

| RFB 3097-2025: SITA CENTURION UPS BATTERY SYSTEM DATA SHEET Rev 2.0                                                              |                                                                                                              |                              |                                                                         |
|----------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|------------------------------|-------------------------------------------------------------------------|
|                                                 |                                                                                                              | Project: RFB 3097-2025       |                                                                         |
|                                                                                                                                  |                                                                                                              | Specification: UPS BATTERIES |                                                                         |
|                                                                                                                                  |                                                                                                              | Date: 2025/06/17             |                                                                         |
| <b>Note (1):</b> The bidder only populate the section (Section 2 or 3) for offered battery technology solution not both sections |                                                                                                              |                              |                                                                         |
| <b>Note (2):</b> Bidder must complete/enter YELLOW cells only                                                                    |                                                                                                              |                              |                                                                         |
| <b>Note (3):</b> SITA reserves the right to request Battery Sizing Calculation Sheet to verify Data Sheet information            |                                                                                                              |                              |                                                                         |
|                                                                                                                                  | UPS Unit Manufacture                                                                                         |                              | VERTIV                                                                  |
|                                                                                                                                  | Model                                                                                                        |                              | EXL S1                                                                  |
|                                                                                                                                  | Nominal Size                                                                                                 |                              | 500kW                                                                   |
|                                                                                                                                  | Mode of Operation                                                                                            |                              | Standalone (Single Unit)                                                |
| Item                                                                                                                             | Description                                                                                                  | Units                        | Required                                                                |
| <b>1</b>                                                                                                                         | <b>GENERAL INFORMATION</b>                                                                                   |                              |                                                                         |
| 1.1                                                                                                                              | Nominal Battery Voltage                                                                                      | V                            | 12v (2 v/cell)                                                          |
| 1.2                                                                                                                              | Equalizing/Boost Charge Voltage                                                                              | V                            | 14.4v (2.4 v/cell)                                                      |
| 1.3                                                                                                                              | Compatability with Vertiv EXL S1 UPS ( <b>Confirmed</b> )                                                    |                              | YES                                                                     |
|                                                                                                                                  | High-Rate Discharge for Data Centre UPS Application                                                          |                              | YES                                                                     |
| 1.4                                                                                                                              | DC Breakers (BCB)                                                                                            |                              | UPS Unit OEM Specified                                                  |
| 1.5                                                                                                                              | Battery Monitoring System (Voltage, Current, Impedance, Temperature system and Battery Balancer per battery) |                              | Included                                                                |
| 1.6                                                                                                                              | Battery Monitoring System Communication Protocol                                                             |                              | Ethernet/IP, PROFINET & Modbus TCP/SNMP                                 |
| 1.7                                                                                                                              | Battery Runtime @ End of Life Factor at <b>500kW</b> UPS Full load                                           |                              | ≥ 30 Minutes                                                            |
| 1.8                                                                                                                              | UPS Operating Efficiency                                                                                     |                              | 95%                                                                     |
| 1.9                                                                                                                              | UPS Continuous Overload Margin @ End of Life                                                                 |                              | 10%                                                                     |
| 1.10                                                                                                                             | Design Margin @ End of Life                                                                                  |                              | 20%                                                                     |
| 1.11                                                                                                                             | Aging Factor                                                                                                 |                              | 25%                                                                     |
| 1.12                                                                                                                             | Temperature compensated battery charging built into cabinet                                                  |                              | Yes                                                                     |
| 1.13                                                                                                                             | Operating Temperature                                                                                        | °C                           | 25 °C                                                                   |
| 1.14                                                                                                                             | Product Warranty                                                                                             | Years                        | ≥ 5 Years                                                               |
| 1.15                                                                                                                             | Performance Guarantee                                                                                        | Years                        | ≥ 10 Years                                                              |
| 1.16                                                                                                                             | Compliant (applicable to the offered solution)                                                               |                              | UL 9540A<br>UL 1642<br>UL 1973<br>UL 1989<br>UL 1778<br>IEC 60896-21/22 |
| 1.17                                                                                                                             | Battery Room Size (Width,Length,Height)                                                                      | mm                           | 6183mm x13979mm x3750mm                                                 |
| 1.18                                                                                                                             | Battery Container Material                                                                                   |                              | Flame Retardant<br>UL94 V-0                                             |
| 1.19                                                                                                                             | Battery Connectors Material and Coating                                                                      |                              | Tin Plated Copper, Fully Insulated including the terminal connections   |
| 1.20                                                                                                                             | Battery Terminal Material and Coating                                                                        |                              | Tin Plated Copper                                                       |
| 1.21                                                                                                                             | Battery Cabinet/String Isolation Included                                                                    |                              | YES                                                                     |
| Item                                                                                                                             | Description                                                                                                  | Units                        | Required                                                                |
| <b>2</b>                                                                                                                         | <b>STRING RATINGS: THIN PLATE PURE LEAD (TPPL)</b>                                                           |                              |                                                                         |
| 2.1                                                                                                                              | Cell type                                                                                                    |                              | Thin Plate Pure Lead (TPPL)                                             |
| 2.2                                                                                                                              | Lead Plates Purity Level                                                                                     | %                            | ≥ 99.99%                                                                |
| 2.3                                                                                                                              | Lead Plates Thickness                                                                                        | mm                           | < 1mm                                                                   |
| 2.4                                                                                                                              | Cells per String (12v Batteries per String)                                                                  | Each                         | 288 (48)                                                                |
| 2.5                                                                                                                              | Minimum Cell Voltage (Minimum Battery Voltage)                                                               | v/cell                       | 1.85 v/Cell (11.10V)                                                    |

| 2.6                                                                                                                                                                                                                                                                                                                                                                       | Max Boost Charge Voltage (Maximum Charge Voltage)                       | v/cell            | 2.4 v/cell (14.4V)              |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------|-------------------|---------------------------------|
| 2.7                                                                                                                                                                                                                                                                                                                                                                       | Battery Connection                                                      |                   | Front End Terminal Connection   |
| 2.8                                                                                                                                                                                                                                                                                                                                                                       | String Fire Protection System Included                                  |                   | YES                             |
| 2.9                                                                                                                                                                                                                                                                                                                                                                       | Compatability with Vertiv EXL S1 UPS (Confirmed)                        |                   | YES                             |
| 2.10                                                                                                                                                                                                                                                                                                                                                                      | Manufacturer and Battery Name                                           |                   |                                 |
| 2.11                                                                                                                                                                                                                                                                                                                                                                      | Manufacturer Battery Type                                               |                   |                                 |
| 2.12                                                                                                                                                                                                                                                                                                                                                                      | Manufacturer Lead Plates Purity Level                                   | %                 |                                 |
| 2.13                                                                                                                                                                                                                                                                                                                                                                      | Manufacturer Lead Plates Thickness                                      | mm                |                                 |
| 2.14                                                                                                                                                                                                                                                                                                                                                                      | Manufacturers Recommended Operating Temperature Range With No De-rating | °C                |                                 |
| 2.15                                                                                                                                                                                                                                                                                                                                                                      | String Minimum Voltage                                                  | V                 |                                 |
| 2.16                                                                                                                                                                                                                                                                                                                                                                      | String Maximum Voltage                                                  | V                 |                                 |
| 2.17                                                                                                                                                                                                                                                                                                                                                                      | Recharge Rate                                                           | A                 |                                 |
| 2.18                                                                                                                                                                                                                                                                                                                                                                      | String Capacity                                                         | Ah                |                                 |
| 2.19                                                                                                                                                                                                                                                                                                                                                                      | String Energy                                                           | kWh               |                                 |
| 2.20                                                                                                                                                                                                                                                                                                                                                                      | Battery Stand Size (L,W,B) per String                                   | mm                |                                 |
| 2.21                                                                                                                                                                                                                                                                                                                                                                      | Number of Strings per UPS unit                                          | Number            |                                 |
| 2.22                                                                                                                                                                                                                                                                                                                                                                      | Block Capacity (Combined Total Strings per UPS Unit)                    | Ah                |                                 |
| 2.23                                                                                                                                                                                                                                                                                                                                                                      | Block Energy (Combined Total Strings per UPS Unit)                      | kWh               |                                 |
| 2.24                                                                                                                                                                                                                                                                                                                                                                      | Offered Solution Estimated Battery Runtime @ End of Life                | minutes           |                                 |
| Item                                                                                                                                                                                                                                                                                                                                                                      | Description                                                             | Units             | Required                        |
| 3                                                                                                                                                                                                                                                                                                                                                                         | CABINET RATINGS: LITHIUM-ION (LiFePO4)                                  |                   |                                 |
| 3.1                                                                                                                                                                                                                                                                                                                                                                       | Cell type                                                               |                   | Lithium Ion Phosphate (LiFePO4) |
| 3.2                                                                                                                                                                                                                                                                                                                                                                       | Cabinet Fire Protection System Included                                 |                   | Yes                             |
| 3.3                                                                                                                                                                                                                                                                                                                                                                       | Compatability with Vertiv EXL S1 UPS (Confirmed)                        |                   | Yes                             |
| 3.4                                                                                                                                                                                                                                                                                                                                                                       | Manufacturer                                                            |                   |                                 |
| 3.5                                                                                                                                                                                                                                                                                                                                                                       | Manufacturers Recommended Operating Temperature Range With No De-rating | °C                |                                 |
| 3.6                                                                                                                                                                                                                                                                                                                                                                       | Cabinet Capacity                                                        | Ah                |                                 |
| 3.7                                                                                                                                                                                                                                                                                                                                                                       | Cabinet Energy                                                          | kWh               |                                 |
| 3.8                                                                                                                                                                                                                                                                                                                                                                       | Cells per Cabinet (Batteries per Cabinet)                               | Each              |                                 |
| 3.9                                                                                                                                                                                                                                                                                                                                                                       | Minimum Cell Voltage                                                    | v/cell            |                                 |
| 3.10                                                                                                                                                                                                                                                                                                                                                                      | Max Cell Voltage                                                        | v/cell            |                                 |
| 3.11                                                                                                                                                                                                                                                                                                                                                                      | String Voltage Range                                                    | V                 |                                 |
| 3.12                                                                                                                                                                                                                                                                                                                                                                      | Recharge Rate                                                           | A                 |                                 |
| 3.13                                                                                                                                                                                                                                                                                                                                                                      | Cabinet Size (L,W,B)                                                    | mm                |                                 |
| 3.14                                                                                                                                                                                                                                                                                                                                                                      | Number of Cabinets per UPS                                              | Number            |                                 |
| 3.15                                                                                                                                                                                                                                                                                                                                                                      | IP Rating of cabinet                                                    | IP                |                                 |
| 3.16                                                                                                                                                                                                                                                                                                                                                                      | Block Capacity (Combined Total Cabinets per UPS Unit)                   | Ah                |                                 |
| 3.17                                                                                                                                                                                                                                                                                                                                                                      | Block Energy (Combined Total Cabinets per UPS Unit)                     | kWh               |                                 |
| 3.18                                                                                                                                                                                                                                                                                                                                                                      | Offered Solution Estimated Battery Runtime @ End of Life                | minutes           |                                 |
| <p>I, the bidder, confirm that the details provided in this data sheet are true and accurate. I further accept that all goods and/or works will be delivered as specified herein.</p> <p>[Note (1): SITA reserves the right to request Battery Sizing Calculation Sheet to verify Data Sheet information]</p> <p>[Note (2): First convert to PDF, then add signature]</p> |                                                                         |                   |                                 |
|                                                                                                                                                                                                                                                                                                                                                                           |                                                                         | Bidder's Name     |                                 |
|                                                                                                                                                                                                                                                                                                                                                                           |                                                                         | Signature (above) |                                 |