TERRA **NIVERSALCOM** Critical Environment Solutions

Revision: 2 Rev Date: 5/3/2013 Original Quote Date: 04/25/13

Quote 130285

800 S. Raymond Ave.,	800 S. Raymond Ave., Fullerton, CA 92831				* Fax 714-578-602		
	Your Orde	r Management Te	eam		Your Request ID		
Order Manager		Partner	Customer Se	rvice			
Monica Perez	Brenda Nice	ols	Customer Service Team		Estimated I	Lead Time	
714-578-6123	714-578-61	15	714-578-6059		1 - week		
Monica@TerraUniversal.com	Brenda@Te	erraUniversal.com	Info@TerraUniversal.co	m	Payment	Terms	
Fax: 714-578-1173	Fax: 714-57	/8-3115	Fax: 714-578-3116		50%Down/Net	15 Days OAC	
Lo	cal Sales &	Support Represe	entative		Trans ID	TUI Ref #	
TUI Direct Support		_		_		130285	
Requested By:		End User:		Invoice ⁻	To Client #	5230	
Michael Hedges University of Hawaii 2680 Woodlawn Dr., Institute Fo Honolulu, HI 96822 Work: 808-856-2962 Email: mhedges@hawaii.edu	or Astronomy	Michael Hedges University of Hawaii 2680 Woodlawn Dr., In Honolulu, HI 96822 Work: 808-856-2962 Email: mhedges@hawa		Accounting I University of 2680 Woodla Institute For Honolulu, H	f Hawaii awn Dr. Astronomy		
				Tel: 808-956-8	3231 Fax: 8	808-956-4532	
Ship To (See Term 2)		Shipping Term (See Term 4)		Quote Summa	ary	
UNIVERSITY OF HAWAII 2680 WOODLAWN DR INST O ASTRONOMY GREG CHING Honolulu, HI 96822	F	F.O.B. Destination Freight & Handling: P Partial Ship OK? No Shipped Via: Unspecif	repay & Add		Services List	\$5,227.0 \$5,227.0	
ATTN: Voltage 12	20	Ship Acct # Tracking #			x, shipping and handl vill be added. A late c paid late (see Term	harge will apply i	
Critical Notes				Projected S	Sales Tax Status:		
Products built or bought for you,					(Out of State)		
shipping and lead time estimates LOADING DOCK/LIFTGATE IS REQUIRE	-	-	d (see Term 3).	(Pleas	e advise if status is no	ot accurate)	
					ay to Terra Universa aymond Ave., Fullert 78-6000 Fax	-	
Iracking available ONLY fro		al Time Order Status Syster	n presents daily progress rep	orts directly on v	www.TerraUniversal.co	om. This service	
Terms of Sale: Terra does not guarantee the suitability of Terra listed. Terra accepted and produced this order TerralIniversal.com. Terra's terms and condition authorized Terra employee and documented by 1. Payment terms are as given above. A Late C 10% of the products and services invoiced or th the "Ship To" addressee and location provided a termination of the products and services invoiced or the the respective terms are assessed to be a service of the products and services invoiced or the the "Ship To" addressee and location provided a	subject to Terra's accept ns supersede any conflic returning a signed copy Charge is invoiced on pro- te discount granted, if ar are the final destination of	ance of customer-approved drawing: ting terms in your PO or RFP/RFO. / of your PO. Summarized, Terra's ter oduct and service invoices unpaid 15 vy, on these items, whichever is great of these products for purposes of Dep	s, receipt of initial payments and expor Any terms on your PO that conflict with rms are: days after their due dates. The late c ter. Invoice due date is based on date	t license, credit appro n Terra's terms are N harge must be paid to shipped. 2. This ord I that you will notify T	oval and to the terms and cor OT accepted unless authorize o retain open account status. der has been accepted with tt erra if these change. If an ex-	nditions shown on ed IN WRITING by an The Late Charge is the understanding that cort license is	

required, a processing charge of \$500 must be paid before the application is submitted. Export licenses require undeterminable time for DOC processing. Terra does not accept orders requiring export licenses until the licenses are received. 3. All Estimated Ship Dates, including confirmed ESDs, are estimates, depend on workloads when the order is ready for manufacturing release and are NOT guaranteed. 4. Except when specified "FOB Destination" in Shipping Terms, above, orders accepted by Terra are FOB Ex-Works. FOB Ex-Works means that risk of loss passes to you when the goods are loaded on the truck and you must file claims for freight damage directly with the freight carrier. If you order freight charges "prepaid and add," freight cost plus a handling charge computed under Terra's standard policy is added to each shipment. These costs may be avoided by ordering "freight collect" and FOB Ex-Works. To reduce costs and speed delivery, it may be necessary to ship from different factories and in different shipments. These are not "partial shipments." 5. Orders accepted, released and processed by Terra cannot be cancelled or returned except on terms that compensate Terra for work performed and expenses incurred. Custom items, items not purchased from Terra, and items modified or damaged by improper use, repairs, application of labels or nameplates are not returnable. 6. All returns must be approved by Terra in writing in advance and may be assessed restock and handling charges. No returns will be accepted without an RMA. All items accepted by Terra must be in original condition and in original shipping containers and returned freight prepaid, FOB Terra. Terra may elect to issue return credits against future orders rather than cash refunds. 7. Terra's warranty is as shown on TerraUniversal.com. This order may not be assigned without Terra's written approval. 8. If Terra files any proceeding to enforce the terms of this order or to collect any amount due, you agree to pay all reasonable attorney's fees and costs.

Detailed List Of Products And Services, Specifications And Cost Follows

Entered by: Monica Perez on 04/25/13 @ 4:09 PM

TERRA UNIVERSAL_COM Critical Environment Solutions

Quote 130285 Revision: 2 Rev Date: 5/3/2013 Original Quote Date: 04/25/13

	Critical Environment Solutions					Revisio	on: 2 R	ev Date: 5/3/207	13 Original Q	uote Date: 04/25/13
800	300 S. Raymond Ave., Fullerton, CA 92831				Tel 714-578-6000			* Fax 714-578-6020		
		Your Order M	lanage	ment ⁻	Гeam				Your Request ID	
	Order Manager	Pa	artner		Customer Service					
Mor	ica Perez	Brenda Nicols			Cus	stomer S	ervice Te	am	Estimate	d Lead Time
Loc	al Rep: TUI Direct Support								1	- week
	Product Number		Qty							
#	Product Name & De	escription	Ord	Units	Of	Count	Unit	Unit Price	Custom Item	Extended
1	6600-66-VL		1	EA				\$5,227.00	No	\$5,227.00 T
	Cleanroom, Softwall Valu	Line, Modular P	owder C	oated St	teel					
	• Size: 6'L x 6'W x 7'H									
	• Class: 100								-	
	• (Height is floor to filter f	ace)								
	 COMPONENTS INCLU 									
	Steel frame - posts and					owder c	oated			
	Steel ceiling grid – joist				'-bars					
	Steel reinforcing gusset Pre-mounted GripTrack				dooma					
	Crate, wood	tor curtain panels		p silleid	uoors				-	
	All electrical componen	nts UL and UL-C li	sted							
	ACCESSORIES INCLUDED:									
	Curtain Panels – 40 mil									
	Strip Shield Door – up Fan Filter Units (FFUs)									
	Fluorescent Light Modu								g	
	Power Supply Unit – Sv									
	user duplex GFI recepta									
	Ceiling Panel 2' x 4',									
	Ceiling Panel 2' x 2', Tool Kit – All tools nec			equired to	o comp	nete cer	ing grid	L		
	o ADDITIONAL INFORM		room							
	Room is sent disassemb	led with assembly	instructi	ons. Tw	o asser	mblers	make the	;		
	process easier			C 1	D	a 1	TT •.			
	FFUs and lights plug in Power Supply Units plu									
	Power Supply Units plug into standard US wall receptacles. Each PSU requires a separate, free 20 A circuit									
	Power Supply Unit Switch and non-switched GFI outlet mount on corner post									
	Strip door mounts at any corner									
	FFUs add 13" (330 mm) overhead to height. Additional 9" to 11" (230 - 280 mm)									
	clearance is required for air flow and installation. Total clearance required above filter face is 22" to 24" (560 - 610 mm)									
	Heavy-duty casters may		tional co	ost (TUI (6704-0)8)				
	Room is shipped in larg					1 36" do	orwayfor	r internal delive	ry.	
	Forklift, lift gates and p									
	Room may be customize Since regulations vary of						no			
	responsibility for meeting							odes.		
	Check your local planni									
	······		~. W -1.1	0 #10 ₽	17					
	www.terrauniversal.com/6 Size: 120" W x 35" D x 45					SA				
	Volts: 120 Amps: 18				-	511				
	1									

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800 S. Raymond Ave., Ful	llerton, CA 9	2831				Tel 71	4-578-6000	* F	ax 714-578-6020
	our Order Ma		ment T	ean	n				Request ID
Order Manager		rtner				tomer	Service		
Monica Perez	Brenda Nicols			Cu	stomer S	ervice Te	am	Estima	ted Lead Time
Local Rep: TUI Direct Support							1 - week		
# Product Number # Product Name & Descr	ription	Qty Ord	Units	Of	Count	Unit	Unit Price	Custom Iter	n Extended
2 6601-24-H-VL		2	EA				\$0.00	Ν	No \$0.00 T
 Fan Filter Unit, HEPA, 120' HEPA-filtered, 3-speed, sel Plugs into Power Supply Ur UL LIsted COMPONENTS INCLUDE FFU Power cable assembly SPECIFICATIONS (at 60 H Removes 99.99% of partic Dimensions: 23.63" x 47.6 Power: 120VAC/60Hz Operating Ratings Airflow CFM (m≈/hr) Hig Air Speed FPM (m/s): Hig Amps (Watts): High - 4.3 Average flowrate is measu Sound level approx. 49 dB ADDITIONAL INFORMA' Power cable shipped unatt Housing: Steel, white pow Includes FDA-approved si Replacement filter: 6601-2 o Recommended use at medit o All filter sales are final; ret o When used in cleanrooms,I to 11" (230 - 280 mm) cle clearance required above f www.terrauniversal.com/6601 Packaged Weight: 71 Lb (32 Volts: 120 Amps: 4.3 W 	f-powered fan-fil nit (TUI 6600-20 ED: Hz) Eles 0.3 micron at 63" x 12.51" H (gh - 808 (1372.8 gh - 115 (0.58) M A (512W) Medi ured 6" (152 mm) BA, at flow of 90 TION: ached wder coated licone sealant 25 (order separato um speed turns of this item FFUs add 13" (33 earance is require filter face is 22" t 1-24-H-VL Cata 2 kg) Origin: V Yatts: 512 Phas	ter unit -VL) ad large 600 mm 8) Medi Medium um - 3.5 below f FPM (0 ely) cannot 30 mm) ed for ai o 24" (5 log: inte USA e: 1 F	r um - 717 - 102 (0. 5A (416W filter face).46 m/s) be accept overhead r flow and 560 - 610	nm x (1213 52) 1 52) 1 7) Lc to he d inst mm) e -	eight. A tallation	ow - 654 3 (0.47) A (393W dditiona . Total	19"	Continued	from previous page

TERRA UNIVERSAL COM **Critical Environment Solutions**

Page: 4

Quote 130285

Revision: 2 Rev Date: 5/3/2013 Original Quote Date: 04/25/13

BOO S. Raymond Ave., Order Manager Monica Perez Local Rep: TUI Direct Support Product Number Product Number Product Name & D 3 3800-80-VL Light Module Fluorescer • Fluorescent 4-tube light • Plugs into Power Suppl • UL listed	Your Order M Pa Brenda Nicols esscription		Units		tomer ervice Te	4-578-6000 Service am	Your Re Estimated	714-578-6020 equest ID Lead Time week
Monica Perez Local Rep: TUI Direct Support Product Number Product Name & D 3 3800-80-VL Light Module Fluorescer • Fluorescent 4-tube light • Plugs into Power Suppl	Brenda Nicols	Qty Ord	Units	Cus Customer S	ervice Te		Estimated	Lead Time
Local Rep: TUI Direct Support Product Number Product Name & D 3 3 3800-80-VL Light Module Fluorescen Fluorescent 4-tube light Plugs into Power Suppl	escription nt ValuLine for M	Ord				am		
 # Product Number Product Name & D 3 3800-80-VL Light Module Fluorescent • Fluorescent 4-tube light • Plugs into Power Suppl 	escription nt ValuLine for M	Ord		Of Count			1 -	week
 # Product Name & C 3 3800-80-VL Light Module Fluorescer • Fluorescent 4-tube light • Plugs into Power Suppl 	nt ValuLine for M	Ord		Of Count				
Light Module Fluorescer • Fluorescent 4-tube light • Plugs into Power Suppl		1			Unit	Unit Price	Custom Item	Extended
Fluorescent 4-tube lightPlugs into Power Suppl			EA			\$0.00	No	\$0.00 T
 COMPONENTS INCL Light Power Cable, Light SPECIFICATIONS: Produces 3409 Candle Dimensions: 2' x 4' (6 Power: 120-277 VAC/ ADDITIONAL INFOR To calculate foot cand the distance between 1 www.terrauniversal.com/2 Packaged Weight: 20 Lb Volts: 120/277 Freq: 50 	UDED: power 10 mm x 1219 mm 50 or 60 Hz, heat lo MATION: les at a work surfac ight and work surfac 3800-80-VL (9.1 kg) Size: 51) bad: 500 e, divide ace measu	candlepo ured in fe			mm) Origin:	USA	
4 6600-20-VL		1	EA			\$0.00	No	\$0.00 T
Power Supply Unit, 120V, Cleanroom, Softwall, ValuLine • Supplies power for up to 3 FFUs and 3 lights • Plugs into standard US wall receptacle • Requires a free 20A 120 VAC circuit • COMPONENTS INCLUDED: Switch box to be mounted on post w/supplied mounting plate Switched 6-outlet 20 A power distribution box to be mounted on ceiling, switched and breaker protected GFI duplex convenience 5 A outlet, non-switched, mounted on post Electrical components UL and UL-C listed • ADDITIONAL INFORMATION: Shipped fully assembled White powder coated Liquid Tight conduit runs power cable up post to ceiling 0 Catalog: Mini 10, #8, Page 02 Volts: 120 Amps: 20 Watts: 2400 Phase: 1 Freq: 50/60								

TERRA JNIVERSAL COM Critical Environment Solutions

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00 S. Raymond Ave.,								
	Fullerton, CA 9	2831			Tel 71	4-578-6000	<u>* Fax 7</u>	14-578-602
	Your Order M		ment T				Your Re	quest ID
Order Manager		artner				Service		
onica Perez	Brenda Nicols			Customer S	Service Te	eam	Estimated I	
ocal Rep: TUI Direct Support	t	0100					l - v	veek
Product Number Product Name & I	Description	Qty Ord	Units	Of Count	Unit	Unit Price	Custom Item	Extended
7 6600-88-VL		1	EA			\$0.00	No	\$0.00 T
 Tool Kit, Cleanroom, So All tools needed to asse COMPONENTS INCL Assembly instructions Variable speed drill w Measuring tape, Engli Mallet, non-marring r Screwdriver, w/bits Allen wrench Drill bit, 3/16" Components vary dependent Or ADDITIONAL INFOR Ladder, 6' (not included www.terrauniversal.com/ Packaged Weight: 8 Lb (2000) 	emble ValuLine soft UDED: s: read or regret it! //tool bits, corded ish, 25' rubber, 16 oz nding on availability RMATION ed), required for asse /6600-88-VL 3.6 kg) Size: 24"	, embly W x 24" 1	D x 6" H	(610 x 610 x	x 152 mr	n) Origin: US	A	
Volts: 120 Amps: 3	Watts: 360 Phase	. 1 110	eq: 60				i	
		3	EA			\$0.00	No	\$0.00
 8 6703-81 Ceiling Panel for Modul Ceiling panel, 2' x 2' x COMPONENTS INCL Panel, polypropylene, Sealing tape, white, pr O ADDITIONAL INFOF Fills unused ceiling gr www.terrauniversal.com/ Origin: USA 	.25", White UDED: white ressure sensitive foat RMATION: rid bays	x 2', Pol	ypropyle	ne		\$0.00	No	\$ 0.00 7
 Ceiling panel, 2' x 2' x COMPONENTS INCL Panel, polypropylene, Sealing tape, white, pr ADDITIONAL INFOR Fills unused ceiling gr www.terrauniversal.com/ 	.25", White UDED: white ressure sensitive foat RMATION: rid bays	x 2', Pol	ypropyle	ne		\$0.00	No	\$0.00 T

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300) S. Raymond Ave., Fullerton, CA 9				Tel 71	4-578-6000		714-578-6020
	Your Order Manager		ment 1		•	Comilar	Your R	Request ID
	3	artner				Service		
	Monica Perez Brenda Nicols Customer Service Team Estimat Local Rep: TUI Direct Support							d Lead Time
LOC								- week
#	Product Number Product Name & Description	Qty Ord	Units	Of Count	Unit	Unit Price	Custom Item	Extended
10	9998-FasTrak	0	EA			\$0.00	No	\$0.00
10 9998-FasTrak 0 EA \$0.00 No FasTrak Services • On a tight schedule? You may choose one of Terra's FasTrak Priority Services to help meet your critical schedule for Terra-manufactured products • FASTRAK ADVANTAGE works within Terra's existing production organization to meet the Estimated Ship Date, even if shop loads or other circumstances change by the time your order hits the shop floor. FasTrak Advantage assigns a FasTrak order expediter to ensure production priority, streamlines internal purchase and overtime authorization, and logs progress to senior management status reports. FasTrak Advantage guarantees* to meet the agreed-to Estimated Ship Date (ESD). • FASTRAK 24/7 provides a higher level of service: a 24/7 commitment to meet the shipping date YOU specify, regardless of quoted lead times. FasTrak-24/7 assigns and a dedicated production team plus a dedicated senior expeditor working three shifts to meet your delivery specification. FasTrak 24/7 guarantees to meet the agreed-to specified ship date. • Call for pricing on the FasTrak program that meets your production schedule. (FasTrak service fees cover costs of additional services only, without additional profit.) *Terra's FasTrak services limited guarantee are ship on the ESD or date specified or to refund 200% of FasTrak								
11	9999-RTOSS	0	EA			\$0.00	No	\$0.00
	REAL-TIME ORDER STATUS SYSTEM							T
	 You can track progress on all manufacture REAL-TIME ORDER STATUS SYS R-TOSS is located on TerraUniversal.com. Progress is updated each day at 2:00 AM F being manufactured. R-TOSS displays are open to all Preferred As items ship, R-TOSS also displays shipp 	d items o TEM (R- , click the PST to sho Clients	-TOSS) e button c ow compl just enro	on the upper s letion of each oll or log-in.	right-han 1 task on	each item		
Tha	nks for Letting Us Quote!		Tota	Is on Pag	e 1			Last Pa <u>q</u> e

Thanks for Letting Us Quote!	Totals on Page 1	Last Page
Printed By: Monica Perez on 05/03/13 @ 2:43 PM	Entered by: Monica Perez on 04/25/13 @ 4:09 PM	Continued from previous page