting brackets must be secured to the wall between 6" and 12" from the ends.

The wall must be a solid wall or extra wall mount brackets will be needed or a load spreader mounted on the inside of the wall. This would require additional materials above and beyond a normal installation.

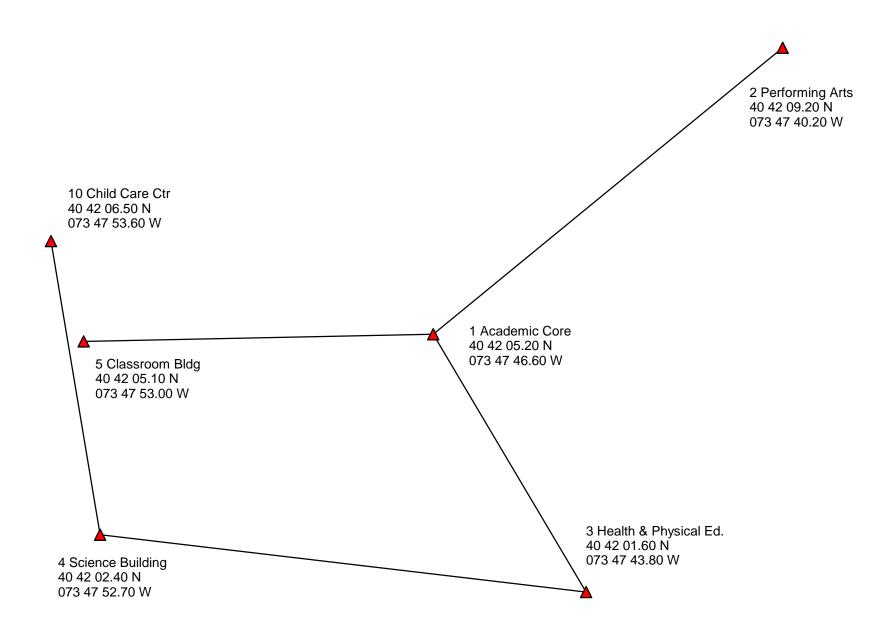
Cable Run Specifications

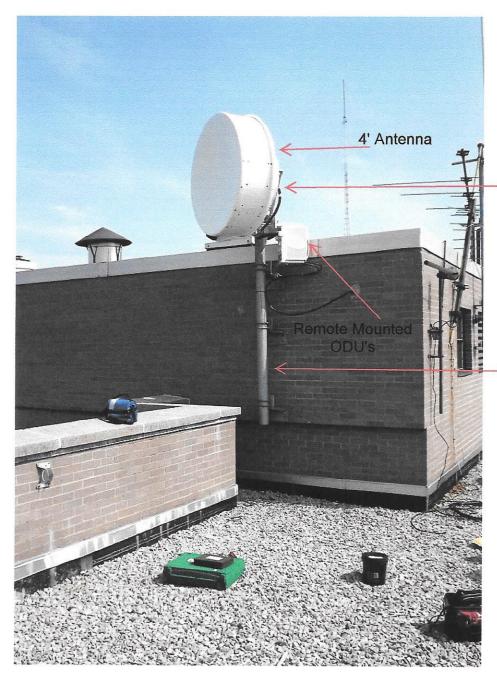
All cable runs must exit the exterior wall through the appropriate conduit with fire stop applied according to local fire codes.

All cable must be secured at regular intervals (3' recommended) and avoid abrasion or contact with sharp or rough surfaces. All cables going through fire walls must use the appropriate fittings and fire stop at the wall entry/exit. All cable must be run between the outdoor mounted radio/antenna unit and the indoor equipment room.

The following page will give you a visual of your installation requirements.



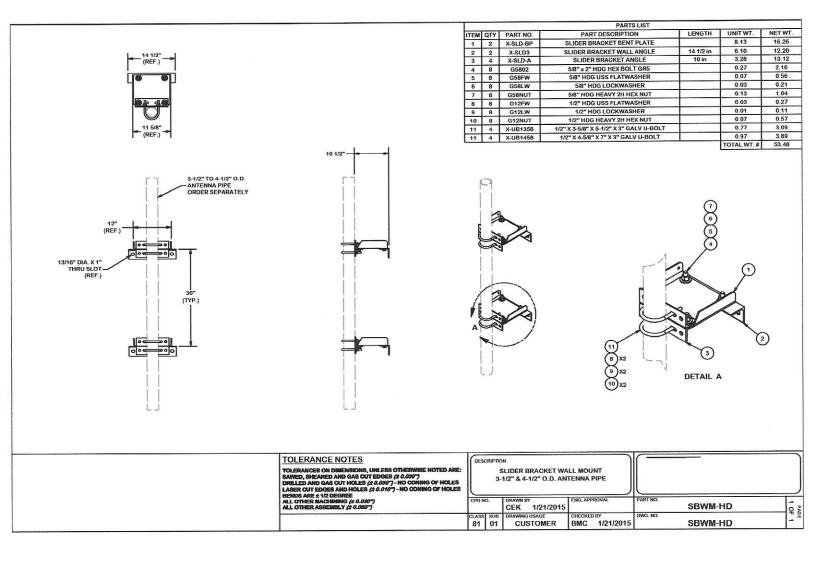


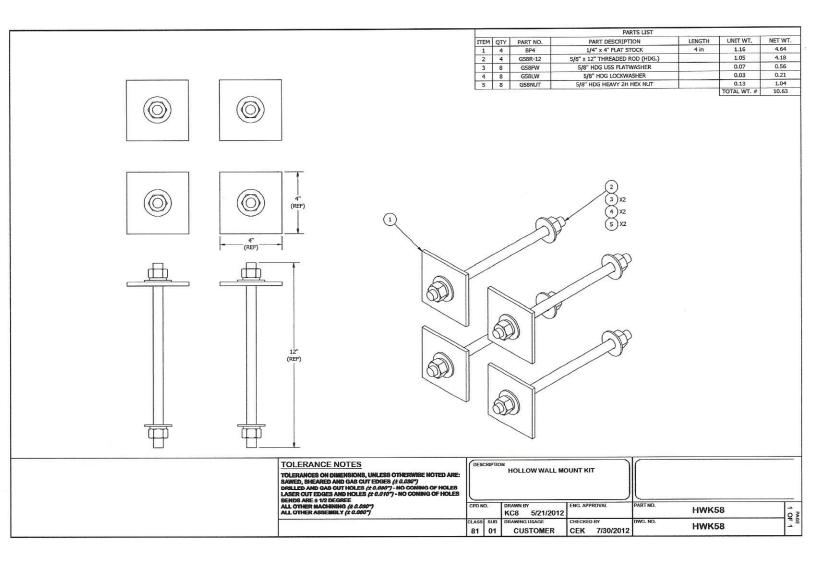


80GHz 1' Antenna has ODU Mounted Directly to Antenna

Wall Mount For much larger antennas

Typical Wall Mounted Antenna and ODU





York College 80GHz 5Gb/s Link

						t Extended		tended Sell
Part Number	Description	Quantity	Uni	t List Price				ce 15% State
	****					te Contract		Contract
ANT-80GHZ-12-SP	ANT-80GHZ-12-SP Single Pol	4	\$	900.00	\$	765.00	\$	3,060.00
ANT-80GHZ-12-DP	ANT-80GHZ-12-DP Dual Pol	6	\$	3,000.00	\$	2,550.00	\$	15,300.00
UPG-80HD-ACM	UPG-80HD-ACM ACM Upgrade	16	\$	500.00	\$	425.00	\$	6,800.00
AP80HD-20-LNK	AP80HD-2O-LNK (Complete 1Gb Link)	8	\$	16,695.00	\$	14,190.75	\$	113,526.00
UPG-80HD-2000	Aplus 2Gb/s Upgrade License	16	\$	1,000.00	\$	850.00	\$	13,600.00
Included in Link Kit	ALFO Plus80 HD RJ45 waterproof IP67 Connector (Rosenberger)	32	\$	2	\$	-	8555	cluded N/C
Included in Link Kit	ALFO Plus ODU Grounding Kit	16	\$	-	\$	27 4-2 5		cluded N/C
Included in Link Kit	ALFO Plus80 HD Pointing Cable	16	\$	-	\$, -		cluded N/C
	ALFO Plus80 HD Console Cable	16	\$	-	\$	-	lr	ncluded N/C
Included in Link Kit	ALFOplus80HD Power Supply Connector	16	\$	14	\$	-	lr	ncluded N/C
Included in Link Kit	ALFOplus80 & ALFOplus80HD	16	\$	e=	\$	-	Ir	ncluded N/C
AGS20-IF0GE8	AGS-20, 8X10Ge LAN Interfaces 1+0, 2+0, Optical 2Gb/s Interfaces	6	\$	3,265.00	\$	2,775.25	\$	16,651.50
SIAE-E01430	SFP - CAT-6 100BaseTX	8	\$	142.00	\$	120.70	\$	965.60
SIAE-M02472	CAT-6 Outdoor Cable (per ft)	1000	\$	0.80	\$	0.68	\$	680.00
SIAE-ICD001134	Outdoor Surge Arrestor	8	\$	200.00	\$	170.00	\$	1,360.00
SIAE-E01419	SFP Module LX	0	\$	100.00	\$	85.00	\$	-
SIAE-E01428	SFP Module SX	12	\$	100.00	\$	85.00	\$	1,020.00
Wall Bracket, Pipe, Hardware	SBWM-HD, P472, HWK58	10	\$	700.00	\$	595.00	\$	5,950.00
License Fee	Link Registration	5	\$	200.00	\$	170.00	\$	850.00
SIAE-P20046	100M SM	12	\$	520.00	\$	442.00	\$	5,304.00
SIAE-P20037	100M MM	0	\$	540.00	\$	459.00	\$	1:-
SIAE-M10154	Outdoor Power Cable	16	\$	295.00	\$	250.75	\$	4,012.00
SIAE-ICD001085	48VDC Power Supply w/ Surge Prot.	16	\$	640.00	\$	544.00	\$	8,704.00
	11.7				Total	Equipment	\$	197,783.10

ESS, Inc PO Box 3051 West Caldwell, NJ 07007

York College 80GHz 5Gb/s Link

Installation and Optimization Services			
Technician	7.5	\$	9,000.00
Tower Crew Labor + Installation Materials	20	\$	27,400.00
Staging	2.5	\$	3,000.00
3 3		\$	_
		Total Services \$	39,400.00

Total Equipment and Services \$ 237,183.10

ESS, Inc PO Box 3051 West Caldwell, NJ 07007



carahsoft

G-Net Solutions is authroized by Carahsoft to sell Gigamon products from their GSA contract GS-35-F-0119Y

> Sold to: Kamrul Ahsan Company: CUNY - York

Address1 94-20 Guy R. Brewer Blvd 0

Address2

City, State, Zip Jamaica, NY 11451 Phone: (718) 262-2754

Email: kahsan@york.cuny.edu

Phone: 631 935-2610 Email: kklunder@gnet-inc.com Quote Name: CUNY- York Gigamon HC101 CAPEX Quote 2017-6-28 Quote valid until: 7/26/2017

Date: 6/28/2017

Salesperson .: Ken Klunder

								G-Net Add'l	D	G-Net Discounted	Total Disc %	
	SKU	Description	Qty.	L	ist Price	Uni	it GSA price	Discount		Price	off List	Total Price
1.00	GVS-HC101	GIGAVUE-HC1 NODE, 12 1G/10G CAGES, 4 10/100/1000M	1	\$	22,995.00	\$	22,935.21	10.00%	\$	20,641.69	10.23%	\$20,641.69
2.00	SFP-532	10 GIG SFP+, MULTIMODE 850NM SR	12	\$	795.00	\$	792.93	10.00%	\$	713.64	10.23%	\$8,563.68
3.00	Shipping	Freight + Insurance	1	\$	90.00	\$	90.00	0.00%	\$	90.00	0.00%	\$90.00
4.00	GPS*	G-Net Implementation Servcies: Certified Gigamon Engineer to provide on-site professional servcies support for implementation and ongoing design support for one year from date of purhcase.	1	W.	1,500.00	\$	1,500.00	0.00%	\$	1,500.00	0.00%	\$1,500.00
	Totals				•			•				¢20 705 27

Terms: 30 Days Net

Quote Valid Until: 7/28/2017

Email to: kklunder@gnet-inc.com

GSA Pricing: This quote complies with GSA pricing as specified in GSA contract GS-35F-0119Y. Provided on this quote are list prices, GSA prices and a G-Net Solutions price which has an additional discount applied that is above and beyond GSA pricing discounts. Line item 4 is an "open market" service provided by G-Net's certified engineers and there is no comprable part number from Gigamon on the GSA price list.

*G-Net Profiessional Services (GPS) is delivered by a G-Net Gigamon certified engineer. GPS is good for one year from the date of purhcase and includes support for initial implementation of all the products purhcased by the customer during the first year after the initial purhcase for deign and configuration of the Gigamon platform including after the platform is placed into production service. Support will be delivered via both On-Site (With a minimum of three business day's notice) and remote/Web based access. Additionally, for one year from date of purhcase, G-Net will provide on-site operational training to customer personel. The GPS also includes a quarterly review of the platform for operational effectiveness for the life of the Gigamon support contract. (Release version, alarms, events & operational effeciency review.) The effective rate for calculating the GPS fee is 5% of the purhcase price of the hardware, software licenses and support fees.



Price Estimate

OGS State Contract number PM20800

Daniel Charles II Cisco Systems, Inc.

Price Estimate for planning and information purposes only and is not a binding offer from Cisco.

Date: 25-Aug-2017

Deal ID: NA
All prices are shown in USD
Projected Actual Cost

Line Service Lead Included Extended **Discount** Selling Item Name Description Qy List Price No Duration Time Item ListPrice Price Small Secure Network Server for ISE 1.0 SNS-3515-K9 N/A 14 days No 0.00 0.00 32.00 0.00 Applications Cisco ISE Software for the SNS-3515-K9 N/A 1.1 SW-3515-ISE-K9 14 days No 15,990.00 15,990.00 32.00 10,873.20 appliance Power Cord, 125VAC 13A NEMA 5-15 CAB-9K12A-NA 1.2 N/A 0.00 0.00 32.00 0.00 8 days No Plug, North America SNS-CPU-E52620D 2.40 GHz E5-2620 v3/6C 0.00 1.3 N/A 14 days Yes 0.00 0.00 32.00 SNS-MR-1X081RU-A 1.4 8GB DDR4-2133 Mhz Memory Module N/A 14 days Yes 2 0.00 0.00 32.00 0.00 1.5 R2XX-RAID0 Enable RAID 0 Setting N/A 10 days Yes 0.00 0.00 32.00 0.00 SNS-MLOM-IRJ45 MLOM Intel -Quad Port 1Gb RJ45 N/A 14 days Yes 0.00 0.00 32.00 0.00 1 1.7 SNS-HD600G10K12G 600GB SAS 10K RPM HDD N/A 14 days Yes 0.00 0.00 32.00 0.00 1.8 SNS-PSU1-770W 770W power supply N/A 14 days Yes 1 0.00 0.00 32.00 0.00 1GB FBWC for Cisco 12G SAS Modular 1.9 SNS-MRAID12G-1GB N/A 14 days Yes 0.00 0.00 32.00 0.00 RAID Avila Cisco 12G SAS Modular Raid 1.10 SNS-MRAID12G N/A 14 days Yes 0.00 0.00 32.00 0.00 Controller SubTotal 10,873.20 Cisco Identity Services Engine 5000 L-ISE-BSE-5K= N/A 15,000.00 15.000.00 2.0 2 days No 32.00 10,200.00 EndPoint Base License SubTotal 10,200.00 Estimate 21,073.20 Total

Projected Actual Cost calculated based on 42% volumen discount not reflected on Vendor Quote

Projected Volume Discount (%)	Volume Discount Unit Price	Volume Discount Extended Price
42%	1	1
42%	9,274.20	9,274.20
42%		1
42%		-
42%	-	-
42%	-	-
42%	-	-
42%		_
42%	-	-
42%	-	-
42%	-	-
SubTotal		9,274.20
42%	8,700.00	8,700.00
SubTotal	8,700.00	8,700.00
Estimate Total		17,974.20

*** Notes

This estimate, calculated by YORK, is based on on NYS OGS Contract Number: PM20800. The Projected Actual Cost were calculated based on a 42% volumen discount the vendor provides beyond the 32% discount in NYS OGS contract.



June 28, 2017

York College The City University of New York Jamaica, New York 11451 Att: Kamrul Ahsan

Re: Fiber Cabling to redundant Data Center

Quote No. York-062817.1020

Mr. Ahsan:

Following is our cabling quote for the work requested at the Academic Core Building as requested. Please review and call me with any questions.

Scope of Work:

- Provide new fiber cable from 25 remote wire closets to new redundant data center 1H07 except for remote closet 2H2 which will be routed back to Data Center 2E03. Refer to closet list below
- 2. All new fiber cable between remote closets and 1H07 to be OM4 12 strand armored, plenum cable.
- 3. At remote closet location furnish and install wall mounted fiber box
- 4. At closet 1H07 furnish and install 4U fiber tray
- 5. All cables to be terminated with SC connectors
- 6. All new cabling to be routed above hung ceiling
- 7. Where required CCSI to provide vertical coring in order to route new cabling
- 8. Owner to provide and install network equipment
- 9. All work to be done during normal business hours
- 10. All cables to be labeled and tested to 10G parameters
- 11. CCS to provide soft copy of all test results to owner
- 12. CCS to provide as-built drawings

From Closet	To Closet	Type of Cable
1H06	1H07-256	OC4
1H3	1H07-256	OC4
1F2	1H07-256	OC4
1F1	1H07-256	OC4
1D	1H07-256	OC4
1B	1H07-256	OC4
1G	1H07-256	OC4
2H1	1H07-256	OC4
2B	1H07-256	OC4
2G	1H07-256	OC4
2F	1H07-256	OC4
2D	1H07-256	OC4
2E	1H07-256	OC4
2H2	2E03	OC4
3D	1H07-256	OC4
3F	1H07-256	OC4
3G2	1H07-256	OC4
3H	1H07-256	OC4
3B	1H07-256	OC4
3G1	1H07-256	OC4
4D	1H07-256	OC4
4TV	1H07-256	OC4
4F	1H07-256	OC4
4G	1H07-256	OC4
LFT-15	1H07-256	OC4
LBT-780	1H07-256	OC4

Please note our pricing is based on the NY OGS State Contract which CCSI hold one of the contracts. Our state contract information is as follows:

Group 77018 Award 21350 Contract No. PT64257

Assumptions

- 1. Electrical by others
- 2. Owner to indicate location of new fiber at cabinet location at 1H07
- 3. Owner to provide and install new racks at 1H07 if required
- 4. Owner to provide access to all closet on a timely manner



Pricing from IDFs to MDFs:

Material: \$87,140.92 <u>Labor:</u> \$162,650.47 Grand Total: \$249,791.39

Pricing between MDF(2E03A-342) to MDF(1H07-256)

Material: \$18,893.52 <u>Labor:</u> \$9,420.00 Grand Total: \$28,313.52

If you agree with the quoted pricing please provide a purchase order so we may begin the installation process. You can fax (516-867-5566) or email the purchase order to George Canteros @ gcanteros@creativecablingsolutions.com

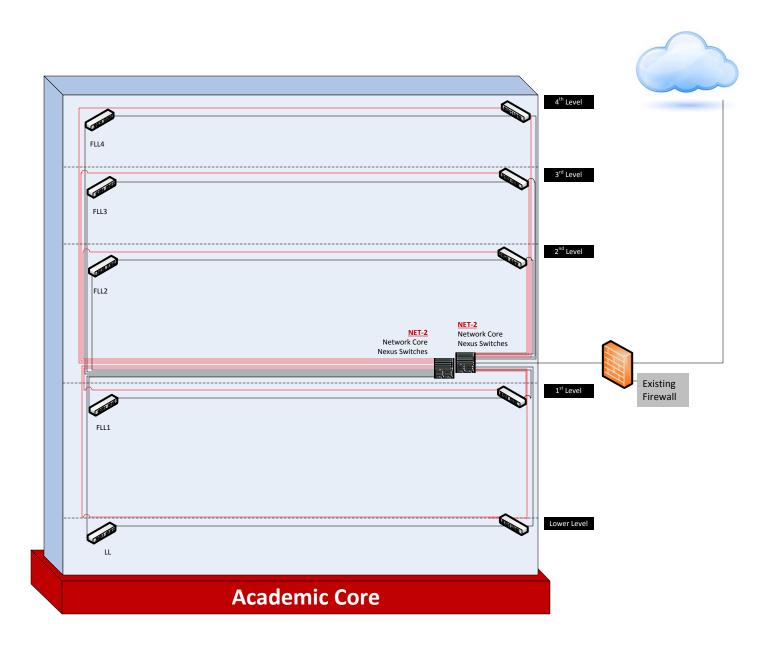
Please call me with any questions regarding our quote.

Thank You,

George Canteros Sales Representative Creative Cabling Solutions Inc. P. 516-867-5577 F. 516-867-5566 C. 631-332-7896

Proposed Architecture

Fiber Redundancy to Network Core Nexus Switches





Savings

Subtotal (43) \$20,084.19

Price does not reflect applicable shipping, taxes and state environmental fee.

Unit Price

\$7,693.99

\$3,299.99

\$129.99

\$126.99

Details

7/10/2017

Net-8-cabinet-KVM-UPS Quote number# 1019112235147

Created July 10, 2017 Expires October 8, 2017 Created by stephen@york.cuny.edu Billing

Order contact Stephen Yu, York College Dell Contract Code: 56AHC Customer agreement number: PM20820/1000041162 Phone: (718) 262-2739 Additional::

stephen@york.cuny.edu

Shipping

Payment method

Delivery method

no charge delivery

Trade compliance

No, I will not be exporting

Quantity

1



Items

APC Smart-UPS SRT 10000VA RM - UPS - 10 kW - 10000 VA - with 208/240V to 120V 10kVA Step-Down Transformer

Dell Contract Code: 56AHC

Manufacturer Part#: SRT10KRMXLT-10KTF

Dell Part#: A8668999 **Estimated Ship Date** July 14, 2017

Premier discount

-\$754.98

\$6,599.98

Item total

\$7,693.99

\$3,955.38

Item total: \$6,939.01

Bundle: Dell Digital 16 Port KVM



Dell Digital 16 Port KVM

Dell Contract Code: 56AHC

Estimated Ship Date

July 10, 2017

Premier discount

-\$1,320.00

\$2,729.79

-\$760.62

\$1,523.88

Catalog Number: 84 / dmpu2016g01

Category	Description	Code	SKU	ID
Base	DMPU2016-G01 Dell 16-port Remote Cosole Switch with two remote users, one local use	546774	[A7546774]	1

21

12

Grouped with your Dell Digital 16 Port KVM



Dell USB SIP for Digital and Analog KVMs. Server Interface Module for VGA, USB keyboard, mouse supp

Dell Contract Code: 56AHC

Manufacturer Part#: DMPUIQ-VMCHS-G01

Dell Part#: A7547276



Dell Serial Interface Pod for Digital KVMs. Serial interface module for DMPU KVMs.

Dell Contract Code: 56AHC

Manufacturer Part#: DMPUIQ-SRL-G01

Dell Part#: A7547277

Premier discount

-\$398.64 Bundle Total: \$8,374.39

American Power Conversion 14-Outlet Basic Rack PDU

\$159 99

\$479.97

Manufacturer Part#: AP9551 Dell Part# : A0040621

Dell Contract Code: 56AHC

Estimated Ship Date July 10, 2017

Premier discount

-\$64 11

Item total: \$415.86



APC Smart-UPS 2200VA RM 2U UPS Battery Backup (SMT2200RM2U)

3

1

3

\$1,049.99

\$3,149.97

Dell Contract Code: 56AHC

Manufacturer Part#: SMT2200RM2U

Dell Part#: A7383000 **Estimated Ship Date** July 10, 2017

Premier discount

Item total: \$2,884.68



DellEMC NetShelter SX 600mm wide x 1200mm Deep Enclosure with Sides - Black

Dell Contract Code: 56AHC

Manufacturer Part#: AR3300X717 Dell Part#: A9662451

Estimated Ship Date July 11, 2017

Premier discount

\$1,861.99

\$1,861.99

-\$391.74

Item total: \$1,470.25

Savings: \$3,955.38

Subtotal (43): \$20,084.19

Savings

\$3,955.38

Subtotal (43)

\$20,084.19

Price does not reflect applicable shipping, taxes and state environmental fee.

Same day shipment subject to order size limitations, Dell standard shipping methods and payment via credit card, gift card or Dell Business Credit. Notification will be provided if there are payment delays which could impact shipping date. Electronics and accessories may ship separately.

Smart Selection. Limited quantities. Only available for orders placed by 5:59 p.m. CT Mon.-Thurs. Systems shipped the next business day after an order is placed. Subject to order approval. Software and accessories not part of the configuration will be shipped separately and may arrive after your system. Please note that Smart Selection Configuration pricing cannot be combined with other pricing offers or discounts provided or agreed to by Dell. ** Orders with Custom Factory Integration might require additional processing time.

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¹Subject to applicable law and regulations

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Your Shopping Cart

9/1/2017



Savings \$8,777.14

Subtotal (1)

\$14,944.86

Price does not reflect applicable shipping, taxes and state environmental fee.

Dell Contract Code: 56AHC

Customer agreement number: PM20820/1000041162

Items		Quantity	Unit Price	Item total
Po	owerEdge R730 - Fully configurable	1	\$23,722.00	\$23,722.00
	timated Ship Date ips in 3 - 5 business days			



Premier discount -\$8,777.14

Catalog Number: 84 / pe_r730_1356

Category	Description	Code	SKU	ID
PowerEdge R730	PowerEdge R730 Server	R73X	[210-ACXU] [329- BCZK]	1
Trusted Platform Module (TPM)	No Trusted Platform Module	NTPM	[461-AADZ]	1574
Chassis Configuration	Chassis with up to 16, 2.5" Hard Drives, MLK	2516HX	[350-BBIL]	1530
Shipping	PowerEdge R730 Shipping	DSHIP	[340-AKKB]	1500
Processor	Intel® Xeon® E5-2680 v3 2.5GHz,30M Cache,9. 60GT/s QPI,Turbo,HT,12C/24T (120W) Max Me m 2133MHz	12025	[338-BFFJ]	1550
Additional Processor	Intel® Xeon® E5-2680 v3 2.5GHz,30M Cache,9. 60GT/s QPI,Turbo,HT,12C/24T (120W) Max Me m 2133MHz	A12025	[374-BBGQ]	1551
Processor Thermal Configuration	2 CPU Standard	2CPU	[370-ABWE] [374- BBHM] [374-BBHM]	1697
Memory DIMM Type and Speed	2400MT/s RDIMMs	2400MT	[370-ACPH]	1561
Memory Configuration Type	Performance Optimized	PEOPT	[370-AAIP]	1562

Category	Description	Code	SKU	ID
Memory Capacity	(14) 32GB RDIMM, 2400MT/s, Dual Rank, x4 Dat a Width	32GBMM	[370-ACNS]	1560
RAID Configuration	RAID 0 for H330/H730/H730P (1-16 HDDs or SS Ds)	R0H	[780-BBJT]	1540
RAID Controller	PERC H730 RAID Controller, 1GB NV Cache	H7301G	[405-AAEG]	1541
Hard Drives	1TB 7.2K RPM SATA 6Gbps 2.5in Hot-plug Hard Drive	1TA25	[400-AEFC]	1570
Network Daughter Card	Broadcom 5720 QP 1Gb Network Daughter Card	5720QP	[540-BBBW]	1518
Embedded Systems Management	iDRAC8 Express, integrated Dell Remote Access Controller, Express	I8EXP	[385-BBHN]	1520
Internal SD Module	Internal Dual SD Module with 2x 8GB SD Cards	28GSD	[330-BBCL] [385- BBCF] [385-BBJM] [385-BBJM]	1640
Internal Optical Drive	No Internal Optical Drive	NODVD	[429-AAOJ]	1600
Bezel	No Bezel	NOBEZL	[350-BBBW]	1532
Rack Rails	ReadyRails™ Sliding Rails With Cable Managem ent Arm	RRCMA	[770-BBBR]	1610
Power Management BIOS Settings	Performance BIOS Setting	HPBIOS	[384-BBBL]	1533
Power Supply	Dual, Hot-plug, Redundant Power Supply (1+1), 1100W	1100R	[450-ADWM]	1620
Power Cords	(2) NEMA 5-15P to C13 Wall Plug, 125 Volt, 15 A MP, 10 Feet (3m), Power Cord, North America	125V10	[450-AALV]	1621
System Documentation	No Systems Documentation, No OpenManage D VD Kit	NODOCS	[631-AACK]	1590
Operating System	No Operating System	NOOS	[619-ABVR]	1650
OS Media Kits	No Media Required	NOMED	[421-5736]	1652
Order Information	US No Canada Ship Charge	USNONE	[332-1286]	111

Category	Description	Code	SKU	ID
PCIe Riser	Risers with up to 3, x8 PCIe Slots + 1, x16 PCIe Slots	RSR31	[330-BBCO] [330- BBCQ] [374-BBHS]	1510
Service	3Yr Basic HW Warranty Repair, 5x10 NBD Onsite	U30S	[976-8706] [976-8778] [991-2878] [996-8029]	29
Deployment Services	No Installation	NOINSTL	[900-9997]	714
Remote Consulting Services	Declined Remote Consulting Service	NORCS	[973-2426]	735

Item total: \$14,944.86

Savings: \$8,777.14

Subtotal (1): \$14,944.86

Savings \$8,777.14

Subtotal (1) \$14,944.86

Price does not reflect applicable shipping, taxes and state environmental fee.

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Smart Selection. Limited quantities. Only available for orders placed by 5:59 p.m. CT Mon.-Thurs. Systems shipped the next business day after an order is placed. Subject to order approval. Software and accessories not part of the configuration will be shipped separately and may arrive after your system. Please note that Smart Selection Configuration pricing cannot be combined with other pricing offers or discounts provided or agreed to by Dell. ** Orders with Custom Factory Integration might require additional processing time.

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**Payment solutions provided and serviced by Dell Financial Services L.L.C. or its affiliate or designee ("DFS") for qualified customers. Offers may not be available or may vary in certain countries. Where available, offers may be changed without notice and are subject to product availability, credit approval, execution of documentation provided by and acceptable to DFS, and may be subject to minimum transaction size.

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¹Subject to applicable law and regulations.

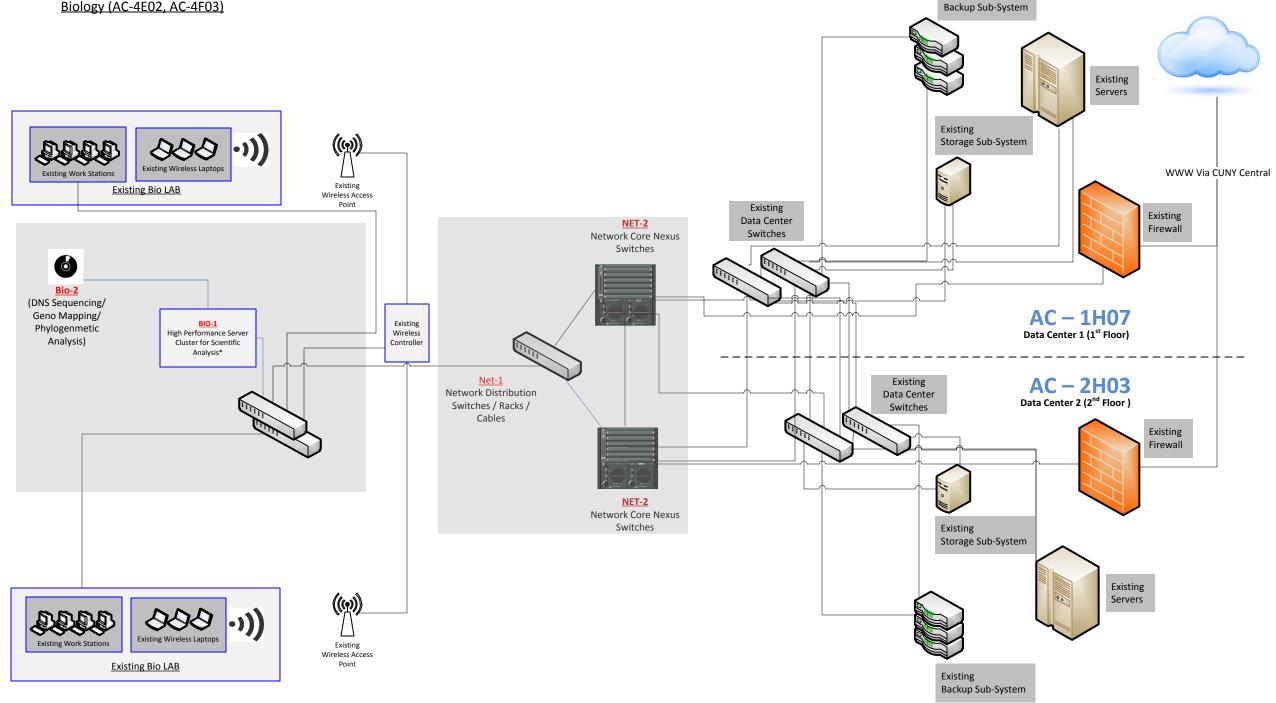
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Biology

High Level Drawing and Quotes

Proposed Architecture

Biology (AC-4E02, AC-4F03)



Existing



Peter Tighe York College ptighe@york.cuny.edu 718-262-2711 Harrison A. Angus PSSC Labs 214-507-3115 harrison@pssclabs.com

Quotation #44-061417-01 Valid Through: 06/28/2017

Terms: Net 30

FOB: Destination / Shipping Costs

are included

GSA Contract # GS-35F-0598R

POWERWULF™ BIO TITANIUM CLUSTER (PN: PS-PW F-CSTM-DH)

The PowerWulf™ Bio Titanium Cluster is a custom configured high performance computing solution designed specifically to meet the computing needs of the York College. The PowerWulf™ Bio Titanium Cluster will be delivered preconfigured with our CBeST Cluster Management Toolkit and optimized for maximum performance.

The PowerWulf™ Titanium Cluster Compute Engine contains:

- 1 Master Node and 6 Compute Nodes
 - Detailed Description of Nodes on Following Page
- 160 Total Intel® Xeon® E5-2600 v4 Cloud Series CPU Cores
 - 320 Total Cores with Hyperthreading enabled
 - o 144 Total 2.2 GHz Cores on Compute Nodes
 - o 16 Total 2.1 GHz Cores on Head Node
- 448 GB Total High Performance ECC System Memory
 - o 2.67 GB per Compute Node Processor Core
 - o 4 GB per Master Node Processor Core
- 10+ TB of RAW Storage Space
 - o 2 TB Configured as RAID 1 on Head Node (OS & Cluster Management)
 - o 2 TB for Data Storage on Head Node
 - o 1.0 TB Scratch / Data Space per Compute Node
- 1 x Edge-Core 5600-52X-D2-AC-F48 Port 10G SFP+ Switch
- Remote Management & Monitoring Network Included
- All necessary Rack and Power Infrastructure included
 - o 1 x 42U Rack Enclosure
 - o 2 x 20 AMP / 220 V / Three Phase PDU
 - o All necessary Power & Network Cables Provided by PSSC Labs
- Additional Head Node Power Redundancy Included
- CBeST Cluster Management Toolkit
 - o CentOS Linux Latest PSSC Labs Supported 64 Bit Operating System
 - o CBeST Feature Details on Following Page
- Onsite Installation including CBeST & Hardware Training Seminar
 - o Does not Include Additional Software Installation
- Three Year Complete Warranty Coverage
 - O Warranty Details on Following Pages



Image is representative only.

The ability to upgrade all system components including processor cores, memory, network backplane & available storage is built into the PowerWulfZXR1+ Cluster. The system will grow along with your computing needs.



PRICING DETAILS

Retail Price: \$113,995.00

New Customer Discount: subtract \$20,000.00

Life Sciences Discount: subtract \$20,000.00

FINAL PRICE: \$73,995.00

Price does not include applicable state, use, or sales tax



NODE CONFIGURATION DETAILS

Head Node Includes:

- o 16 x Intel Xeon E5 2620 v4 Cloud Ready Processor Cores / 2.1 GHz
 - 2 x E5-2620 v4 CPU's, 8.0GT/sec QPI
- o 64 GB of High Performance 2400 MHz ECC system memory
- o 2 x 1.0 TB SATA III 6Gbps 7200 RPM GOLD RAID Level Enterprise Hard Drives
 - Configured for RAID 1 for OS and CBeST Cluster Tools
- 2 x 1.0 TB SATA III 6Gbps 7200 RPM GOLD RAID Level Enterprise Hard Drives
 - Configured for RAID 1 for Data
- o LSI 9361-4i 6/12Gbps SAS/SATA III RAID Controller
- o 2 x 10/100/1000 BaseT Gigabit On-board Network Adapters
- o 10/100/1000 IPMI Remote Management Port
- o 1 x Dual Port 10 GigE / PCI Express x8 Adapter
- o REDUNDANT Power Supply with 80%+ Energy Efficient Enterprise Class Power Source

Each Compute Node Includes (6 Total Nodes):

- o 24 x Intel Xeon E5 2650 v4 Cloud Ready Processor Cores / 2.2 GHz
 - 2 x E5-2650 v4 CPU's, 9.6GT/sec QPI
- 64 GB of High Performance 2400 MHz ECC system memory
- o 1 x 1.0 TB SATA III 6Gbps 7200 RPM GOLD RAID Level Enterprise Hard Drives
- o 2 x 10/100/1000 BaseT Gigabit On-board Network Adapters
- o 10/100/1000 IPMI Remote Management Port
- o 1 x Dual Port 10 GigE / PCI Express x8 Adapter
- o 90%+ Energy Efficient Enterprise Class Power Source
- o Tool Free Patent Pending Rackmount Chassis



SERVICES INCLUDE

- Installation of CBeST® v. 4.0 Complete Beowulf Software Toolkit including:
 - o Setup of and installation of CentOS 7.X x 64-bit
 - Message Passing Libraries (OpenMPI standard, options available)
 - o TORQUE Scheduling System
 - o Ganglia Cluster Monitoring Utility and Custom Scripting
 - Temperature Monitoring & Auto Shutdown Script
 - o Clonezilla to facilitate imaging compute nodes
 - o PowerScripts for Remote Cluster or Node Reboot, Remote Cluster or Node Shutdown
 - Security Patches (Port Mapper, IP Chains/Tables and Latest Security Updates)
 - Scientific Libraries (LAPAK & BLAS)
 - o GNU Compilers (C & Fortran standard, options available)
- CBeST® Operation Manual (35+page) detailing installation, operation, maintenance and support
- CBeST® Support: PSSC Labs will extend the CBeST® support to 3 years. Our standard warranty includes 1 year CBeST® support. See p.4 for details.
- Hardware Warranty: PSSC Labs will upgrade the standard warranty from 1 year return to depot to 3 year onsite. See p.4 for details.
- Maintenance Kit. An extensive maintenance kit will ship with the cluster. The maintenance kit allows for immediate replacement of critical failed components.
- IPMI Remote Network Management Configuration. Allows remote access to all nodes for system management.
- Complete Recovery (CPR) Toolkit. PSSC Labs will keep a copy of your image at our facility.
- Performance Tuning. PSSC Labs Cluster Technicians have 10+ years experience optimizing system hardware for maximum performance. Performance tuning encompasses every step of the integration process including:
 - o Optimizing BIOS settings for specific hardware
 - o Installation of latest component drivers
 - o Installation of necessary firmware updates
 - o Compiling MPI with various flags for maximum performance
- Net Connect Integration Service. Prior to software installation by PSSC Labs Cluster Technicians, end user will provide the necessary network information including (cluster name, IP address, subnet, gateway, etc). Once this information is received, PSSC Labs will verify the information and properly configure the PowerWulf Cluster network. All network settings will be tested prior to shipping. End user will simply need to connect a network cable to begin communicating with the PowerWulf Cluster and run jobs.
- Site Preparation Guide. Gathers information regarding computing environment and network settings to ensure proper connectivity, power and cooling.





WARRANTY DETAILS

Hardware Support

Each system includes a THREE year return to depot hardware warranty (unless otherwise noted). The warranty services coverage is limited only to PSSC Labs manufactured systems specified on the quotation or technical specifications document. Under no circumstances will the hardware warranty be extended to peripherals or other components added by anyone other than PSSC Labs. Any negligent or malicious treatment of system hardware including but not limited to improper computing environment, unacceptable operating room temperatures, and/or inappropriate firewall as specified by PSSC Labs is considered grounds for voiding warranty service. Shipping costs to PSSC Labs are the responsibility of the end user. PSSC Labs is responsible for all return shipping cost. In order to reduce system down-time, PSSC Labs strongly recommends purchasing our System Maintenance Kit. This System Maintenance Kit includes system components most likely to fail (hard drive, power supply, items with moving parts). On-Site Hardware Support Services are available for up to three years. On-Site Hardware Support Services can be purchased on an annual or per incident basis. Contact your Sales Representative for annual and per incident pricing.

CBeST™ Support

PSSC Labs can preinstall and test the CBeST™ Cluster Management Toolkit. PSSC Labs is responsible for the integration of various software packages (commercial and open source) that constitute CBeST. PSSC Labs is not responsible for making changes to the source code, writing custom scripts or debugging any third party software application (commercial and open source). As part of CBeST installation, PSSC Labs Cluster Technicians will need to establish internal system network configuration settings. These settings (including domain name) cannot be changed without prior notice to PSSC Labs. Making internal system network changes without PSSC Labs consent is prohibited and can void the warranty. No custom configuration, customer scripts or other software changes are included. CBeST Support is included for one year. During this time, the end user may contact PSSC Labs an unlimited number of times via email and telephone. A support ticket must be opened on PSSC Labs website. Our Cluster Technicians are available to discuss the cluster network settings and installed CBeST packages. Cluster Technicians may refer to system manual or online information. If necessary, Cluster Technicians can log into system to verify proper CBeST functionality. If CBeST is not functioning properly, Cluster Technicians can ONLY return system to proper factory installed condition. If during the support process, PSSC Labs determines that the system is not functioning due to unauthorized system changes or unacceptable computing environment (as specified in the site preparation guide) the customer will be notified and sent a void of warranty notification. The end user will have 30 days to return system configuration to factory installed settings at which time PSSC Labs can reinstate the warranty. Cluster Technicians can be contracted in order to return system to factory installed conditions.

Limits of Liability

In no event will PSSC Labs be liable to the customer for lost profits or any form of indirect, special, incidental, or consequential damages of any form from any causes of action of any kind with respect to any order, whether based on breach of contract, tort (including negligence), or otherwise, and whether or not the other party has been advised of the possibility of such damage. Recourse is limited only to the value of the purchase price.

All terms and conditions listed on the PSSCLabs website (<u>www.pssdabs.com</u>) apply to this quotation.



STATEMENT OF PAST PERFORMANCE

PSSC Labs provides high performance computing solutions to the worlds most prestigious and demanding organizations including NASA, US Department of Defense, Harvard University and many more. Our hardware knowledge, software expertise and support ensure that PSSC Labs end users receive the best possible solution at a competitive price. PSSC Labs recently surpassed a milestone achievement by delivering our 2000th PowerWulf Cluster. We also recently earned the distinction of the world's leading provider of turn-key, high performance computing solutions for life science research and more specifically next generation sequencing.

PSSC Labs delivered its first PowerWulf Linux cluster in 1996 to the University of California at Irvine (UCI). Since that time PSSC Labs has delivered over 2000 PowerWulf Clusters to government, university and research organizations in 35 unique countries. This experience helps our cluster technicians develop CBeST (Complete Beowulf Software Toolkit) the most full featured, easy to use and best supported cluster management software package available today. CBeST is comprised of custom scripts and open source software tools elegantly integrated and custom configured for each unique cluster hardware configuration. CBeST allows you to easily manage, monitor, maintain and upgrade your cluster. Our cluster technicians offer unlimited lifetime support for all CBeST. For complete CBeST details please visit http://www.pssclabs.com/support_cbest.asp

Our record of delivering excellent quality products combined with responsive and knowledgeable support is the primary reasons for our success. Below is a list of organizations currently using PSSCLabs PowerWulf Clusters. Feel free to contact them as references. If you would like additional references please visit http://www.pssclabs.com/company/endorsement.asp

Universities

MIT

Organizations currently using PSSC Labs PowerWulf Clusters

Commercial/Research **Roche Diagnostics** Northrop Grumman Agencourt Biosciences Seqwright Max PlanckInstitute Beijing Institute of Genomics Beth Israel Medical Center Booz Allen Hamilton British Airways CACI Technologies Computer Sciences Corp. Concurrent Pharmaceuticals Sanger Institute Riken Institute Memorial Sloan Kettering **Advanced Technologies**

Leeds Institute of Medicine

Qingdao Institute of Bio-energy

Harvard University Northwestern UC Berkeley Stanford University Yale University Johns Hopkins Boston University New York University Northeastern University Rice University City University New York University of Liverpool University of Sao Paulo University of Ontario National Yang-Ming University Anand Agricultural University **Newcastle University**

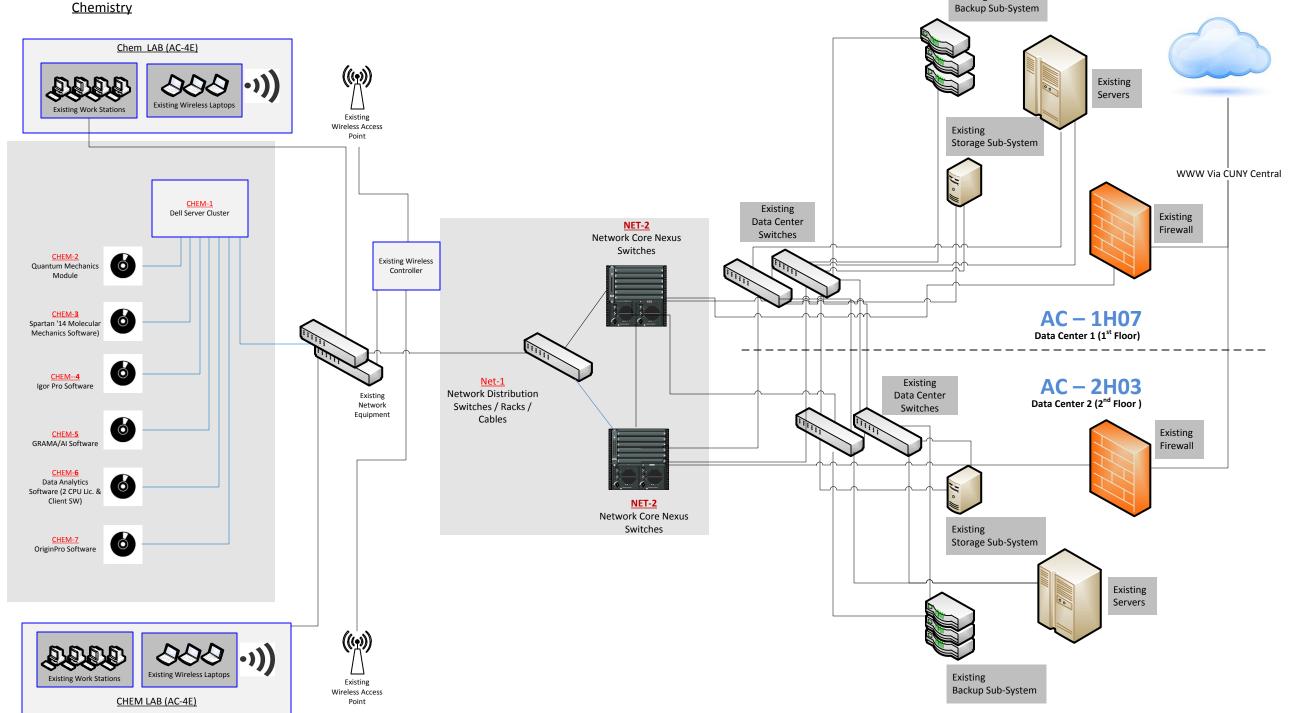
Government Agencies NASA NOAA US Army Research Labs US Army Redstone Arsenal US Naval Research Labs US Department of Agriculture US Center for Disease Control US Nuclear Regulatory Commission Lawrence Berkeley National Labs Los Alamos National Labs Argonne National Labs Idaho National Laboratory VA Healthcare System National Institute of Infectious Disease (Japan) National Institute of Oncology National Botanical Research Institute (India)

Chemistry

High Level Drawing and Quotes

Proposed Architecture

Chemistry



Existing

7/12/2017 Your Shopping Cart



Savings

Subtotal (6) \$99,896.04

Payment method

Price does not reflect applicable shipping, taxes and state environmental fee.

Unit Price

\$27,294.00

✓

You've successfully saved a new eQuote - #1025505269627

×

Item total

\$163,764.00

-\$63,867.96

\$63,867.96

Details

Items

CHEM-1-servers-R830 Quote number# 1025505269627

Created July 12, 2017 Expires October 10, 2017 Created by stephen@york.cuny.edu Billing

Order contact
Stephen Yu, York College
Dell Contract Code: 56AHC
Customer agreement number:
PM20820/1000041162
Phone: (718) 262-2739
Additional::

Delivery method no charge delivery

Shipping

Trade complianceNo, I will not be exporting

Quantity

6

stephen@york.cuny.edu

PowerEdge R830 - Fully configurable

Dell Contract Code: 56AHC **Estimated Ship Date** Ships in 8 - 10 business days

Premier discount

Catalog Number: 84 / pe_r830_1190

Category	Description	Code	SKU	ID
PowerEdge R830	PowerEdge R830 Server	PER830	[210-AIBO] [329- BDJF]	1
Service	3 Years Basic Hardware Warranty Repair: 5x 10 HW-Only, 5x10 NBD Onsite	NBD3	[810-0412] [810- 0421]	29
Shipping Information	US No Canada Ship Charge	USNONE	[332-1286]	111
Deployment Services	No Installation	NOINSTL	[900-9997]	714
Remote Consulting Services	Declined Remote Consulting Service	NORCS	[973-2426]	735
Shipping	PowerEdge R830 Shipping	DSHIP	[340-BBSB]	1500
Network Daughter Card	QLogic 57800 2x10Gb DA/SFP+ + 2x1Gb BT Network Daughter Card	5780DA	[540-BBBY]	1518
Embedded Systems Management	iDRAC8, Enterprise with vFlash 8GB SD	VI8EN	[385-BBHO] [385- BBHZ]	1520
Chassis Configuration	Chassis with up to 16, 2.5" Hard Drives	1625HD	[321-BCET]	1530
Bezel	Bezel	BEZEL	[350-BBEJ]	1532
Power Management BIOS Settings	Performance BIOS Setting	HPBIOS	[384-BBBL]	1533
Advanced System Configurations	UEFI BIOS Boot Mode with GPT Partition	UEFIB	[800-BBDM]	1534
RAID Configuration	RAID 6 for H730/H730P (4-16 HDDs or SSD s)	C5MSR6	[780-BBZK]	1540
RAID Controller	PERC H730P RAID Controller, 2GB NV Cach e	H730P	[405-AACU] [440- BBGW]	1541
Processor	2x Intel® Xeon® E5-4620 v4 2.1GHz,25M C ache,8.0 GT/s QPI,Turbo,HT,10C/20T (105 W) Max Mem 2133 MHz	54620P	[338-BJHR]	1550

Category	Description	Code	SKU	ID
Additional Processor	Upgrade to Four Intel® Xeon® E5-4620 v4 2. 1GHz,25M Cache,8.0 GT/s QPI,Turbo,HT,10 C/20T (105W)	54620A	[374-BBLY]	1551
Memory Capacity	(12) 16GB RDIMM, 2400MT/s, Dual Rank, x8 Data Width	16GBMM	[370-ACNX]	1560
Memory DIMM Type and Speed	2400MT/s RDIMMs	2400MT	[370-ACPH]	1561
Memory Configuration Type	Performance Optimized	PEOPT	[370-AAIP]	1562
Hard Drives	(6) 1TB 7.2K RPM SATA 6Gbps 2.5in Hot-plu g Hard Drive	1TBES	[400-AIUW]	1570
Trusted Platform Module	No Trusted Platform Module	NTPM	[461-AADZ]	1574
System Documentation	No Systems Documentation, No OpenMana ge DVD Kit	NODOCS	[631-AACK]	1590
Internal Optical Drive	DVD+/-RW, SATA, Internal	DVRWSA	[429-AAPS]	1600
Rack Rails	ReadyRails™ Sliding Rails With Cable Manag ement Arm	RRCMA	[770-BBBR]	1610
Power Supply	Dual, Hot-plug, Redundant Power Supply (1+1), 1100W	1100R	[450-ADWM]	1620
Power Cords	(2) NEMA 5-15P to C13 Wall Plug, 125 Volt, 15 AMP, 10 Feet (3m), Power Cord, North A merica	125V10	[450-AALV]	1621
Internal SD Module	Internal Dual SD Module with 2x 8GB SD Car ds	28GSD	[330-BBCL] [385- BBCF] [385-BBJM] [385-BBJM]	1640
Operating System	No Operating System	NOOS	[619-ABVR]	1650
OS Media Kits	No Media Required	NOMED	[421-5736]	1652
Processor Thermal Configuration	4 CPU	4HTSNK	[370-ACPJ] [374- BBNG] [412-AAHZ] [412-AAHZ]	1697

Item total: \$99,896.04

Savings: \$63,867.96

Subtotal (6): \$99,896.04

Savings \$63,867.96

Subtotal (6) \$99,896.04

Price does not reflect applicable shipping, taxes and state environmental fee.

Same day shipment subject to order size limitations, Dell standard shipping methods and payment via credit card, gift card or Dell Business Credit. Notification will be provided if there are payment delays which could impact shipping date. Electronics and accessories may ship separately.

Smart Selection. Limited quantities. Only available for orders placed by 5:59 p.m. CT Mon.—Thurs. Systems shipped the next business day after an order is placed. Subject to order approval. Software and accessories not part of the configuration will be shipped separately and may arrive after your system. Please note that Smart Selection Configuration pricing cannot be combined with other pricing offers or discounts provided or agreed to by Dell. ** Orders with Custom Factory Integration might require additional processing time.

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**Payment solutions provided and serviced by Dell Financial Services L.L.C. or its affiliate or designee ("DFS") for qualified customers. Offers may not be available or may vary in certain countries. Where available, offers may be changed without notice and are subject to product availability, credit approval, execution of documentation provided by and acceptable to DFS, and may be subject to minimum transaction size. Offers not available for personal, family or household use. Dell and the Dell logo are trademarks of Dell Inc. Restrictions and additional requirements may apply to transactions with governmental or public entities.

Subject to applicable law and regulations.



OriginLab Corporation One Roundhouse Plaza Northampton, MA 01060

Dr. Ruel Desamero Department Chair, Chemistry York College 94 - 20 Guy R. Brewer Blvd Jamaica NY 11451 Phone: (718)262-2676 Email: jvedad@york.cuny.edu Order: Q25-011F3-160113(C)

This order is valid only for direct sales made by OriginLab Corporation

Your Sales Representative:

Bob Sullivan

Email: edusales@originlab.com Phone: 413-5862013 X125 Fax 413-586-0176

Date: 06/15/2017 F.O.B. Origin Order Valid: 45 Days

Instructions:

- Please reference this order number, plan description and the total cost when placing your order.
- If you wish to pay by a Purchase Order (PO), please ask your Sales Representative if your company is on payment terms with OriginLab. If not, you will be given a Credit References form to fill out and send back before your PO can be fulfilled.
- Fax your purchase order to: 413-585-0126; to order by credit card, please call us at: 800-969-7720 press 2.

OriginPro 2017 Perpetual Network Research Lab License

Quantity	Description	List Price	Total Price (US \$)
1	24-Seat OriginPro 2017 Perpetual Network Academic License Includes First year of Maintenance*	\$27,600.00	\$27,600.00
	Volume discount (30%)		-\$8,280.00
	Manager special discount (48.5%)		-\$9,370.20
	Shipping and Handling fee (UPS Ground)		\$15.00
Total	(Not including any other applicable taxes)		\$9,964.80

*Annual Maintenance:	
Maintenance Benefits	Free Software Upgrades Free Personal Technical Support
Renewal	Discounts on OriginLab Certified Trainings and Consulting Customer will be contacted sixty (60) days prior to the maintenance expiration date.
	• Maintenance for the following year will cost 20% of the current license list price if renewed prior to the expiration date of the plan. This does not include any expiring licenses.

Billing and Shipping:	
Pricing	Any special pricing on this order is a one-time offer.
Payments in US dollars	Payment will be due prior to delivery of service and/or goods unless OriginLab Corporation has authorized payment terms of net thirty (30) days from date of invoice.
Shipments	All taxes and tariffs are additional and the responsibility of the customer.
Federal Tax ID	OriginLab Corporation has Federal Tax ID #04-3165185

Available License Types for Origin or OriginPro software:					
Node-locked License (Also known as "Fixed Seat")	Each computer running the software requires a computer-specific license which will enable the software to run on that computer. The license is obtained from the OriginLab website using a licensing "wizard" provided when you run the software (an offline option is provided). Once the license is obtained, it is saved to the computer with no further internet access required. Licenses can also be deactivated to prepare for computer replacement.				
Concurrent Network License (Also known as "Floating Seat")	The software can be installed on any number of networked computers in your organization at a single site. The number of computers that can run the software at the same time is determined at the time of license purchase and is controlled by a FLEXnet license manager that you set up on one of your workstations or servers on your network. A borrowing option is provided to run the software on mobile computers while traveling. Furthermore, you can set up the license manager to limit the software use, such as you can reserve a number of licenses for a user or group of users.				

Computer Science / Math / ISM Lab

High Level Drawing and Quotes

Proposed Architecture Existing Computer Science/Math/ISM Lab Backup Sub-System (AC-2E03) Computer CS/Math LAB (AC-2E03A) Existing Servers **Existing Work Stations** CSMATH-8 Wireless Acess Existing Storage Sub-System WWW Via CUNY Central CSMATH-1 Existing Apple Server NET-2 Existing Data Center Network Core Nexus Firewall Switches Switches CSMATH-7 CSMATH-2 Wireless Comtroller Net-1 Server Cluster Network Distribution (Computer Science) Switches / Racks / CSMATH-9 Cables Lab Network AC - 1H07 Equipment CSMATH-3 Server Cluster CSMATH-10 Data Center 1 (1st Floor) Campus (ISM) Cabinet with UPS Network AC - 2H03Existing CSMATH-4 Data Center Data Center 2 (2nd Floor) Disk Array Switches Existing Firewall CSMATH--5 **Network Switches** NET-2 Network Core Nexus CSMATH--6 Switches Existing Catalyst Switchs Storage Sub-System Existing Servers Existing **CSMATH-8** Backup Sub-System Wireless Acess ISM LAB (AC-2E03)



OGS State Contract number PM20800



Daniel Charles II Cisco Systems, Inc.

Price Estimate for planning and information purposes only and is not a binding offer from Cisco.

 Date: 25-Aug-2017
 Estimate ID:
 SX74495200CR

 Deal ID:
 NA

All prices are shown in USD

						All	prices ar	e shown in USD
Part Number	Description	Service Duration (Months)	Lead Time	Unit List Price	Qty	Unit Net Price	Disc (%)	Extended Net Price
WS-C3650-24TS-S	Cisco Catalyst 3650 24 Port Data 4x1G Uplink IP Base		14	4,300.00	3	2,924.00	32.00	8,772.00
S3650UK9-36E	CAT3650 Universal k9 image		14	0.00	3	0.00	32.00	0.00
PWR-C2-250WAC	250W AC Config 2 Power Supply		14	0.00	-	0.00	32.00	0.00
CAB-TA-NA	North America AC Type A Power Cable		14	0.00	3	0.00	32.00	0.00
STACK-T2-BLANK	Type 2 Stacking Blank		14	0.00	3	0.00	32.00	0.00
PWR-C2-BLANK	Config 2 Power Supply Blank		14	0.00	3	0.00	32.00	0.00
AIR-CT2504-5-K9	2504 Wireless Controller with 5 AP Licenses		21	1,295.00	1	880.60	32.00	880.60
LIC-CT2504-BASE	Base Software License		14	0.00	1	0.00	32.00	0.00
LIC-CT2504-5	5 AP License for 2504 WLAN Controller		14	0.00	1	0.00	32.00	0.00
AIR-CT2504-CCBL	2504 Wireless Controller Console Cable		14	0.00	1	0.00	32.00	0.00
AIR-CT2504-K9	2504 Wireless Controller with 0 AP Licenses		14	0.00	1	0.00	32.00	0.00
AIR-CT2504-SW-8.0	Cisco 2504 Wireless Controller SW Rel. 8.0		14	0.00	1	0.00	32.00	0.00
CAB-AC2	AC Power cord North America		14	0.00	1	0.00	32.00	0.00
LIC-CT25-DTLS-K9	2504 Wireless Controller DTLS License		14	0.00	1	0.00	32.00	0.00
AIR-CT2504-HA-K9	2504 Wireless Controller for High Availability		21	1,200.00	1	816.00	32.00	816.00
LIC-CT2504-BASE	Base Software License		14	0.00	1	0.00	32.00	0.00
AIR-CT2504-CCBL	2504 Wireless Controller Console Cable		14	0.00	1	0.00	32.00	0.00
AIR-CT2504-K9	2504 Wireless Controller with 0 AP Licenses		14	0.00	1	0.00	32.00	0.00
AIR-CT2504-SW-7.6	2504 Wireless Controller SW Rel. 7.6 with WLAN Express Setup		14	0.00	1	0.00	32.00	0.00
CAB-AC2	AC Power cord North America		14	0.00	1	0.00	32.00	0.00
LIC-CT25-DTLS-K9	2504 Wireless Controller DTLS License		14	0.00	1	0.00	32.00	0.00
AIR-CAP1702I-B-K9	802.11ac CAP; 3x3:2SS; Int Ant; B Reg Domain		14	695.00	5	472.60	32.00	2,363.00
AIR-AP-T-RAIL-R	Ceiling Grid Clip for Aironet APs - Recessed Mount (Default)		14	0.00	5	0.00	32.00	0.00
AIR-AP-BRACKET-1	802.11n AP Low Profile Mounting Bracket (Default)		14	0.00	5	0.00	32.00	0.00
SWAP1700-CMB-A1-K9	Cisco 1700 Series Combined Unified and Autonomous (xxxxx) SW		14	0.00		0.00	32.00	0.00
S3G5K9W7-15303JD	Cisco 1700 Series IOS WIRELESS LAN		14	0.00	5	0.00	32.00	0.00
SWAP1700-RCOVRY-K9	Cisco 1700 Series IOS WIRELESS LAN RECOVERY		14	0.00	5	0.00	32.00	0.00
ISR4331-SEC/K9	Cisco ISR 4331 Sec bundle w/SEC license		14	4,500.00	10	3,060.00	32.00	30,600.00
SL-4330-IPB-K9	IP Base License for Cisco ISR 4330 Series		14	0.00		0.00	32.00	0.00
PWR-4330-AC	AC Power Supply for Cisco ISR 4330		14	0.00	10	0.00	32.00	0.00
CAB-AC	AC Power Cord (North America), C13, NEMA 5-15P, 2.1m		14	0.00	10	0.00	32.00	0.00
SL-4330-SEC-K9	Security License for Cisco ISR 4330 Series		14	0.00	10	0.00	32.00	0.00
MEM-FLSH-4G	4G Flash Memory for Cisco ISR 4300 (Soldered on motherboard)		14	0.00	10	0.00	32.00	0.00
MEM-4300-4G	4G DRAM (2G+2G) for Cisco ISR 4330, 4350		14	0.00	10	0.00	32.00	0.00
NIM-BLANK	Blank faceplate for NIM slot on Cisco ISR 4400		14	0.00	20	0.00	32.00	0.00
SM-S-BLANK	Removable faceplate for SM slot on Cisco 2900,3900,4400 ISR		21	0.00	10	0.00	32.00	0.00
SISR4300UK9-316S	Cisco ISR 4300 Series IOS XE Universal		14	0.00		0.00	32.00	0.00
WS-C3850-48F-S	Cisco Catalyst 3850 48 Port Full PoE IP Base		14	14,000.00	2	9,520.00	32.00	19,040.00
S3850UK9-36E	CAT3850 Universal k9 image		14	0.00	2	0.00	32.00	0.00
CAB-TA-NA	North America AC Type A Power Cable		14	0.00	2	0.00	32.00	0.00
PWR-C1-BLANK	Config 1 Power Supply Blank		14	0.00	2	0.00	32.00	0.00
PWR-C1-1100WAC	1100W AC Config 1 Power Supply		14	0.00	2	0.00	32.00	0.00

Valid through:			Product To	tal	62,471.60
FOB Point: None			Service Tot	al:	0.00
			Total Price:	:	62,471.60
Notes					

14

0.00 2

0.00 32.00

0.00

Cisco Catalyst 3850 Network Module Blank

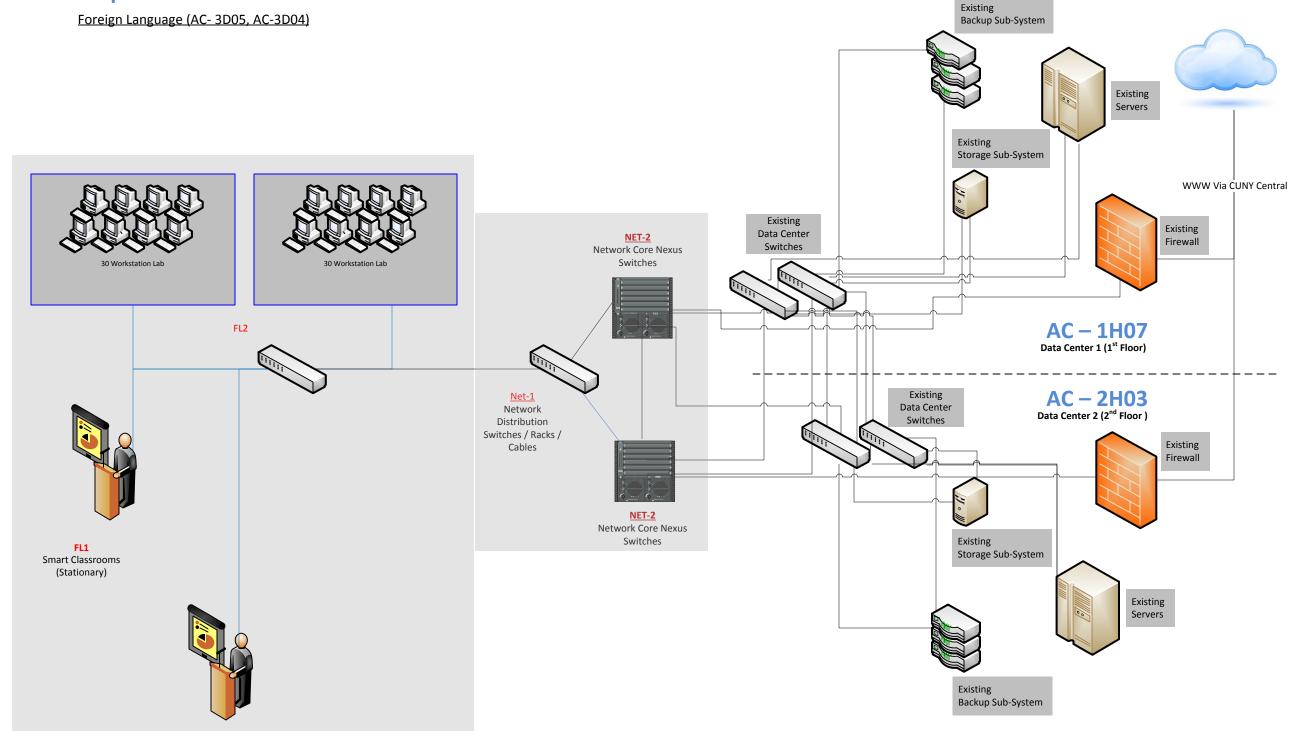
C3850-NM-BLANK

This Price Estimate does not constitute an offer by Cisco to sell products, but is instead an invitation to issue a purchase order to Cisco until the valid date specified in this Price Estimate. Such a purchase order will be subject to Cisco standard procedures, terms and conditions for the acceptance of purchase orders. This order may subject to sales tax, VAT, duty and freight charges even if not noted on this estimate.

Language

High Level Drawing and Quotes

Proposed Architecture





A quote for your consideration!

Based on your business needs, we put the following quote together to help with your purchase decision. Please review your quote details below, then contact your sales rep when you're ready to place your order.

Total:\$3,199.10

Quote number: 3000015455702.1

Quote date: Jul. 11, 2017 **Quote expiration:** Aug. 10, 2017

Company name: YORK COLLEGE-CUNY Customer number: 1498754

Phone:

(718) 262-5213

Sales rep information:

Terri Lehenbauer Terri_Lehenbauer@Dell.com (800) 456-3355 Ext: 5139266 Bill to: YORK COLLEGE-CUNY ACCOUNTS PAYABLE RM1H12 94-20 GUY R BREWER BLVD JAMAICA

NY 11433-0001

US

(718) 262-5213

Pricing Summary

Item	Qty	Unit price	Subtotal
OptiPlex 7450 AIO	2	\$1,599.55	\$3,199.10
DBC as low as \$96.00 / month^		Subtotal: \$3,19 Shipping: \$ ronmental Fees: \$	
	Ta	exable Amount: exable Amount: Estimated Tax:	\$3,199.10 \$0.00 \$0.00
		Total:	\$3,199.10

Special lease pricing may be available for qualified customers. Please contact your DFS Sales Representative for details.

Dear Customer,

Your Quote is detailed below; please review the quote for product and information accuracy. If you find errors or desire certain changes please contact me as soon as possible. Regards,

Terri Lehenbauer

Order this quote easily online through your **Premier page**, or if you do not have Premier, using Quote to Order

Shipping Group 1

Shipping Contact: Shipping phone: Shipping via: **Shipping Address:** (718) 262-2739 **ACCOUNTS PAYABLE** Standard Ground 94-20 GUY R BREWER BLVD **DEAN-STUDENT SVCES** JAMAICA NY 11451-0001 US

SKU	Description	Qty	Unit Price	Subtotal
	OptiPlex 7450 AIO	2	\$1,599.55	\$3,199.10
	Estimated Delivery Date: Jul. 21 - Jul. 25, 2017			
	Contract Code: 83AHG			
	Customer Agreement No: PM20820 AggBuy16-'17			
338-BKYX	Intel Core i7-7700 (QC/8MB/8T/3.6GHz/65W); supports Windows 10/Linux	2	-	-
619-AHKN	Win 10 Pro 64 English, French, Spanish	2	-	_
630-AAPK	No Productivity Software	2	-	-
370-ADJH	16GB (2x8GB) 2400MHz DDR4	2	-	-
400-ANPQ	256GB 2.5inch SATA Class 20 Solid State Drive	2	-	-
490-BBFG	Intel Integrated Graphics, Dell OptiPlex	2	-	-
429-AAZF	8x Slimline DVD+/-RW Drive	2	-	-
658-BBTV	Cyberlink Media Suite Essentials for Windows 10 and DVD drive (without Media)	2	-	-
620-AALW	OS-Windows Media Not Included	2	-	-
575-BBHR	Height Adjustable Stand for OptiPlex 7440/7450	2	-	-
580-ADJC	Dell KB216 Wired Multi-Media Keyboard English Black	2	-	-
275-BBBW	Dell MS116 Wired Mouse, Black	2	-	-
634-BENZ	No DDP ESS Software	2	-	-
954-3465	No DDPE Encryption Software	2	-	-

817-BBBB	No FGA	2	-	-
210-AKMX	BASE,AIO,OPTI,7450,CTO,WW	2	-	-
555-BDGO	Intel Dual Band Wireless AC 8265 (802.11ac) 2x2 +	2	-	_
	Bluetooth	_		
329-BDHW	7450 AlO 23.8, FHD Touch with Camera, Integrated	2	_	
327-001144	Graphics, Bronze PSU	2	_	_
222 4207	• •	2		
332-1286	US Order	2	-	-
340-ABJI	No Diagnostic/Recovery CD media	2	-	-
340-BJWF	MOD,PLCMT,QSG,W10,7450,DAO	2	-	-
409-BBCF	No Intel Rapid Start or Smart Connect	2	-	-
422-0008	Dell Data Protection System Tools Digital	2	-	-
	Delivery/DT			
525-BBCL	SupportAssist	2	-	_
640-BBLW	Dell(TM) Digital Delivery Cirrus Client	2	-	_
658-BBMR	Dell Client System Update (Updates latest Dell	2	_	_
030 DDMIK	Recommended BIOS, Drivers, Firmware and Apps)	_		
4E0 DDDD	Waves Maxx Audio	2		
658-BBRB			-	-
658-BCUV	Dell Developed Recovery Environment	2	-	-
555-BDIO	Intel Dual Band Wireless 8265 (802.11ac) Driver	2	-	-
450-AAOJ	System Power Cord (Philipine/TH/US)	2	-	-
329-BBJL	TPM Enabled	2	-	-
387-BBLW	E-Star 6.1 & TCO 5.0 Driver, Service Install Module	2	-	-
389-BCGW	No UPC Label	2	-	-
389-BRFZ	MOD,LBL,REG,JSD2,NON-GS,7450	2	-	-
340-AGIK	Safety/Environment and Regulatory Guide	2	-	-
	(English/French Multi-language)			
340-BJWH	MOD,SHP MTL,TAR,AIO23.8,DAO	2	-	_
389-BBUU	Shipping Label for DAO	2	_	_
401-AADF	No Additional Hard Drive	2	_	_
389-BHGE	Intel Core i7 Processor Label	2	-	-
			-	-
631-ABEU	No Out-of-Bands Systems Management	2	-	-
817-BBBN	NO RAID	2	-	-
800-BBIO	Desktop BTO Standard shipment	2	-	-
391-BDHK	Dell Touch Liquid Crystal Display, Dell OptiPlex	2	-	-
	7450AIO			
461-AABV	No Accessories	2	-	-
997-6870	Dell Limited Hardware Warranty Plus Service	2	-	-
997-6942	ProSupport Plus: Accidental Damage Service, 5	2	-	_
	Years	_		
997-6952	ProSupport Plus: Keep Your Hard Drive, 5 Years	2	_	_
997-6962	ProSupport Plus: Next Business Day Onsite 5 Years	2	_	_
997-6982	• • • • • • • • • • • • • • • • • • • •	2	-	-
771 -U70L	ProSupport Plus: 7x24 Technical Support, 5 Years	۷	-	-

Subtotal: \$3,199.10 Shipping: \$0.00 Environmental Fees: \$0.00 Estimated Tax: \$0.00

Total: \$3,199.10

Important Notes

Terms of Sale

This quote is valid for 30 days unless otherwise stated. Unless you have a separate written agreement that specifically applies to this order, your order will be subject to and governed by the following agreements, each of which are incorporated herein by reference and available in hard copy from Dell at your request:

If this purchase is for your internal use only: Dell's Commercial Terms of Sale (www.dell.com/CTS), which incorporate Dell's U.S Return Policy(www.dell.com/returnpolicy) and Warranty (www.dell.com/warrantyterms).

If this purchase is intended for resale: Dell's Reseller Terms of Sale (www.dell.com/resellerterms).

If this purchase includes services: in addition to the foregoing applicable terms, Dell's service contracts and related service terms (www.dell.com/servicecontracts/global).

If this purchase includes software: in addition to the foregoing applicable terms, your use of the software is subject to the license terms accompanying the software, and in the absence of such terms, then use of the Dell-branded application software is subject to the Dell End User License Agreement - A Version. (www.dell.com/AEULA) and use of the Dell-branded system software is subject to the Dell End User License Agreement - S Version (www.dell.com/SEULA) (the "End User License Agreements").

You acknowledge having read and agree to be bound by the foregoing applicable terms in their entirety. Any terms and conditions set forth in your purchase order or any other correspondence that are in addition to, inconsistent or in conflict with, the foregoing applicable online terms will be of no force or effect unless specifically agreed to in a writing signed by Dell that expressly references such terms.

Pricing, Taxes, and Additional Information

All product, pricing, and other information is valid for U.S. customers and U.S. addresses only, and is based on the latest information available and may be subject to change. Dell reserves the right to cancel quotes and orders arising from pricing or other errors. Please indicate any tax-exempt status on your PO, and fax your exemption certificate, including your Customer Number, to the Dell Tax Department at 800-433-9023. Please ensure that your tax-exemption certificate reflects the correct Dell entity name: **Dell Marketing L.P.** Note: All tax quoted above is an estimate; final taxes will be listed on the invoice. If you have any questions regarding tax please send an e-mail to Tax Department@dell.com.

For certain products shipped to end-users in California, a <u>State Environmental Fee</u> will be applied to your invoice. Dell encourages customers to dispose of electronic equipment properly.

Dell Business Credit (DBC):

OFFER VARIES BY CREDITWORTHINESS AS DETERMINED BY LENDER. Offered by WebBank to Small and Medium Business customers with approved credit. Taxes, shipping and other charges are extra and vary. Minimum monthly payments are the greater of \$15 or 3% of account balance. Dell Business Credit is not offered to government or public entities, or business entities located and organized outside of the United States.

Dell Financial Services Lease:

- 1. This proposal is property of Dell Financial Services and contains confidential information. This proposal shall not be duplicated or disclosed in whole or part. Minimum transaction size \$500.
- 2. All terms are subject to credit approval, execution and return of mutually acceptable lease documentation.
- 3. Lease rates are based upon the final amount, configuration and specification of the supplied equipment. Interim rent may apply and be due in the first payment cycle.
- 4. The Lease Quote is exclusive of shipping costs, maintenance fees, filing fees, licensing fees, property or use taxes, insurance premiums and similar items, which shall be for Lessee's account.
- 5. This proposal is valid through the expiration date shown above, or, if none is specified, for 30 calendar days from date of presentation.

Important Notes

Terms of Sale

Unless you have a separate written agreement that specifically applies to this order, your order will be subject to and governed by the following agreements, each of which are incorporated herein by reference and available in hardcopy from Dell at your request: Dell's Terms of Sale (www.dell.com/learn/us/en/uscorp1/terms-of-sale), which include a binding consumer arbitration provision and incorporate Dell's U.S. Return Policy (www.dell.com/returnpolicy) and Warranty (for Consumer warranties; for Commercial warranties).

If this purchase includes services: in addition to the foregoing applicable terms, the terms of your service contract will apply (Consumer; Commercial). If this purchase includes software: in addition to the foregoing applicable terms, your use of the software is subject to the license terms accompanying the software, and in the absence of such terms, then use of the Dell-branded application software is subject to the Dell End User License Agreement - Type A (www.dell.com/AEULA) and use of the Dell-branded system software is subject to the Dell End User License Agreement - Type S (www.dell.com/SEULA).

You acknowledge having read and agree to be bound by the foregoing applicable terms in their entirety. Any terms and conditions set forth in your purchase order or any other correspondence that are in addition to, inconsistent or in conflict with, the foregoing applicable online terms will be of no force or effect unless specifically agreed to in a writing signed by Dell that expressly references such terms.

Pricing, Taxes, and Additional Information

All product, pricing, and other information is valid for U.S. customers and U.S. addresses only, and is based on the latest information available and may be subject to change. Dell reserves the right to cancel quotes and orders arising from pricing or other errors. Please indicate any tax-exempt status on your PO, and fax your exemption certificate, including your Customer Number, to the Dell Tax Department at 800-433-9023. Please ensure that your tax-exemption certificate reflects the correct Dell entity name: **Dell Marketing L.P.**Note: All tax quoted above is an estimate; final taxes will be listed on the invoice.

If you have any questions regarding tax please send an e-mail to Tax Department@dell.com.

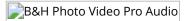
For certain products shipped to end-users in California, a State Environmental Fee will be applied to your invoice. Dell encourages customers to dispose of electronic equipment properly.

^Dell Business Credit (DBC):

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- 5. This proposal is valid through the expiration date shown above, or, if none is specified, for 30 calendar days from date of presentation.



The Professional's Source

800.606.6969/212.444.6615



Item Total: \$505.36

MY CART #6266654058

■ Select All Remove Move to List **Quantity Price**

Speco Technologies NEXUS UL
Contractor Series 6.5" 70V
Commercial Metal Back Can
Speaker

B&H #SPSP6NXCTUL • MFR #SP6NXCTUL
Update
Shipping Charges Apply

Square Trade Protection plan:
2 Years Protection plan \$10.49
3 Years Protection plan \$14.99

Compare all options

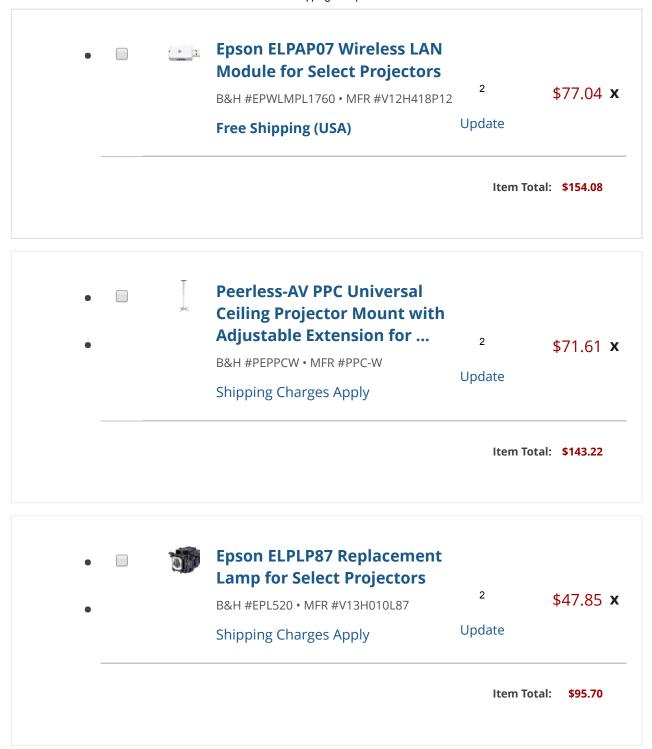
Microsoft LifeCam Studio

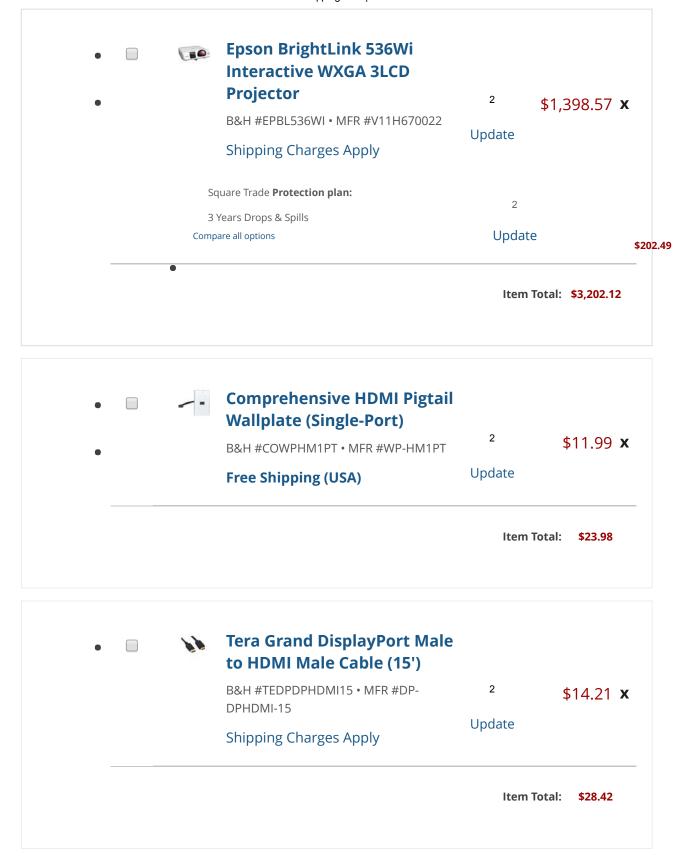
B&H #MILCSPL2 • MFR #Q2F-00013 2 \$68.86 X

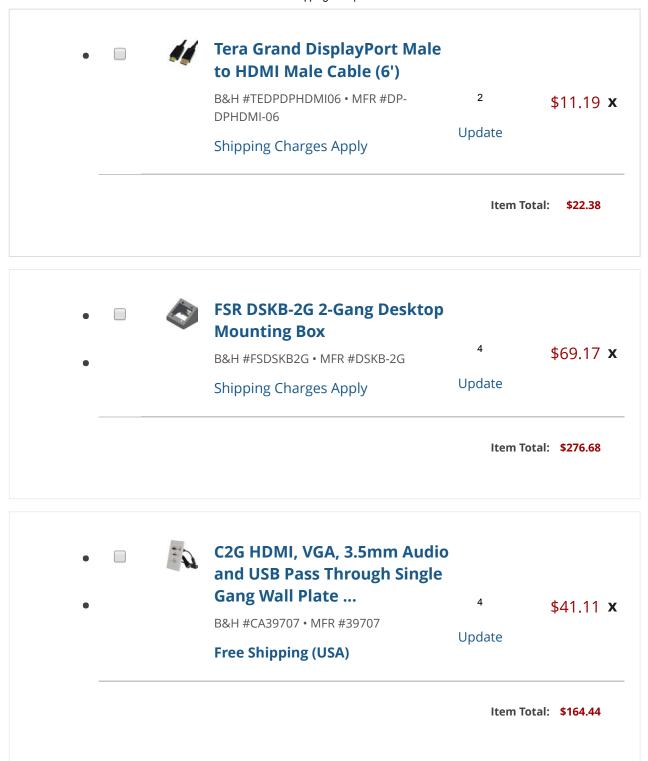
Shipping Discount Update

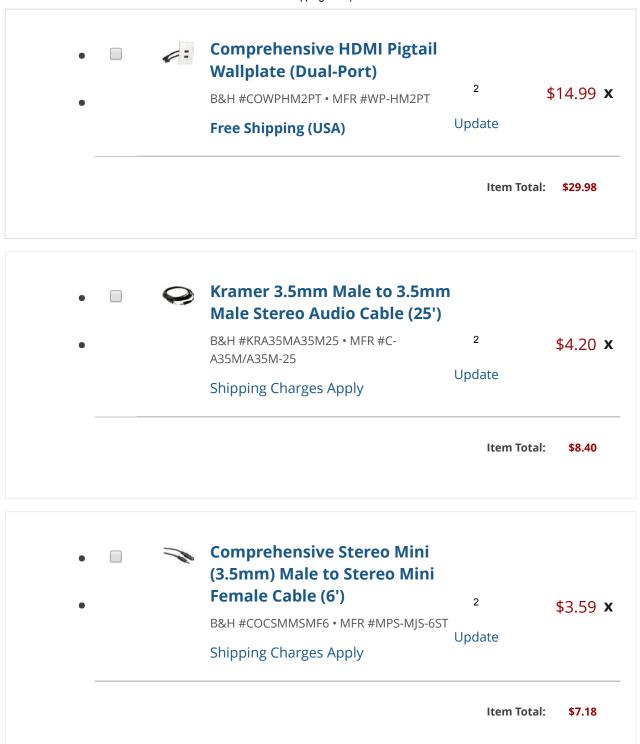
Square Trade Protection plan:
2 Years Protection plan \$5.24
3 Years Protection plan \$7.49

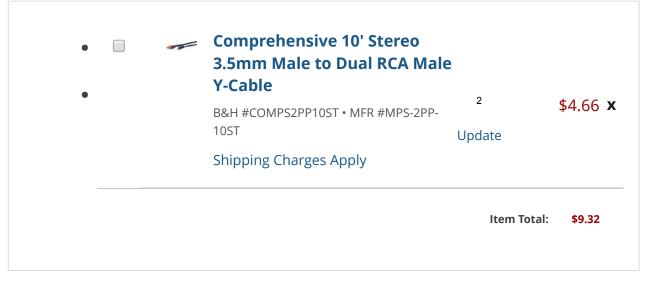
Compare all options



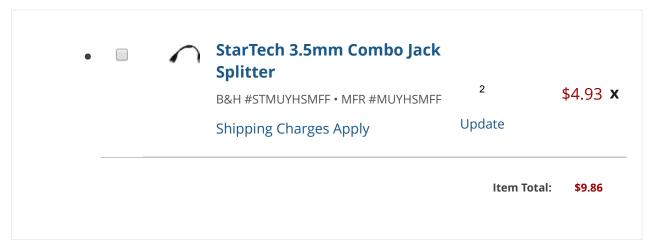


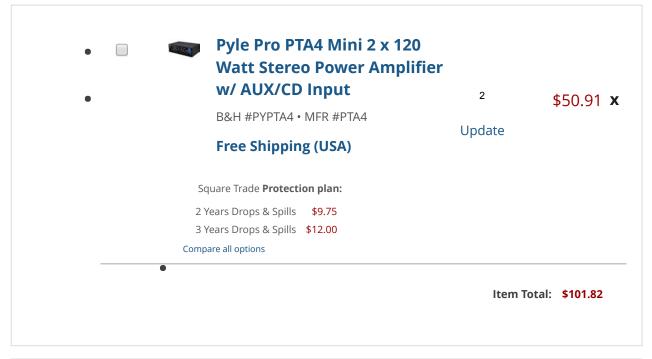










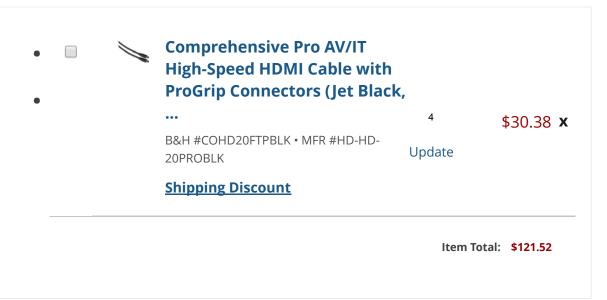


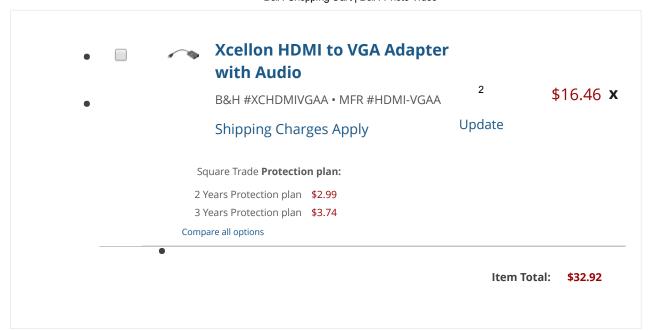
NTW 26AWG High Speed HDMI
Cable With Ethernet (50')

B&H #NTHSHDMI2650 • MFR #NHDMI4050/26CL2

Free Shipping (USA)

Item Total: \$113.28





Shipping

Store Pickup

NYC SuperStore

SubTotal: \$5,657.10

Shipping: Choose Above

You Saved: \$665.14

3

Sales: 800.606.6969 or 212.444.6615

Customer Service: 800-221-5743 or 212-239-7765 Please note that B&H does not process web orders from Friday evening to Saturday evening.

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Geology / Environmental Health

High Level Drawing and Quotes

Proposed Architecture

Existing Geology / Enviromental Health (AC2F03) Backup Sub-System Existing Servers Existing Storage Sub-System Existing Existing LAB (AC-2F03) Wireless Access WWW Via CUNY Central NET-2 Existing Existing Network Core Nexus Data Center Firewall Switches Switches GEOENV-1 Niton® XL3t ULTRA Net-1 Network Distribution Existing Wireless Controller Switches / Racks / AC - 1H07 Cables Data Center 1 (1st Floor) Existing AC - 2H03Data Center Data Center 2 (2nd Floor) Switches **GEOENV-2** Existing High Performance Firewall Workstation NET-2 GEOENV-1 NDT© software suite for easy data Network Core Nexus downloading and viewing, remote control Existing Switches and grade library modification. Storage Sub-System Existing Servers **Existing Work Stations** Existing Existing Wireless Access LAB (AC-2F06) Point Existing Backup Sub-System

-\$734.87

Savings
Subtotal (2)

1



Price does not reflect applicable shipping, taxes and state environmental fee.

Payment method

DELL) eQuote

Details

Items

geoen-2-workstation Quote number# 1026960033326

Created July 10, 2017 Expires October 8, 2017 Created by stephen@york.cuny.edu Billing

Order contact
Stephen Yu, York College
Dell Contract Code: 56AHC
Customer agreement number:
PM20820/1000041162
Phone: (718) 262-2739
Additional::

Shipping

Delivery method no charge delivery

Trade compliance

No, I will not be exporting

Quantity Unit Price Item total

Bundle: OptiPlex 7040 Mini Tower - Great value and in-stock for fast shipping



OptiPlex 7040 Mini Tower - Great value and instock for fast shipping

stephen@york.cuny.edu

Dell Contract Code: 56AHC

Dell Smart Selection

July 10, 2017

\$1,884.28 \$1,884.28

Premier discount

Catalog Number: 84 / s024o7040mtusr

Category Description Code SKU ID OptiPlex 7040 MT OptiPlex 7040 Mini Tower BTX 7040TB [210-AFGH] Memory 16GB (2x8G) 2133MHz DDR4 Memory 16G2D4 [370-ACKD] 3 Keyboard Dell KB216 Wired Keyboard English Black US216B [580-ADJC] 4 Video Card AMD Radeon™ R7 350X (4GB DP/DVI-I) R7350F [490-BCQS] 6 [555-BBFO] Driver No Wireless Selected **NOWRLS** [400-AIRY] [412-Hard Drive M.2 256GB PCIe NVMe Class 40 Solid State 256SDM 8 AAGV] [773-BBBC] Media Card Reader No Media Card Reader Selected **NMCR** [385-BBCR] 10 Windows 10 Pro, 64bit English, French, Span Operating System 10P64M [619-AHKN] 11 ish Dell MS116 Wired Mouse Black [275-BBBW] MS116B 12 Mouse Network Card No Bcom required NOBCOM [555-BBKH] 13 Removable Media Storage 8x DVD+/-RW 9.5mm Optical Disk Drive 8XDVRW [325-BBRL] [429-16 Device AAJV] Wireless No Wireless **NOWRLS** [555-BBFO] 19 Power Cord System Power Cord (English) US125V [450-AAOJ] 20 Documentation/Disks Safety/Environment and Regulatory Guide **EFDOC** [340-AGIK] 21 (English/French Multi-language) [997-6870] [997-**Hardware Support Services** 3 Year Hardware Service with Onsite/In-Ho NBD3 29 me Service After Remote Diagnosis 6872] Systems Management Intel vPro Technology Enabled **VPRO** [631-AASO] 49 NORDVD [340-ABJI] Diagnostic CD / Diskette No Diagnostic/Recovery CD media 50 Placemat Quick Reference Guide, Win 10 PLMTW10 [340-ASOH] 60 Canada Ship Options US No Canada Ship Charge USNONE [332-1286] 111

Category	Description	Code	SKU	ID
Chassis Options	OptiPlex 7040 MT with 240W up to 85% efficient Power Supply (80Plus Bronze)	MTBRNZ	[329-BCSE]	116
E-Star	ENERGY STAR Version 6.0	ESTAR6	[387-BBEZ]	122
Processor	Intel® Core™ i7-6700 Processor (Quad Core, 8MB, 8T, 3.4GHz, 65W)	176700	[338-BHUH] [412- AAGU]	146
Dell Data Security Encryption	DDPE Personal Edition License + ProSuppor t for Software 1 Year	PDPE1Y	[421-9984] [954- 3455]	156
UPC Label	Print on Demand Label	POD	[389-BDQH]	292
TPM Security	Trusted Platform Module (TPM Enabled)	TPM	[329-BBJL]	297
Packaging	Shipping Material for System, Minitower	SHPDAO	[340-ARRJ] [389- BBUU]	465
Stands and Mounts	No Integrated Stand option	NOSTND	[575-BBBI]	558
FGA Module	7040MT_1H17_026/US/BTS	FG0024	[998-BZGD]	572
Cables and Dongles	No Adapter	NOADPTR	[470-AAJL]	592
Dell Threat Protection and Endpoint Security Suite	No Dell Data Protection Endpoint Security Suite Software	NODDP	[634-BENZ]	593
Optical Software	Cyberlink Media Suite Essentials without M edia for Win10/8.1	W8DVDSW	[658-BBTV]	597
Additional Hard Drive	No Additional Hard Drive	NADDHD	[401-AANH]	637
Label	Reg Label, MT, MEX,EPA	EPAMEX	[389-BHMP]	676
CompuTrace Offerings + Stoptrack Label	No Computrace	NCTRACE	[461-AABF]	697
Serial Port/PS2 Adapter	No Accessories	NOACC	[461-AABV]	698
Hard Drive Software	NO INTEL RESPONSIVE	NOINTR	[551-BBBJ]	707
Processor Branding	Intel Core I7 vPro Label	VICI7	[389-BHJV]	749
Microsoft Application Software	Microsoft Office 30 Day Trial	16MUI	[658-BCSB]	1002
Non-Microsoft Application Software	Windows 10	WIN10	[340-AJFC] [422- 0008] [525-BBCL] [640-BBLW] [658- BBMQ] [658-BBMR] [658-BBNH] [658- BCUV]	1003
RAID Connectivity	NO RAID	NORAID	[817-BBBN]	1009
Operating System Media	OS-Windows Media Not Included	NOMEDIA	[620-AALW]	200013
Transportation from ODM to region	BTS/BTP Shipment	BTS	[800-BBIP]	200080
External Speakers	No External Speaker	NOESPK	[817-BBBC]	200095

Grouped with your OptiPlex 7040 Mini Tower - Great value and in-stock for fast shipping



Dell UltraSharp 27 InfinityEdge Monitor - U2717D

Dell Contract Code: 56AHC

Premier discount -\$158.40

1

\$719.99

Catalog Number: 84 / u2717dcc

Category Description Code SKU ID

\$719.99

Dell UltraSharp 27 InifinityEdge Monitor - U2 U2717D [210-AHGV]

717D

Hardware Support Services 3 Year Premium Panel Limited Warranty-Adv AE3 [808-1298] [808- 29

anced Exchange 1299]

Bundle Total: \$1,711.00

Savings: \$893.27

Subtotal (2): \$1,711.00

Savings \$893.27

Subtotal (2) \$1,711.00

Price does not reflect applicable shipping, taxes and state environmental fee.

Same day shipment subject to order size limitations, Dell standard shipping methods and payment via credit card, gift card or Dell Business Credit. Notification will be provided if there are payment delays which could impact shipping date. Electronics and accessories may ship separately.

Smart Selection. Limited quantities. Only available for orders placed by 5:59 p.m. CT Mon.—Thurs. Systems shipped the next business day after an order is placed. Subject to order approval. Software and accessories not part of the configuration will be shipped separately and may arrive after your system. Please note that Smart Selection Configuration pricing cannot be combined with other pricing offers or discounts provided or agreed to by Dell. ** Orders with Custom Factory Integration might require additional processing time.

^Dell Business Credit: Offered to business customers by WebBank who determines qualifications for and terms of credit. Taxes, shipping and other charges are extra and vary. Minimum monthly payments are the greater of \$15 or 3% of the new balance shown on the monthly billing statement. Dell and the Dell logo are trademarks of Dell Inc.

**Payment solutions provided and serviced by Dell Financial Services L.L.C. or its affiliate or designee ("DFS") for qualified customers. Offers may not be available or may vary in certain countries. Where available, offers may be changed without notice and are subject to product availability, credit approval, execution of documentation provided by and acceptable to DFS, and may be subject to minimum transaction size. Offers not available for personal, family or household use. Dell and the Dell logo are trademarks of Dell Inc. Restrictions and additional requirements may apply to transactions with governmental or public entities.

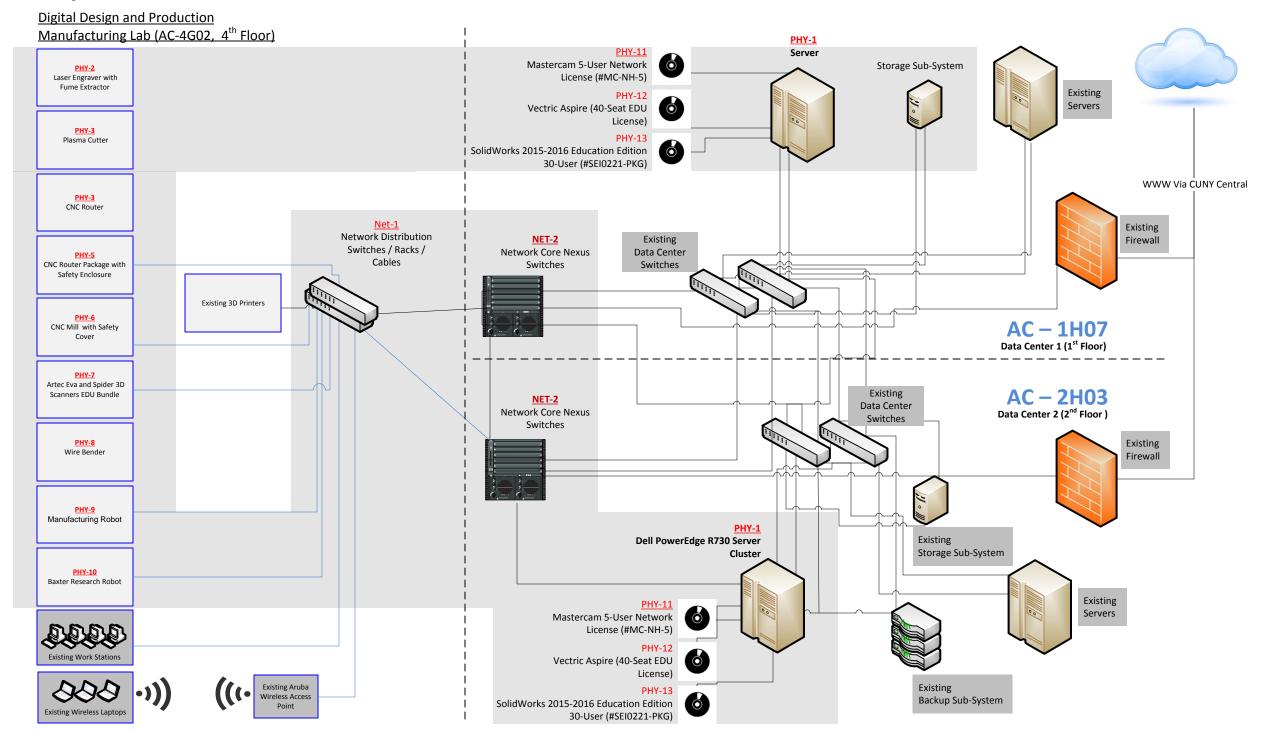
¹Subject to applicable law and regulations

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Digital Design and Production Manufacturing Lab

High Level Drawing and Quotes

Proposed Architecture





YORK COLLEGE CUNY EPILOG FUSIONM2-32 50-WATT LASER ENGRAVER

320 East 3rd Avenue • Tarentum, PA 15084 • Phone (800) 232-7600 • Fax (724) 230-2406 • www.alleghenyedusys.com

Educational Systems, Inc.				
Part No	Description	Qty	Unit	Total
Epilog FusionM2-32 50	0-Watt Laser Engraver (NYS Contract #PC65608):			
#FUSIONM2-32-50	Epilog Fusion M2 32" x 20" 50-Watt Laser Engraver Includes servo motors, auto focus, air assist, red dot pointer, lens, Radiance high definition optics, integrated floor stand, Ethernet and USB interface, 2-year onsite parts and labor warranty.	1	\$26,959.21	\$26,959.21
	Fusion32 Vector Grid	2	634.38	1,268.76
	Fusion Rotary Attachment	1	1,677.13	1,677.13
	Air Assist Pump Used in place of a compressed air source.	1	342.41	342.41
Fume Extractor and M	Iachine Setup/Training:			
#L0761-0003	BOFA Advantage 1000 IQ Fume Extractor	1	6,107.00	6,107.00

Totals:

#SBHK-2524

Epilog FusionM2-32 50-Watt Laser Engraver (NYS Contract #PC65608)	\$30,247.51
Fume Extractor and Machine Setup/Training	\$6,859.00
GRAND TOTAL	\$37,106.51

Can be vented into the room when using approved

Standard Double Hose Connection Kit to 4" Port

materials. Includes one set of filters.

Freight for BOFA Unit

Ref. #C17-1144A2 - 06/29/2017

Customer to provide the following:

- 1. An Ethernet network connection (with static IP address) or a Windows based PC with 4GB RAM, a free USB port and graphics software (i.e. CorelDraw, Adobe Illustrator, etc.). If the laser is networked then separate Windows based PC/s with 4GB RAM and graphics software are required. Note: to use the new ECC software you must have a PC connected to the system via USB.
- 2. The 50-Watt laser engraver requires <u>115vac power on a dedicated 20amp circuit</u>. The air assist pump requires 115vac 5amp power. The BOFA unit requires 115vac 19.5amp power on a separate circuit.
- 4. This is a large machine. Double-door access to building/rooms may be required. Overall dimensions: 52.5"w x 35"d x 40.75"h. Machine weight: 500 lbs.

Consumable Items - Replacement Filters for BOFA AD 1000 IQ (less freight):

#A1030222	Replacement Deep Pleat Pre-Filter for L0661A	1	\$455.00	\$455.00
#A1030297	Replacement Combined Filter for L0661A	1	891.00	891.00

252.00

500.00

1

252.00

500.00

^{*} Proposal total is F.O.B. destination.

^{**} Proposal is valid for 60 days.



YORK COLLEGE CUNY FANUC 200iD/4S R-30iB TRAINING CERT PACKAGE (FENCELESS)

320 East 3rd Avenue ● Tarentum, PA 15084 ● Phone (800) 232-7600 ● Fax (724) 230-2406 ● www.alleghenyedusys.com

Part No	Description	Qty	Unit	Total
200iD/4S R-30iB Educati	on Training CERT Package (Fenceless):			
#LRMATE-A/B-FL	LR Mate 200iD/4S Robot with R-30iB Mate Controller	1	\$39,900.00	\$39,900.00
	and MH3 Fenceless Education Training Cart to include: (1) LR Mate 200iD/4S Robot with R-30iB Mate Controller to include: - 6 Axis Mechanical Robot - R-30iB Mate Controller - LR Handling Tool Software – CERT Configuration with DCS, Collision Guard and 4D Graphics - MH iPendant with Touch Screen – R-30iB Mate			

(1) MH3 Fenceless Education Training Cart to include:

#LRMATE-C	- DCS/AB SafeZone Scanner - Collaborative Open CERT Cart - 180+ Degree Work Envelope - Enhanced Gripper with Embedded Laser Pointer - Allen Bradley - SafeZone Safety Laser Scanner - Allen Bradley - Auditable Safety Stack Light - 4.6 Gal. Ultra Quiet Air Compressor Instructor MH CERT Program/Software Package and Student MH Software Package (Single Instructor) to include: Instructor MH CERT Program and Software Package to include: - Free Annual Instructor Software Subscription Renewal (when instructor certification is completed – instructor is given 1-year to complete the program) - MH Certification and MH CERT Training Program - ROBOGUIDE Simulation Software - MH eLearn Web Courses Student MH Software Package to include: - 12-Month Subscription Per Student (Renewals available for purchase to schools with a certified instructor) - Qty. (25) ROBOGUIDE Simulation Software - Oty. (25) MH eLearn Web Curriculum	1	(No Charge with First CERT Cart Purchase)	(No Charge with First CERT Cart Purchase)
	Instructor Manual Bundle to include: - (1) FANUC Robot Operations - (1) FANUC HandlingPro (Roboguide Simulation) - (1) FANUC HandlingTool Operations & Programming	1	(No Charge with First CERT Cart Purchase)	(No Charge with First CERT Cart Purchase)
	iRVision 2D Guidance Hardware (Carried) and Software Requires iRVision Instructor CERT Program and EOAT Adaptor.	1	4,000.00	4,000.00
	Fenceless Multi-FOAT Adaptor Kit	1 1	800.00	800.00



YORK COLLEGE CUNY FANUC 200iD/4S R-30iB TRAINING CERT PACKAGE (FENCELESS)

320 East 3rd Avenue • Tarentum, PA 15084 • Phone (800) 232-7600 • Fax (724) 230-2406 • www.alleghenyedusys.com

Part No	Description	Qty	Unit	Total
Tatt No	Project Based Learning – Battery Package with Basic iRVision 2D and Error Proofing to include: - Gripper Fingers for LR Mate (standard M1 gripper will work) - Machined "AA" Battery Magazine - (8) AA Batteries	1	\$4,100.00	\$4,100.00
	 Machined Loading Trays with iRVision target for teaching vertical, horizontal, and diagonal load / unload programming (1) FANUC iRVision 2D Manual Includes a demo program when purchased with a CERT cart Requires iRVision 2D Guidance Hardware/Software and iRVision Instructor CERT Program. 			

	GRAND TOTAL	\$52,980.00	l
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^{*} Proposal total is F.O.B. destination.

Ref. #C17-1153A2 - 06/29/2017

Customer is to provide a 120vac 20amp grounded outlet for the robot cart and computers.

^{**} Proposal is valid for 60 days.



YORK COLLEGE CUNY SOLIDWORKS SOFTWARE

320 East 3rd Avenue ● Tarentum, PA 15084 ● Phone (800) 232-7600 ● Fax (724) 230-2406 ● www.alleghenyedusys.com

Description	Qty	Unit	Total
SolidWorks 2017-2018 Education Edition, 60-User Network License Includes a 1-year SolidWorks Subscription Service. Subscription service includes access to the customer portal and 60-Student Engineering Kit licenses.	1	\$3,600.00	\$3,600.00
	SolidWorks 2017-2018 Education Edition, 60-User Network License Includes a 1-year SolidWorks Subscription Service. Subscription service includes access to the customer	SolidWorks 2017-2018 Education Edition, 60-User 1 Network License Includes a 1-year SolidWorks Subscription Service. Subscription service includes access to the customer	SolidWorks 2017-2018 Education Edition, 60-User 1 \$3,600.00 Network License Includes a 1-year SolidWorks Subscription Service. Subscription service includes access to the customer

^{*} Proposal total is F.O.B. destination.

Ref. #C17-1154A - 06/21/2017

Please visit http://www.solidworks.com/sw/support/SystemRequirements.html to view the latest system requirements.

^{**} Proposal is valid for 60 days.

^{***} Installation and training not included.



YORK COLLEGE CUNY MASTERCAM SOFTWARE

320 East 3rd Avenue ● Tarentum, PA 15084 ● Phone (800) 232-7600 ● Fax (724) 230-2406 ● www.alleghenyedusys.com

Part No	Description	Qty	Unit	Total
Mastercam Software:				
#MC-NH-5-MA	Mastercam 2018 Software NetHASP with 5-User Licenses Includes a 5-license network-based USB NetHASP with Mastercam 2018 Mill Level 3, RouterPro, Lathe, Wire, Solids, Multi-Axis, Mastercam for SolidWorks Plug-In and 1-Year of Mastercam Software Maintenance.	1	\$5,780.00	\$5,780.00
#MC-IGC	Mastercam 2018 Instructor Grant Copy	1	250.00	250.00
·	Shipping	1	15.00	15.00

^{*} Proposal total is F.O.B. destination.

Ref. #C17-1155A - 06/21/2017

Please visit http://www.mastercam.com/en-us/Support/System-Requirements to view the latest system requirements.

GRAND TOTAL....

\$6,045.00

^{**} Proposal is valid for 60 days.

^{***} Installation and training not included.



YORK COLLEGE CUNY VECTRIC ASPIRE SOFTWARE

320 East 3rd Avenue • Tarentum, PA 15084 • Phone (800) 232-7600 • Fax (724) 230-2406 • www.alleghenyedusys.com

Part No Des	escription	Qty	Unit	Total
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Vectric Aspire Software:

Aspire Software License (Up to a 40-Seat EDU Lab License if software is registered to a specific school)	1	\$1,995.00	\$1,995.00
Shipping	1	15.00	15.00

|--|

^{*} Proposal total is F.O.B. destination.

Ref. #C17-1156A - 06/21/2017

Please visit http://support.vectric.com/aspire-questions/item/minimum-computer-requirements-to-run-software to view the latest system requirements.

Educational Classroom License Terms:

Educational classroom licenses purchased after May 1st 2012 can be installed on up to 40 computers in one single classroom. The software can also be installed on one teacher's laptop, which may be used outside of the classroom.

The software must not be installed on student's individual or personal laptops.

The license must be registered to an individual school rather than a school district. If you wish an educational classroom license, please let Vectric know the name of the school where the router is installed. An educational classroom license is non-transferable. The software must be registered using an email address belonging to the school or university.

^{**} Proposal is valid for 60 days.

^{***} Installation and training not included.



YORK COLLEGE CUNY IMPLEMENTATION SERVICES

320 East 3rd Avenue ● Tarentum, PA 15084 ● Phone (800) 232-7600 ● Fax (724) 230-2406 ● www.alleghenyedusys.com

Part No Description		Qty	Unit	Total
Implementation Services:				
- Epilog Fusion - Roland GS-2 (2) Epilog Fu - Techno HD-I - Techno HD-I - Techno HD-I - Roland MDX - Artec EVA & - DIWire+ Wir	Services for the following items nM2-32 50-Watt Laser Engraver 4 Vinyl Cutter sionM2-40 Laser Engravers I 48x96 CNC Plasma Cutter 8x96 CNC Router I Mini CNC Router I-540A CNC Mill 2 Space Spider Scanners re Bender ate 200iD/4S CERT Cart	1	\$4,000.00	\$4,000.00
- SolidWorks S - Mastercam Se - Vectric Aspir	oftware	·.		
TOTAL				\$4,000.00

^{*} Proposal is valid for 60 days.

Ref. #C17-1157A2 - 06/29/2017



YORK COLLEGE CUNY MAKER SPACE QUOTES SUMMARY

320 East 3rd Avenue ● Tarentum, PA 15084 ● Phone (800) 232-7600 ● Fax (724) 230-2406 ● www.alleghenyedusys.com

Charles and Charle				
Part No	Description	Qty	Unit	Total
MIC	0. 4. 5			
Maker Spac	e Quotes Summary:			
	Epilog FusionM2-32 50-Watt Laser Engraver (C17-1144A2)	1	\$37,106.51	\$37,106.51
	Roland GS-24 Vinyl Cutter (C17-1145A2)	1	2,615.00	2,615.00
	Epilog FusionM2-40 Laser Engravers (C17-1146A2)	2	50,659.05	101,318.10
	Techno HD-II 48x96 CNC Plasma Cutter (C17-1147A2)	1	35,193.00	35,193.00
	Techno HD 48x96 CNC Router (C17-1148A2)	1	38,745.00	38,745.00
	Techno HD-II Mini CNC Router (C17-1149A2)	1	15,877.00	15,877.00
	Roland MDX-540A CNC Mill (C17-1150A)	1	34,438.90	34,438.90
	Artec EVA and Space Spider 3D Scanners (C17-1151A)	1	28,283.00	28,283.00
	DIWire+ Wire Bender (C17-1152A2)	1	5,455.00	5,455.00
	Fanuc LR Mate 200iD/4S CERT Cart (C17-1153A2)	1	52,980.00	52,980.00
	SolidWorks Software (C17-1154A)	1	3,600.00	3,600.00
	Mastercam Software (C17-1155A)	1	6,045.00	6,045.00
	Vectric Aspire Software (C17-1156A)	1	2 010 00	2 010 00

TOTAL

Ref. #C17-1158A2 - 06/29/2017

Please see each individual quote for the customer requirements/responsibilities.

Implementation Services (C17-1157A2)

4,000.00

4,000.00

\$367,666.51

^{*} Proposal is valid for 60 days.



27-43 Wormwood Street, Suite 300 Boston, Massachusetts 02210

United States

York College

94-20 Guy R. Brewer Blvd Jamaica, New York 11451

United States

FEIN: 26-2940435 Date 6/22/2017

Duns # 023644066 Quote # 201706220058900

Quote Valid Until 7/22/2017

Sales ContactTony BaileyNameDaniel PhelpsPhone617-600-6803Phone7182622917

Email tbailey@rethinkrobotics.com Email dphelps@york.cuny.edu

Part #	Product	Description	Quantity	Price	Total Price
59768	Sawyer Robot System	Sawyer Robot including one year hardware warranty and software updates for the life of the robot	1.00	\$34,900.00	\$34,900.00
59769	Sawyer Pedestal	Pedestal designed for standing workplace heights, on casters for movement with leveling feet for stability and controller mounting features	1.00	\$3,500.00	\$3,500.00
31556	Electric Parallel Gripper (EPG) Kit	Electric Parallel Gripper (EPG) Kit. Includes: Parallel Gripper, Fingers- 4 Types, Fingertips, Hex Key for installation, Custom Hard Plastic Carry Case, and a User Guide	1.00	\$1,750.00	\$1,750.00
70024	North America AC Cord	North America AC Cord with IEC Connector C13, V-Lock, 2m	1.00	\$35.00	\$0.00
59770	Adapter Tool Plate	End of Arm Tool (EOAT) mounting plate for attaching Rethink Robotics' grippers (electric or vacuum) to the Sawyer robot. (1 per Sawyer)	1.00	\$0.00	\$0.00
	S&H (est)	Estimated shipping and handling charges	1.00	\$600.00	\$600.00

Total Price \$40,750.00

Notes:

Comments Payment Terms: Net 30 (pending credit approval)

Shipping Terms: FOB Shipping Point

Confidentiality: The information in this quote is confidential

- Please Include the quote number on your purchase order.
- If you are sales tax exempt, please provide a valid exemption certificate or else sales tax will be included on your invoice.

RETHINK ROBOTICS, INC. STANDARD TERMS AND CONDITIONS OF SALE

- 1. Scope of Agreement; Acceptance. Notwithstanding any terms set forth in a purchase order, these Terms and Conditions and the terms of the License Agreement accompanying the software ("Software") provided with the Rethink Robotics, Inc. ("Rethink Robotics") robots (the "Robots") and grippers, end effectors, pedestals and other Robot hardware, excluding consumables, (the "Accessories") (collectively referred to as "Products"), are the terms under which Rethink Robotics accepts the purchase order ("Order") from purchaser for the Products listed in the Purchase Order ("Purchaser"). Acceptance of said Order is expressly made conditional on Purchaser's assent, express or implied, to the terms set forth herein, unless otherwise agreed to in a separate written agreement executed by an officer of Rethink Robotics. Prices are exclusive of, and Purchaser agrees to pay, all federal, state, municipal and other governmental excise, sales, use, and similar taxes, duties or tariffs. Any existing nondisclosure agreements between Rethink Robotics and Purchaser shall remain in effect.
- 2. Prices and Payment Terms. All prices and payments shall be in U. S. dollars. Prices are Ex-Works Shipping Point and Purchaser is responsible for all shipping, handling and insurance costs and any fees, taxes, or duties related to the delivery or use of the Products. Subject to Purchaser meeting Rethink Robotics' open account credit criteria, the balance of the purchase price of each shipment of Products is due and payable net 30 days from the date of invoice. Overdue payments will be charged interest at the rate of one percent (1%) per month (12% per annum) or the maximum amount legally chargeable by Rethink Robotics, whichever is less, compounded monthly. If any action or proceeding is brought for collection, Rethink Robotics shall be entitled to reasonable attorneys' fees and other costs incurred.
- 3. Title and Security Interest. Title and risk of loss for the Products (excluding Software which is licensed) shall pass to Purchaser on delivery Ex-Works to a common carrier. Until Purchaser performs all of its obligations under these Terms and Conditions, Rethink Robotics will retain a purchase money security interest in the purchased Product and the proceeds thereof to secure performance of all of such obligations of Purchaser.
- 4. Limited Warranty and Exclusive Remedy. The Rethink Robotics Robots and Accessories, as supplied and distributed by Rethink Robotics and/or its authorized reseller, and delivered new, in the original carton to the original end user customer, are warranted by Rethink Robotics against manufacturing defects in materials and workmanship for one year from the date of delivery to end user customer. Rethink Robotics will repair or replace the defective product, at its option and at no charge with new or reconditioned parts, if found to be defective during the limited warranty period specified above. Rethink Robotics does not warrant uninterrupted or error-free operation of the product. Replacement parts and products assume the remaining original warranty. Rethink Robotics may require the end user customer to upgrade to its latest version of software before providing any warranty service.

This limited warranty covers manufacturing defects in materials and workmanship encountered in normal use of the Robots and Accessories and shall not apply to any failure or improper operation of the Robots and Accessories not caused by Rethink Robotics, including, but not limited to: damage which occurs in shipment; applications and uses for which the applicable Robot or Accessory was not intended (harsh use, crushing, submersion or high-pressure water, and so forth); failures or problems that are caused by products or equipment not supplied by Rethink Robotics; accidents, misuse, abuse, neglect, misapplication, fire, lightning or other acts of nature; incorrect electrical line voltage, fluctuations or surges; damage caused by improper installation; prod-uct alteration or modification; improper or unauthorized repair; exterior finish or cosmetic damage; product with altered serial numbers; failure to follow operating instructions, end user customer adjustments, and/or maintenance and environmental instructions that are covered and prescribed in the documentation; use of non-Rethink Robotics or unau-thorized parts, supplies, accessories or equipment which damage the Robot or Accessory or result in service problems; failures or problems due to incompatibility with other equipment. With the exception of using the torso access panel for air system installation, opening the body of a Robot or Accessory casing voids all warranties unless performed by a certified field service technician or an end user customer technician trained and certified by Rethink Robotics or its authorized reseller. With the exception of the air system in the torso access panel, there are no user-serviceable parts inside the body of any Robot or Accessory.

Items such as the Rethink Robotics filters, vacuum cups, vacuum extenders, fingers, finger tips, and air hoses are considered consumables. The limited warranty for consumables begins on the date of delivery to the end user customer and extends for ninety (90) days. Rethink Robotics will repair or replace these items, at its option and at no charge with new or reconditioned consumables, if the consumables are found to be defective during the limited war¬ranty period specified above. Replacement consumable items assume the remaining original warranty, or ninety (90) days, whichever is shorter.

THERE ARE NO EXPRESS WARRANTIES OTHER THAN THOSE SET FORTH ABOVE. RETHINK ROBOTICS AND ITS RESELLERS HEREBY DISCLAIM ALL OTHER WARRANTIES, WHETHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WAR¬RANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PUR¬POSE AND NONINFRINGEMENT, OR ANY WARRANTIES WITH RESPECT TO COMPLIANCE OF ANY ROBOT, ACCESSORY OR CONSUMABLE WITH ANSI, ISO OR OTHER INDUSTRIAL ROBOT SAFETY STANDARDS. NO OTHER WARRANTY OR GUARANTEE GIVEN BY ANY OTHER PERSON, FIRM OR CORPORATION WITH RESPECT TO THIS PRODUCT SHALL BE BINDING ON RETHINK ROBOTICS OR ITS RESLLERS.

RETHINK ROBOTICS' ROBOTS HAVE BEEN DEVELOPED AND TESTED FOR RESEARCH AND MANUFACTURING USES AND SHOULD BE OPERATED IN STATIONARY, LEVEL ENVIRONMENTS (AS DESCRIBED IN THE SPECIFICATIONS AND USER GUIDE). THE END USER CUSTOMER SHOULD PERFORM A RISK ASSESSMENT BEFORE OPERATING THE ROBOT. USE OUTSIDE OF THE ROBOT'S SPECIFICATIONS, INTENDED USE, OR WITH UNMITIGATED HAZARDS MAY INCREASE THE RISK OF INJURY TO THE END USER, DAMAGE TO THE ROBOT, VOID THE WARRANTY, AND LIMIT RETHINK ROBOTICS' ABILITY TO PROVIDE SUPPORT FOR THE PRODUCTS.

RETHINK ROBOTICS, INC. MAKES NO, AND HEREBY DISCLAIMS ANY, REPRESENTATION OR WARRANTY, RELATING TO COMPLIANCE WITH REGULATIONS AND/OR STANDARDS OUTSIDE OF THE UNITED STATES AND PURCHASER AGREES TO COMPLY, AND BEAR ANY COSTS OF COMPLIANCE, WITH ANY LOCAL FOREIGN ENTRY, DOMESTIC USE, AND (RE)EXPORT REGULATIONS.

RETHINK ROBOTICS OR ITS RESELLERS SHALL NOT BE LIABLE FOR LOSS OF REVENUE OR PROFITS. FAILURE TO REALIZE SAVINGS OR OTHER BENEFITS, OR ANY OTHER SPECIAL, INCIDENTAL, CONSEQUENTIAL OR OTHER INDIRECT DAMAGES CAUSED BY THE USE. MISUSE OR INABILITY TO USE THIS PRODUCT. REGARDLESS OF THE LEGAL THEORY ON WHICH THE CLAIM IS BASED, AND EVEN IF RETHINK ROBOTICS OR ITS RESELLERS HAVE BEEN ADVISED OF THE POSSIBIL-ITY OF SUCH DAMAGES. NO RECOVERY OF ANY KIND AGAINST RETHINK ROBOTICS OR ITS RESELLERS FOR BREACH OF ANY WARRANTY SHALL BE GREATER IN AMOUNT THAN THE PURCHASE PRICE OF THE PRODUCT SOLD BY RETHINK ROBOTICS AND/OR ITS RESELLERS AND CAUSING THE ALLEGED DAMAGE. WITHOUT LIMITING THE FOREGOING, THE END USER CUSTOMER ASSUMES ALL RISK AND LIABILITY FOR LOSS, DAMAGE OR INJURY TO THE END USER CUSTOMER, ITS EMPLOYEES AND THE END USER CUSTOMER'S PROPHERTY AND TO OTHERS AND THEIR PROPERTY ARISING OUT OF THE USE, MISUSE OR INABILITY TO USE A PRODUCT SOLD BY RETHINK ROBOTICS AND/OR ITS RESELLERS AND NOT CAUSED DIRECTLY BY THE GROSS NEGLIGENCE OF RETHINK ROBOTICS OR ITS RESELLERS. THIS LIMITED WARRANTY SHALL NOT EXTEND TO ANYONE OTHER THAN THE ORIGINAL END USER CUSTOMER PURCHASING THIS PRODUCT, IS NONTRANSFERABLE AND STATES PURCHASER'S EXCLU-SIVE REMEDY. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, OR THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATIONS OR EXCLUSIONS MAY NOT APPLY TO THE END USER CUSTOMER. THIS WARRANTY GIVES THE END USER CUSTOMER SPECIFIC LEGAL RIGHTS AND THE END USER CUSTOMER MAY ALSO HAVE OTHER RIGHTS, WHICH VARY FROM STATE TO STATE.

- 5. Limitation of Liability. (a) RETHINK ROBOTICS' CUMULATIVE LIABILITY TO PURCHASER OR ANY OTHER PARTY FOR ANY LOSS OR DAMAGES RESULTING FROM ANY CLAIMS, DEMANDS, OR ACTIONS ARISING OUT OF OR RELATING TO THE PRODUCT SHALL NOT EXCEED THE PRICE PAID TO RETHINK ROBOTICS FOR THE PURCHASE OF THE PRODUCT(S) CAUSING DAMAGE.
- (b) IN NO EVENT SHALL RETHINK ROBOTICS BE LIABLE FOR LOST PROFITS, OR ANY SPECIAL, INCIDENTAL, CONSEQUENTIAL, EXEMPLARY OR OTHER INDIRECT DAMAGES, OR FOR THE LOSS OF DATA OR LOSS OF USE, EVEN IF RETHINK ROBOTICS HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.
- 6. Governing Law. This sale of Products shall be construed and governed in accordance with the laws of the Commonwealth of Massachusetts, excluding: (i) its conflicts of laws principles; and (ii) the United Nations Convention on the International Sale of Goods. Any dispute, controversy or claim arising out of this Agreement shall be referred to an arbitration proceeding in Boston, Massachusetts, USA conducted in English under the commercial arbitration rules of the American Arbitration Association ("AAA"), and shall be the exclusive forum for resolving such dispute, controversy or claim. The arbitration shall be conducted in accordance with the provisions set forth in the License Agreement. The prevailing party shall be entitled to recover, in addition to any other relief granted, reasonable attorneys' fees.

Rethink Robotics, Inc. – Standard Terms and Conditions of Sale Rev. 3/18/15



YORK COLLEGE CUNY ROLAND GS-24 VINYL CUTTER

320 East 3rd Avenue • Tarentum, PA 15084 • Phone (800) 232-7600 • Fax (724) 230-2406 • www.alleghenyedusys.com

Part No	Description	Qty	Unit	Total
Roland Vinyl Cutter:				
#GS-24	Roland 24" CAMM-1 Desktop Vinyl Cutter with Stand Includes stand, AC adapter, power cord, blade, blade holder, roller base, alignment tool, Roland CutStudio software, USB cable and setup guide.	1	\$1,995.00	\$1,995.00
	Roland Project Based Learning Kit	1	495.00	495.00
	Freight	1	125.00	125.00

GRAND TOTAL.....

Ref. #C17-1145A2 - 06/29/2017

Please visit www.rolanddga.com to view the current system requirements.

Consumable Items:

Vinyl Cutter Startup Kit	1	\$350.00	\$350.00
Include vinyl sign making startup kit, startup vinyl rolls			
and spare GS-24 all-purpose cutting blade.			

\$2,615.00

^{*} Proposal total is F.O.B. destination.

^{**} Proposal is valid for 60 days.



YORK COLLEGE CUNY EPILOG FUSIONM2-40 75-WATT LASER ENGRAVER

320 East 3rd Avenue • Tarentum, PA 15084 • Phone (800) 232-7600 • Fax (724) 230-2406 • www.alleghenyedusys.com

Educational Systems, Inc.							
Part No	Description	Qty	Unit	Total			
Epilog FusionM2-40 75-Watt Laser Engraver (NYS Contract #PC65608):							
#FUSIONM2-40-75	Epilog FusionM2 40" x 28" 75-Watt Laser Engraver Includes servo motors, auto focus, air assist, red dot pointer, lens, Radiance high definition optics, integrated floor stand, Ethernet and USB interface, 2-year onsite parts and labor warranty.	2	\$36,666.00	\$73,332.00			
	Fusion40 Vector Grid	2	759.51	1,519.02			
	Air Assist Pump Used in place of a compressed air source.	2	342.41	684.82			
	Fusion Rotary Attachment	2	1,677.13	3,354.26			
Fume Extractor:							
#L0862-0003	BOFA Advantage 1500 IQ Fume Extractor Requires the hose connection kit. Includes one set of filters. This unit can be vented into the classroom when using approved materials.	2	10,412.00	20,824.00			

Totals:

#DHK-AD1500IQ-4

Epilog FusionM2-40 75-Watt Laser Engraver (NYS Contract #PC65608)	\$78,890.10
Fume Extractor	\$22,428.00
GRAND TOTAL	\$101,318.10

Standard Double Hose Connection Kit to 4" Ports

Freight for the BOFA

Ref. #C17-1146A2 - 06/29/2017

Customer to provide the following for each system:

- 1. An Ethernet network connection (with static IP address) or a Windows based PC with 4GB RAM, a free USB port and graphics software (i.e. CorelDraw, Adobe Illustrator, etc.). If the laser is networked then separate Windows based PC/s with 4GB RAM and graphics software are required. Note: to use the new ECC software you must have a PC connected to the system via USB.
- 2. The 75-Watt system requires <u>115vac 20amp power on a dedicated circuit</u>. Epilog highly recommends 220-240vac single-phase 15amp power on a dedicated circuit for optimum performance. The air assist pump requires 115vac 5amp power. The BOFA unit requires 230vac single-phase 25amp power on a separate circuit.
- 3. This is a large machine. Double-door building/room access required. Machine size = 60.5"w x 41.25"d x 42.25"h; Machine weight = 643 lbs.

252.00

550.00

504.00

1,100.00

^{*} Proposal total is F.O.B. destination.

^{**} Proposal is valid for 60 days.

^{***} You must show NYS contract #PC65608 on your purchase order.

^{****} Setup and training not included. See separate quote.



#A1030297

YORK COLLEGE CUNY EPILOG FUSIONM2-40 75-WATT LASER ENGRAVER

320 East 3rd Avenue ● Tarentum, PA 15084 ● Phone (800) 232-7600 ● Fax (724) 230-2406 ● www.alleghenyedusys.com

891.00

891.00

Part No	Description	Qty	Unit	Total
Consumable Items	- BOFA Replacement Filters (less freight):			
#A1030222	Replacement Deep Pleat Pre-Filter for L0862	1	\$455.00	\$ 455.00

Replacement Combined Filter for L0862



YORK COLLEGE CUNY TECHNO HD-II 48" x 96" CNC PLASMA CUTTER

320 East 3rd Avenue • Tarentum, PA 15084 • Phone (800) 232-7600 • Fax (724) 230-2406 • www.alleghenyedusys.com

Part No	Description	Qty	Unit	Total
---------	-------------	-----	------	-------

Techno HD-II 48" x 96" CNC Plasma Cutter:

#HDII-48X96-PLASMA	Tachno UD II 49" v 06" Stannar CNC Plasma Cuttor	1	\$28,393.00	\$28,393.00
#HDII-40X90-FLASMA	Techno HD-II 48" x 96" Stepper CNC Plasma Cutter	1	\$20,393.00	\$20,393.00
	(230v single-phase):			
	- Integrated stand			
	- PC based WinCNC controller			
	- Water table, steel v-grid and down draft			
	- Electronic torch break-away			
	- Automatic digital torch height control			
	- 1-Year onsite parts and labor warranty			
#H24H00-PM0085	Hypertherm Powermax 85 Plasma Torch to include (230v	1	4,800.00	4,800.00
	1PH/3PH):			
	- Techno's CNC Plasma real-time torch height control and			
	torch mounting accessories			
	- Cutting Specifications: Production Pierce = 5/8"			
	Freight	1	2,000.00	2,000.00

TOTAL	\$35,193.00

^{*} Proposal total is F.O.B. destination.

Ref. #C17-1147A2 - 06/29/2017

Customer to provide the following:

- 220vac single-phase 15amp dedicated circuit for the machine.
- #8 Ground wire to machine stand (Required for CNC plasma machines).
- Dedicated power and a compressed air source (or Nitrogen) for the Powermax 85 torch, see info below:

Requirements: A clean dry non-fluctuating 90psi Compressed air or Nitrogen (required for Aluminum and Stainless steel cutting applications) source.

Input Voltage: 200-480V, 1-PH, 50/60Hz, CSA 200-600V, 3-PH, 50/60Hz, CSA 200-600V, 3-PH, 50/60Hz, CSA

Input Current: @ 12.2kW Output 200/208/240/480 V, 1-PH, 70/68/58/29 A 200/208/240/480/600 V, 3-PH, 42/40/35/18/17 A

Flow Rate and Pressure: 400scfh 6.7cfm @ 85psl Duty Cycle: 60%, @ 85Amps, 230-600V, 3-PH 60%, @ 85Amps, 480V, 1-PH 50%, @ 85Amps, 240-600V, 1-PH 50%, @ 85Amps, 200-208V, 3-PH 40%, @ 85Amps, 200-208V, 1-PH 100% @ 66Amps, 230-600V, 1/3-PH 100% @ 46Amps, 230-600V, 1/3-PH 100% @ 46Amps, 230-600V, 1/3-PH

- A licensed electrician to perform/provide all electrical connections.
- 8" Dia metal duct and exhaust port to the outside. Machine stand has an 8" duct at the rear of the unit for the downdraft table.

^{**} Proposal is valid for 60 days.

^{***} Setup and training not included. See separate quote.



YORK COLLEGE CUNY TECHNO HD-II 48" x 96" CNC PLASMA CUTTER

320 East 3rd Avenue ● Tarentum, PA 15084 ● Phone (800) 232-7600 ● Fax (724) 230-2406 ● www.alleghenyedusys.com

Part No Description Qty Unit Total

- Supplemental fume extraction (if needed).
- Access to a water source and drain for use with the water table inserts.
- PCs with CAD/CAM software.
- Customer is responsible for unloading the machine and placing it into the desired classroom. A forklift and special door access are required.

Consumable Items:

Po	wermax 85 Torch Consumables Kit	1	\$450.00	\$450.00



YORK COLLEGE CUNY TECHNO HD 48x96 CNC ROUTER

320 East 3rd Avenue ● Tarentum, PA 15084 ● Phone (800) 232-7600 ● Fax (724) 230-2406 ● www.alleghenyedusys.com

Part No Description	Qty	Unit	Total
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Techno HD 48x96 CNC Router:

//IID 400.6	T 1 HD 402 002 01 CNG D (200 2.1)	1	Φ27 222 00	Φ 27 222 00
#HD-4896	Techno HD 48" x 96" Stepper CNC Router (230v 3phase)	I	\$27,322.00	\$27,322.00
	to include:			
	- Integrated stand			
	- Standard 7.5" gantry height			
	- Hand-held controller			
	- Vacuum t-slot table (requires vacuum pump if vac-table			
	is to be used)			
	- 4HP HSD Spindle			
	- 1-Year onsite parts and labor warranty			
	8HP Rotary Vane Vacuum Pump (230v 3-Phase)	1	8,358.00	8,358.00
	Cam Clamp, HD	2	81.00	162.00
	Clamp Bar, HD	4	81.00	324.00
	4-Pc Toggle Clamp Set	1	70.00	70.00
	Educational Tooling Kit	1	509.00	509.00
	Freight	1	2,000.00	2,000.00

CD LVD MODILY	Φ20 5 45 00
GRAND TOTAL	\$38,745.00

^{*} Proposal total is F.O.B. destination.

Ref. #C16-1148A2 - 06/29/2017

Customer to provide the following:

- 230vac 3-phase 20amp dedicated circuit with disconnect and machine ground for the CNC Router/Spindle. A separate 230vac 3-phase 40amp dedicated circuit with disconnect is required for the vacuum pump.
- #8 Ground wire to the machine stand (Highly recommended for CNC routers).
- A licensed electrician to perform/provide all electrical connections.
- PC/s with CAD/CAM software.
- A USB flash drive to transfer the NC files from the PCs to the CNC Router controller.
- A dust collection system (if desired).
- Customer is responsible for unloading the machine and placing it into the desired room. A forklift and special door access are required. Overall dimensions for the CNC Router are 119"L x 78"W x 60"H (not including the control cabinet). The vacuum pump is approximately 43"L x 30"W x 22"H.

^{**} Proposal is valid for 60 days.

^{***} Setup and training not included. See separate quote.



YORK COLLEGE CUNY TECHNO HD-II MINI CNC ROUTER

320 East 3rd Avenue ● Tarentum, PA 15084 ● Phone (800) 232-7600 ● Fax (724) 230-2406 ● www.alleghenyedusys.com

1,340.00

1,554.00

70.00

81.00

81.00

509.00

1,500.00

1

1

1

1

2

1

1,340.00

1,554.00

70.00

81.00

162.00

509.00

1,500.00

Part No	Description	Qty	Unit	Total
Techno HD-II Mini CNC	Router:			
#HD-II-MINI	Techno HD-II Mini 21x36 Table Top CNC Router System to include: - X-Axis Travel = 21" - Y-Axis Travel = 36" - Gantry Clearance = 7.5" - Micro Stepper Controller with Brushless Motors - Hand Held Control Pendant - Vacuum T-Slot Table (Includes Venturi Vacuum Generator for Vacuum Source) - Spindle = 2HP High Frequency Spindle, 6000-18000 RPM, with vac-hood, collect wrenches, ER16 collets (1/8", 1/4" x	1	\$10,661.00	\$10,661.00

TOTAL	\$15,877.00

^{*} Proposal total is F.O.B. destination.

Ref. #C17-1149A2 - 06/21/2017

Customer to provide the following:

- The CNC Router/Spindle requires a 220vac single-phase 15amp dedicated circuit with disconnect.
- #8 Ground wire to the machine stand (Highly recommend for CNC routers).

3/8") and cover nut

Toggle Clamp Set

Cam Clamp

Clamp Bar

Freight

1-Year Onsite Parts and Labor Warranty

Steel Base with Casters for HD-II Mini

Top Safety Enclosure for HD-II Mini

Starter Educational Tooling Kit

- A licensed electrician to perform/provide all electrical connections.
- A compressed air source for the Venturi vacuum pump.
- PCs with CAD/CAM software.
- A USB drive to transfer files from the CAD/CAM PCs to the hand-held controller.
- A dust collection system (if desired).
- Customer is responsible for unloading the machine and placing it into the desired room. A forklift and special door access may be required. Overall dimensions with stand and enclosure = 37.5"W x 65"L x 66"H (approx.)

^{**} Proposal is valid for 60 days.

^{***} Setup and training not included. See separate quote.





- X Axis Travel = 21.0"
- Y Axis Travel = 36.0"
- Z Axis Travel = 9.5"
- Gantry Clearance = 7.5"

Techno is proud to introduce the HD-II 2136 tabletop, a compact version of a full-scale CNC router system that can be implemented in a production environment or educational setting. The machine is available with an optional safety enclosure and stand. It can be easily transported around the facility to any convenient location.

FEATURES

- 21" x 36" Process area
- Precision ball screws on all three axes
- 2 HP high frequency collet spindle
- Brushless micro stepper motors and controls
- Vacuum T-slot table for easy part fixturing
- Automatic tool calibration pad
- **Easy to Use Hand-Held Controller**
- Includes: 1/8", 1/4", 3/8" collets and wrenches

Hand-held controller: The heart of the HD-II Tabletop machine is it's easy to use Hand-held Micro Stepper Controller. The hand-held controller is so user-friendly that setup, installation and training is completed through our self-taught, step-by-step manuals. Every command is very easy to read, understand, and execute. We guarantee you will be cutting parts the same day you connect power to the machine!

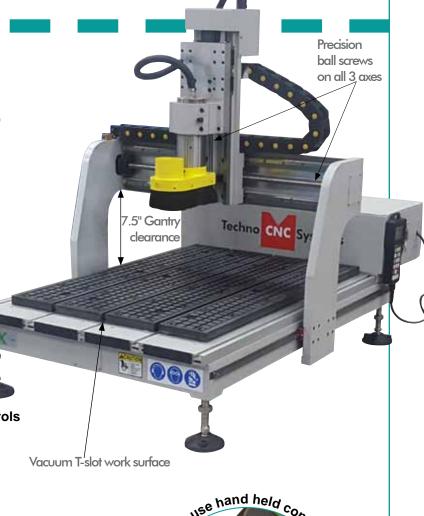




OPTIONS

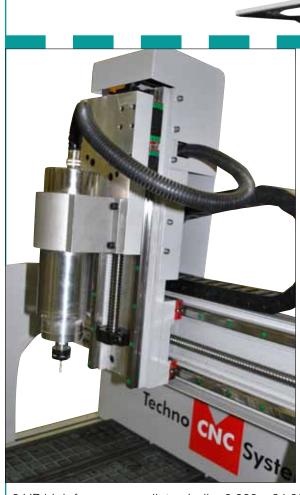
- Steel base with casters
- Full safety enclosure
- Vacuum pump
- 1.5 HP dust collector
- Vise

- Cam clamp
- Clamp bar
- Toggle clamp set (4 pcs)
- Coolant system
- 4th axis rotary table w/tailstock



www.technocnc.com Phone: 631-648-7481





2 HP high frequency collet spindle, 6,000 – 24,000 rpm, and ultra-quiet operaton allow users to cut with the same accuracy and efficiency as larger format routers with little to no maintenance.



Shown is the Techno HD II 21 x 36 Tabletop CNC Router with optional safety enclosure and stand.



All the electrical components are housed, wired and tagged in the HD-II Tabletop electrical enclosure. This allows for easy access and service when needed.

The rear view of the Techno HD II 21 x 36 Tabletop CNC Router is showing the electronics enclosure and yacuum connections



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YORK COLLEGE CUNY ROLAND MDX-540A CNC MILL

320 East 3rd Avenue ● Tarentum, PA 15084 ● Phone (800) 232-7600 ● Fax (724) 230-2406 ● www.alleghenyedusys.com

Part No Des	escription	Qty	Unit	Total
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Roland MDX-540A CNC Mill:

#MDX-540A	Roland MDX-540 CNC Milling Machine with 4-Tool	1	\$30,995.00	\$30,995.00
	ATC			
	19.6"(x), 15.7"(y), 6.1"(z). Includes spindle, SRP Player			
	CAM software and 1-year onsite parts and labor			
	warranty. Requires collets and tooling.			
#ZBX-540E	Safety Cover for MDX-540	1	1,539.00	1,539.00
#US-COL7-1/8	1/8" Collet for ATC	2	59.99	119.98
#US-COL7-5	3/16" Collet for ATC	2	59.99	119.98
#US-COL-1/4	1/4" Collet for ATC	2	59.99	119.98
#EM-KIT-LR	Long Reach Tooling Kit	1	379.99	379.99
#EM-KIT-SR	Short Reach Tool Kit	1	143.99	143.99
#TAPE-MILLING	Double-Sided Tape for Milling	2	10.49	20.98
	Freight	1	1,000.00	1,000.00

TOTAL	\$34,438.90
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^{*} Proposal total is F.O.B. destination.

Ref. #C17-1150A - 06/21/2017

Please visit www.rolanddga.com to view the latest computer and utility requirements (power, air, etc.). Customer is responsible for unloading the machine and placing it into the desired classroom.

Options:

#ZTT-540	T-Slot Table for MDX-540	1	\$1,399.00	\$1,399.00
#ZCL-540	Rotary 4th Axis Unit	1	5,099.00	5,099.00
	Roland Project Based Learning Kit for MDX-540 Series	1	1,195.00	1,195.00

^{**} Proposal is valid for 60 days.

^{***} Setup and training not included. See separate quote.



YORK COLLEGE CUNY ARTEC EVA & SPACE SPIDER 3D SCANNERS

320 East 3rd Avenue • Tarentum, PA 15084 • Phone (800) 232-7600 • Fax (724) 230-2406 • www.alleghenyedusys.com

Part No Description Qty Unit	Part No	Description	Otv	Unit	Total
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Artec Eva & Space Spider 3D Scanner:

#EDU EVA SPACE BUND	Artec Eva & Space Spider 3D Scanners EDU Bundle	1	\$28,193.00	\$28,193.00
	Includes both scanners, 20-free Artec Studio licenses,			
	2-year warranty and 2-years of updates.			
	Shipping	1	100.00	100.00

GRAND TOTAL	\$28,293.00

^{*} Proposal total is F.O.B. destination.

Ref. #C17-1151A - 06/21/2017

Please visit $\underline{www.artec3d.com}$ for the latest system requirements. Additional PC RAM is recommended over the minimum specs for optimal performance (16GB – 32GB total).

^{**} Proposal is valid for 60 days.

^{***} Setup and training not included. See separate quote.



YORK COLLEGE CUNY DIWIRE+ DESKTOP WIRE BENDER

320 East 3rd Avenue • Tarentum, PA 15084 • Phone (800) 232-7600 • Fax (724) 230-2406 • www.alleghenyedusys.com

Part No Description Qty Unit Total
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DIWire+ Desktop Wire Bender:

#4D1132	DIWire+ Desktop Wire Bender EDU Bundle	1	\$5,355.00	\$5,355.00
	Includes machine with Wireware software, 1/8" and 1/16"			
	bend heads and feed wheels and 2-year warranty.			
	Shipping	1	100.00	100.00

GRAND TOTAL	\$5,455.00

^{*} Proposal is F.O.B. destination.

Ref. #C17-1152A2 - 06/29/2017

Please visit www.pensalabs.com to view the latest system requirements.

^{**} Proposal is valid for 60 days.

^{***} Setup and training not included. See separate quote.