PRE-INSTALLATION VISIT / SITE READINESS CHECKLIST
VERTIV TRINERGY CUBE UPS SYSTEMS
INSTALLING CONTRACTOR

THIS AREA TO BE COMPLETED BY GENERAL CONTRACTOR / UPS INSTALLER DURING PRE-INSTALLATION VISIT.

(List additional equipment information in Section 6.0).

Site Name		**Installing Contractor**	
Address		**Contracting Company**	
City		**Contractor Phone**	
State	**Zip**		
Sales Order #	**Site ID**		

VERTIV Contact Name		**VERTIV Contact Title**	
VERTIV Contact Phone		**VERTIV Contact Email**	

Cube Model #		***Vertiv Services will assist with Identification***
IO Box Serial #		**Core Position Relative to IO Box**
Core 1 Serial #		**Core 1 Position**
Core 2 Serial #		**Core 2 Position**
Core 3 Serial #		**Core 3 Position**
Core 4 Serial #		**Core 4 Position**
Core 5 Serial #		**Core 5 Position**
Core 6 Serial #		**Core 6 Position**

Use one form for each Tringergy Cube Module (IO Box and attached Cores). Attach comments to Section 6.0, or on additional sheets if necessary. Complete this form during the Pre-Installation process (prior to the equipment installation).

Introduction

THIS FORM MUST BE COMPLETED BY THE INSTALLING CONTRACTOR FOR EACH TRINERGY CUBE MODULE. PROVIDE INITIALS AND DATE FOR EACH STEP AND SIGN THE DOCUMENT ON THE LAST PAGE.

The purpose of this form is to ensure a complete and quality installation of the UPS system and make the start-up process as efficient as possible. FAILURE TO FOLLOW ALL STEPS ON THIS DOCUMENT COULD RESULT IN EQUIPMENT MALFUNCTION.

1.0 Sequence	**Completed**
1.1 Installing Contractor has received the *Pre-Installtion Visit / Site Readiness Checklist (Installing Contractor)* document from Vertiv Project Management team, Vertiv Project Leader, or found within the Cube equipment documentation. A copy of this document ships with every Trinergy Cube module and can be found inside the I/O Box of the Cube module.	
1.2 Installing Contractor must review this document and contact Vertiv prior to the installation of the UPS.	
1.3 Installing Contractor is required to fully review this form with the Vertiv Service personnel present and complete this form during the Vertiv Services Pre-Installation Site Visit which is completed prior to the installation of the equipment.	
1.4 Sign the Pre-Installation document and provide a copy to the Vertiv Service personnel that completes the inspection of the equipment.	

2.0 Documentation & Requirements	**Installing Contractor (Initial/Date)**
2.1 Confirm that all Installation Manuals and Handling Instructions are on-hand for the equipment to be installed. Refer to the QR codes at the end of this document.	_____
2.2 Confirm that all latest submittals and wire lists are on hand. Contact VERTIV sales representative or your local Vertiv service office if the latest documentation is not available.	_____
2.3 The Installing Contractor shall thoroughly read ALL installation instructions and Vertiv submittal drawings for proper installation PRIOR to beginning the work.	_____

2.4 Review and understand all power and control wire termination points. Find all locations physically on the equipment before beginning installation. Refer to the *Installation Manual* for additional details. _____

To prevent damage to the UPS:

- The Installing Contractor shall not drill or cut any metal conduit on top of the unit.
- No drilling or self-tapping is to occur on top of the UPS.
- The Installing Contractor shall not drill or cut any structural material such as rebar or any metal-containing material on top or above of the unit. Metal shavings allowed to enter inside the unit can severely damage the UPS.
- The Installing Contractor must remove the low voltage conduit plate per the Installation Manual and perform drilling/punching holes in the plate away from the unit. Ensure the conduit plate is free of metal shavings prior to reinstallation.
- The Installing Contractor shall not remove any of the blue filter material installed on the unit. This filter will be removed by the Vertiv Customer Engineer.
- The Installing Contractor shall not walk anywhere on top of the unit. There are electronic components under the top panels of the unit that may get damaged and impair equipment operation.
- The Installing Contractor shall not use the top of the unit as a storage location.

  If a separate conduit or plenum is used, the Installing Contractor must ensure that no metal shavings enter the unit. _____

2.5 Review proper ground requirements. Refer to the *Installation Manual* for further details. _____

3.0 Pre-Installation Inspection of the UPS System **Installing Contractor (Initial/Date)**

3.1 Check for shipping damage internally or externally. Notify VERTIV sales representative about any damage. _____

3.2 Provide access to Vertiv personnel so that the back of the equipment can be inspected during the Pre-Installation Site Visit (prior to the installation of the equipment). _____

3.3 Each Core has a specific installation location within the Cube system. Review the installation documentation with Vertiv personnel to ensure the Cores will be installed in the correct position relative to the IO Box. _____

3.4 Provide access to the Power Cable kit that is shipped on a pallet with the Cube equipment. _____

4.0 Confirmation of Trinergy Cube Module Installation Requirements (Prior to Installation) **Installing Contractor (Initial/Date)**

4.1 Keep all protective shrink wrap on the unit and remove only when required. This filter material will be removed by Vertiv Customer Engineer during startup.

Blue Filter Part Number: Grainger Part Number 2JTA8

Confirm equipment is placed with adequate clearances as per Installation Manual and NEC. All cabinet doors must be able to open fully. Compliance with step 2.3 is required. _____

4.2 Ensure that there is a minimum of 36 inches in front of all circuit breakers and disconnects to perform maintenance. _____

4.3 Confirm a minimum of 24 inches clearance at top of equipment for air exhaust and service access. Conduit or other material may only be mounted to locations referenced in the installation manual. _____

4.4 Adequately cover the equipment as much as possible during work to keep it clean. _____

4.5 All AC and DC power wiring connections must be torqued as per applicable requirements and marked when complete.

NOTE: Do not use a drill or conduct any drilling or self-tapping on top of the Trinergy Cube. Remove the I/O Box Top Conduit plate/cover and drill away from the Trinergy Cube if the Conduit Box cover has no knockout. Ensure the conduit plate is free of metal shavings prior to reinstallation.

NOTE: It is the responsibility of the installer to ensure no conductive material enters the unit. Installer will be billed for any cleaning or failure as a result of debris entering the unit.

THE INSTALLING CONTRACTOR WILL BE BILLED AT VERTIV'S PREVAILING LABOR RATES FOR ANY CLEANING OR EQUIPMENT FAILURE THAT RESULTS FROM DEBRIS ENTERING THE UNIT. _____

IMPORTANT NOTE: DO NOT MEGGER CABLES WHILE ATTACHED TO THE EQUIPMENT. MEGGER CABLES BEFORE ATTACHING TO THE EQUIPMENT.

4.6 Ensure clockwise, A-B-C phase rotation for wiring of all equipment. Phasing to be matched for all power feeds (Input, Bypass, Output, Maintenance Bypass, etc.). _____

4.7 Run and terminate ALL control wiring (installer is responsible to terminate). Wires MUST be marked as per VERTIV wire list numbers. THERE SHOULD BE NO SOLID CONTROL WIRE.

NOTE: Ensure no wire clippings enter the unit. Strip the wire away from the unit. _____

4.8 Ensure all control wiring is run in their own conduits (as per the cable groups on the VERTIV submittal wire lists) and separated from power wiring. Maintain independent control power routes as indicated in the installation documentation. Verify the Trinergy Cube System is wired following the supplied installation instructions. Consult Vertiv Customer Engineer if needed. _____

4.9 Ensure that the Core is installed per the Core Positioning Identification indicated on the Core Serial Number label. See *Installation Manual* for configuration details. _____

4.10 For 1+N (paralleled Trinergy Cube) systems, the cabling impedances for the bypass feeds to each UPS must be within 10% from maximum to minimum. If the cabling impedances are greater than 10%, then inform the customer that the installation may result in an overload condition when operating on bypass. The Cube modules have components that are capable of compensating up to 5% for sharing. _____

4.11 Confirm if the UPS is configured as a dual or single-input unit. _____

5.0 Confirmation of Trinergy Cube System Battery Installation Requirements (Prior to Installation)

Installing Contractor (Initial/Date)

5.1 Review DC cabling, control wiring, power supply requirements, and battery breaker installation. For the DC cabling, the positive and negative pairs must be placed properly in each conduit run. Ensure no control wiring is installed with the power wiring, etc. _____

5.2 Installing Contractor must understand proper installation requirements and has the battery manufacturer's installation manual on-hand.

- For Samsung Lithium battery installations, ensure that Rack 1 contains the System BMS. The 1-LIBSGXXX1PS cabinet contains the System BMS board which has the red *Reset* button. This cabinet must always be Cabinet 1 regardless of the configuration (left-to-right or right-to-left).
- For Vertiv High Power Lithium (HPL) battery installations, consult with the Vertiv Customer Engineer or product user manual for additional details.
- Do NOT use cable lube to aid in sliding of jars (i.e., Yellow77). This will ruin the jars.
- Installing Contractor must follow proper post-preparation (i.e., no wire brushes).
- Installing Contractor must follow the proper torque setting (manufacturing requirements and in-lbs or Nm specifications). _____

5.3 Ensure that the battery system has a minimum of 36 inches of clearance for service access. _____

5.4 Complete internal battery connections (cabinets) or battery installation (rack- based systems). All connections to be completed before Battery Verification (or equivalent) is performed. _____

5.5 Confirm battery spill containment installed as applicable, as well as hydrogen detectors, if required. _____

5.6 Ensure that the battery room exhaust is installed. BATTERY ROOM EXHAUST MUST BE WORKING BEFORE BATTERY CHARGING CAN BEGIN. Check compliance to NEC, if applicable. _____

6.0 Comments / Additional Equipment Information

IMPORTANT: IF VERTIV ARRIVES ON SITE FOR START-UP AND THE EQUIPMENT OR SITE IS NOT READY, THE INSTALLING CONTRACTOR WILL BE BILLED FOR ADDITIONAL SERVICES PERFORMED BY VERTIV PRIOR TO THE STARTUP AT VERTIV'S PREVAILING LABOR RATES (A P.O. WILL BE REQUIRED FOR START-UP TO BEGIN).

Installing Contractor Representative

Signature _____ Date _____

Printed Name _____ Company _____

Save and Submit

Click Save and Submit button to save this file.
After the file has been saved, an Outlook e-mail item will be opened with the saved file attached.

Scan the QR code to view Operation and Maintenance Guide (SL-30837)

Scan the QR code to view Installation Guide (SL-30831)