

# **SCOPE OF WORK**

# ICOM™-S INSTALLATION AND CONFIGURATION SERVICES

#### **SERVICE SUMMARY**

Feature	Detail
On-Site Service	Includes Vertiv Service-trained personnel for installation and configuration scheduled by the customer between 8am-5pm, Monday-Friday (excluding national holidays).
Customer Support	Access support by contacting the Customer Resolution Center (1-800-543-2378). To coordinate installation scheduling contact na.icomssupport@vertiv.com.
Labor & Travel	Includes 100% labor and travel coverage in the relation to the scope of services within this document when conducted 8am-5pm, Monday-Friday (excluding national holidays).
Service Professional	Performed by Vertiv factory-trained and authorized technician equipped with Vertiv Proprietary tools and software. Vertiv CEs and Vertiv Partners are the only approved OEM service providers for Vertiv products

# **SERVICE PERFORMED**

Part Number	Description	SOW
ICOMSPIC-CPQ (Single System)	iCOM™-S Panel Appliance Configuration	<ul> <li>All units installed, powered up, and networked to iCOM-S network.</li> <li>All wireless gateways installed, powered up, and networked to iCOM-S network (if applicable).</li> <li>All network cables from units and wireless gateways ran to panel (if applicable).</li> <li>All unit configuration complete (TW and sensor configuration set on the unit controllers).</li> <li>Customer to provide IP networking documentation (IP/subnets and TW properties known for all equipment).</li> <li>20V/60Hz (NEMA 5-15 / Standard 3-Prong NA outlet) available within 3' for powering panel from UPS/Backed up power source.</li> <li>Panel mounted on the wall by mechanical/electrical contractor. The panel shall be level and positioned the proper distance away from nearby walls based on the design.</li> <li>Customer provides room drawings to Vertiv in PDF file format which are used to generate up to two iCOM™-S graphics. Drawing requirements are detailed in the Pre-installation Preparedness Checklist which is completed prior to scheduling the on-site visit.</li> <li>Services Covered</li> <li>Updating to most current available software.</li> <li>Plugging system networking cables into panel.</li> <li>Configuring the router/USB-Ethernet dongle for external BMS &amp; Web UI Connectivity.</li> </ul>





		<ul> <li>Setting system passwords.</li> <li>Setting up new users.</li> <li>Setting system altitude.</li> <li>Configuring desired calculations/metrics on UI.</li> <li>Importing floor plan images.</li> <li>Naming Rooms.</li> <li>During the installation visit, a product orientation and operational demonstration of up to two hours after the system is fully setup and operational.</li> <li>Services Not Covered</li> <li>Mounting panel on wall.</li> <li>Running Power and Networking Cables.</li> <li>Physical power and networking verification (cables built incorrectly not covered for instance).</li> <li>CRAC Unit Configuration/Verification.</li> <li>System commissioning.</li> </ul>
ICOMSSIC-CPQ (Single System)	iCOM™-S Software Installation and Configuration on Customer Provided Server	Pre-Requisites  Server/VM installed, powered up, and integrated into customer network (on UPS/power backup feed).  Server/appliance with sufficient system resources and OS (per deployment guide).  Process for remote/VPN access allowing file transfers in place and known.  SQL Server SA user credentials known (if connecting to corporate instance of SQL Server).  Admin/Services user credentials known (used to install the iCOM-S software).  Proper port assignments on integrated network gear.  Services Covered  Working with customer corporate IT group on the pre-requisites.  Installing the latest iCOM-S software.  Remote networking verification that all devices can be reached.  During the installation visit, a product orientation and operational demonstration of up to two hours after the system is fully setup and operational.  Services Not Covered  Running Power and Networking Cables.  Physical power and networking verification (cables built incorrectly not covered for instance).  CRAC Unit Configuration/Verification.





(Per RDU Ga	RDU301 (iCOM™-S) Gateway Installation & Configuration	Pre-Requisites  • 1U rack space (or other installation location) available with power available with 120V/60Hz (NEMA 5-15 / stand 3 prong NA outlet) available within 3' for powering RDU.  • Network connection from southbound device network available and patched.  • Network connection from northbound iCOM™-S network available and patched.  Services Covered  • Installing RDU appliance in 1U Rack mount kit.  • Updating to latest RDU firmware if applicable.  • Setting the RDU networking properties.  • Creating/adding proper RDU clusters and RDU's to the system.
		<ul> <li>Properly assigning and verifying deployed functionality to the RDU gateways.</li> <li>Services Not Covered</li> <li>Running Power and Networking Cables.</li> <li>Physical power and networking verification (cables built incorrectly not covered for instance).</li> <li>Physically racking the RDU into the proper mount location in the rack.</li> </ul>
ICOMSBMSC-CPQ (Per connected Thermal Unit)	iCOM™-S Single Connected Thermal Unit BMS Configuration	<ul> <li>Pre-Requisites</li> <li>Agreed upon points (data/calculations) to be used.</li> <li>Agreement on point register/ID mappings.</li> <li>Known BMS/Operations network IP address to be used by the system provided by customer.</li> <li>Agreement on preferred naming/identification templates (if desired).</li> <li>Units networked and communicating to the iCOM-S software.</li> <li>Services Covered</li> <li>Adding the unit to the system with proper data being communicated.</li> <li>Verification that metrics/calculations are populating on the iCOM™-S system.</li> <li>Placing units and connected wired sensors on floor plan graphics using the Room Editor program.</li> <li>Enabling and configuring unit data points for BMS communication using the Point Configurator program.</li> <li>Assigning iCOM groups/calculations to proper iCOM™-S/RDU cluster.</li> <li>Services Not Covered</li> <li>Running Power and Networking Cables.</li> <li>Physical power and networking verification (cables built incorrectly not covered for instance).</li> <li>System commissioning (including Point to point verification with upstream BMS system).</li> </ul>





		Pre-Requisites
		Power and networking ran to Gateway installed location.
		Wireless Gateway IP address known.
		Names provided for each WSN Gateway and sensor preferably in an Excel format.
		Remote mounting kit installed and powered (if ordered).
	Vertiv WSN Wireless Gateway Installation/Configuration	Services Covered
		Setting Gateway password.
ICOMSGIC-CPQ		Set the IP networking address on the Gateway.
(Per connected Wireless Gateway)		Verify through software that Gateway has network visibility to RDU or iCOM-S software (based on application deployment).
		Add the gateway to the iCOM-S (which pulls in all connected sensors).
		Assigning WSN Gateway to proper iCOM-S/RDU cluster.
		Services Not Covered
		Running Power and Networking Cables.
		Physical power and networking verification (cables built incorrectly not covered for instance).
		System commissioning (including Point to point verification with upstream BMS system).
		Physically mounting the Wireless Gateways.
		Pre-Requisites
		Locations of sensors to be installed are known.
		Known relationships of sensor to gateway communication.
	Vertiv WSN Wireless T/H/Flex Sensor Installation/Configuration	Names provided for each WSN Gateway and sensor preferably in an Excel
		format.
		Services Covered
		Joining the Sensors to the Gateway.
		Modifying the polling/update rates on the sensors.
ICOMSSPIC-CPQ		Naming the sensors (in Gateway or iCOM™-S).
(Per Single		Setting Location Type property (in iCOM™-S).
Wireless Sensor)		<ul> <li>Setting thresholds on the sensors (in iCOM™-S).</li> </ul>
		Placing wireless sensor on floor plan within the Room Editor program.
		Services Not Covered
		System commissioning (including Point to point verification with upstream BMS system).
		Sensors to be physically placed on the rack by the customer and not Vertiv personnel.
		Physically placing additional indi product labels on individual sensors.





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ICOMSCM-CPQ (Per System)	iCOM™-S Automated Reporting Setup and Configuration	<ul> <li>Pre-Requisites</li> <li>Folder location on iCOM-S/network known where data/reports to be saved and if custom file names are to be used.</li> <li>All devices/groups set up, configured, and communicating to the iCOM-S system.</li> <li>Known schedule of how frequently to run the reports and what reports to run.</li> <li>The customer provides the e-mail server information to be configured into iCOM™-S for automated reporting.</li> <li>Services Covered</li> <li>Configuration of scheduled reports in iCOM-S software.</li> </ul>
ICOMSCMU-CPQ (Per connected Thermal Unit being controlled)	iCOM™-S Single Connected Thermal Unit Control Association	<ul> <li>Pre-Requisites</li> <li>Successful unit communication/networking with units added to system with proper data communication.</li> <li>Services Covered</li> <li>Selecting/associating unit's wired sensors for group control (using Room Editor or iCOM-S UI).</li> <li>Enabling control (hot spot protection level) in iCOM-S software.</li> <li>Verifying control value from iCOM-S properly communicating to units through enablement.</li> <li>Services Not Covered</li> <li>System commissioning (including Point to point verification with upstream BMS system).</li> <li>After iCOM™-S is setup, a thermal technician will be required to configure for proper TW mode and sensor control (remote, aux sensor enabled, etc).</li> <li>Configuration of wired sensors.</li> </ul>
ICOMSCMS-CPQ (Per connected Wireless Sensor being used for control)	iCOM™-S Single Connected Vertiv WSN Wireless Sensor Control Association	Pre-Requisites  • Gateways and sensors properly communicating to the iCOM-S software.  Services Covered  • Selecting/associating wireless sensor to the proper iCOM control group (using Room Editor or iCOM-S UI).  • Enabling control (hot spot protection level) in iCOM-S software.  • Verifying control value from iCOM-S properly communicating to units through enablement.  Services Not Covered  • System commissioning (including Point to point verification with upstream BMS system).





THERM_ SERVAPPENG	iCOM™-S Engineering and Application Support	<ul> <li>Pre-Requisites</li> <li>Caller requesting service is the user at the site responsible for iCOM™-S or a designated user IT point of contact.</li> <li>Services Covered</li> <li>Limited advanced troubleshooting support.</li> <li>Services Not Covered</li> <li>Remote step-by-step training of the installation process.</li> <li>Firmware/Software updates for system components.</li> <li>Floor Plan, BMS, and Report construction.</li> </ul>
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#### **ASSUMPTIONS AND CLARIFICATIONS**

- Upon completion of installation per the Statement of Work, end-user must provide written project sign-off at the site when the job is completed. If this does not occur, Seller will assume customer acceptance and invoice accordingly.
- Unless a Master Service Agreement supersedes, Vertiv Corporation Standard Terms and Conditions of Sale apply to all purchases from Vertiv Corporation and are available for download at http://termsconditions.vertiv.com, or available upon request from your Vertiv Corporation representative.
- Trash shall be placed in the customer's dumpster or trash container at the job site.

#### **CUSTOMER RESPONSIBILITIES**

To provide timely, accurate and thorough execution of the services described herein, Vertiv requests the following:

- Point of Contact (POC): When initiating contact with Vertiv for the visit, please provide the name, phone number, and e-mail address to na.icomssupport@vertiv.com.
- Scheduling: Project schedules are developed after receipt of a valid purchase order for the proposed services. Visits should be requested at least 6-8 weeks in advance by contacting na.icomssupport@vertiv.com.
- Parking: Parking shall be provided for the Seller's crew.
- Site Access: Prior to time of scheduled work, provide site access including any customer required escort, security clearance, safety training and badging for Vertiv personnel.
- Material Storage: If the final location of equipment is not on the same floor as the location where the equipment is being stored, the contractor shall support and provide a capability to move the equipment to the final location. Vertiv will communicate with the contractor for material handling and support requests for material handling aids especially for heavy items within the platform.
- Equipment Access: Convenient access to the equipment covered by the Scope of Work. Work that includes Vertiv personnel utilizing lifts and ladders is not covered within the Scope of Work.
- Shutdown: Service may require shutdown of load.
- Notification: If for any reason the work cannot be performed during scheduled time, notify Vertiv personnel 24-hours prior to scheduled event.
- Please note that some processes may require the use of a USB drive for offline file transfers. If this is not an available option for a customer, please provide approved mechanism/process for updating non-internet connected systems.





• Internet Connectivity: Not required if a USB device is authorized for file transfer. Internet connectivity is required if a USB device is not authorized for file transfer.

# **TERMS AND CONDITIONS**

Subject to all Terms & Conditions as noted in the Vertiv Terms & Conditions or the terms of a Master Agreement between the parties, if any, shall apply.

