



༄། །འབྲུག་མི་སེར་རྒྱུ་ཚོར་གཞི་བཟུང་ཚད།

**DRUK HOLDING & INVESTMENTS LTD.**

**GROUP STANDARD BIDDING DOCUMENT**

---

**GOODS**



Part I: NOTICE INVITING TENDER

**NIT No: Carrying out Proof of Concept (POC) on OUTDOOR CABINET /2024**

1. Bhutan Telecom Ltd. invites eligible bidders to submit your e-bid for the supply of OUTDOOR Cabinet.
2. Bhutan Telecom Limited would like to inform the interested firms to kindly visit the website [www.tender.bt](http://www.tender.bt) for vendor registration and to submit the proposal online.
3. The user manual for vendor registration and bidding process is available on the website [www.tender.bt](http://www.tender.bt) or else can be downloaded from following links:-User manual for vendor registration-User manual for Bidding process
4. SBD Timeline

|  |  |
|--|--|
| <b>NIT No.</b>   | Carrying out Proof of Concept (POC) on OUTDOOR CABINET /2024 |
| <b>Bid Submission &amp; EMD Submission Date &amp; Time</b> | On or before 3 <sup>th</sup> June 2024 (17:00 hrs)           |
| <b>Bid Opening Date &amp; Time</b>                         | 4 <sup>th</sup> June 2024 (14:00 hrs)                        |
| <b>RFP shall be available at</b>                           | <a href="http://www.tender.bt">www.tender.bt</a>             |

Part II: Terms and Conditions

1. Scope of Supply

- 1.1 POC duration shall be for a period of 2 months from the date of installation and commissioning.
- 1.2 If POC becomes successful, then the equipment shall be retained and 100% payment shall be released within 10 days from the date of submission of POC result. However, if unsuccessful, then the same shall be returned to the vendor on SOR basis at the vendor's cost.
- 1.3 Equipment/ Outdoor cabinet must be supplied as per the specifications, catalogs, datasheet furnished during the bid submission.
- 1.4 The bidder(s) may quote for any or all items as per the technical specification as attached.(Annexure-iv)

2 Clarification to the bidding document

- 2.1 Further information can be obtained in writing from [procurement@bt.bt/manager.powerandinfra@bt.bt](mailto:procurement@bt.bt/manager.powerandinfra@bt.bt) not later than May 31<sup>st</sup> 2024.

3 Documents comprising bid

- 3.1 The bid must be accompanied by the following document:
  - i. Bid Security
  - ii. Valid Trade license
  - iii. Tax clearance
  - iv. Integrity Pact Document
  - v. OEM certificate
  - vi. Catalogue and Datasheet
  - vii. Any other relevant documents as required

4 Bid Price

- 4.1 All prices shall be quoted in BTN/INR. The quoted price shall be CIF, Thimphu including taxes, duties and other levies to the final place of delivery.
- 4.2 The final place of delivery of Equipment is Central Stores, Thimphu
- 4.3 Each item shall be evaluated and contract awarded separately to the firm(s) offering the lowest evaluated price for each item.

*Or*

- 4.4 The bidder(s) must quote for all the items under this bid if in lot. Price bids will be evaluated for all the items together and contract awarded to the firm offering the lowest evaluated total cost of all the

items.

- 4.5 All price quoted shall be on per unit basis and valid for 12 months from the date of bid opening. The selected bidders shall be contacted for additional supply of any in-listed item in the future or repeat order basis for the entire period.

## 5 Bid Validity

- 5.1 The bid shall be valid for 90 days from the date of submission of the bid. In exceptional circumstances, prior to the expiration of the bid validity period, the Purchaser may solicit the Bidder's consent to an extension of the bid validity period. The request and responses shall be made in writing. A bid valid for a shorter period shall be considered non-responsive.

## 6 Bid Security

- 6.1 The Bidders are requested to submit *eBid* in the systems and upload the EMD and then also submit EMD original a **day before actual submission date** of the systems date (**i.e by 3<sup>rd</sup> June 2024**) to avoid disqualifying of bid submission.

6.2

- a) The Bid security shall be valid up to 3 months.
- b) The Bid Security is to be submitted as a part of the Bid in a separate sealed envelope and be submitted to Finance & Accounts Division or to our nearest Branch Office within the specified time in SBD timeline.
- c) Any Bid not accompanied by bid security of adequate value and validity shall be rejected by the Purchaser and considered as non-responsive.

- 6.3 The bid security shall be forfeited in the following cases:

- a) If the Bidder withdraws the bid after Bid opening during the period of Bid validity.
- b) If the Bidder does not accept the correction of the Bid price;
- c) In the case of a successful bidder, if the bidder fails within the specified time limit to sign the Contract or furnish Performance Security.

## 7 Purchaser's Right to Accept Any Bid, and Reject Any or All Bids

- 7.1 The Purchaser is not bound to accept the lowest bid and reserves the right to accept or reject any or all the bids without assigning any reason whatsoever.

## 8 Quantity Variation

- 8.1 Depending on the final requirement, at the time of the award of the Contract, the Purchaser may increase or decrease the quantities by twenty five percent (25%) of the indicated quantity.

9 Award of Contract

- 9.1 The Purchaser shall award the Contract to the Bidder whose offer has been determined to be the lowest evaluated Bid. The Purchaser shall issue Notification of Award/ Purchase Order to the successful Bidder. Until a formal Contract is prepared and executed, the Notification of Award/Purchase Order shall constitute a binding Contract.

10 Delivery Schedule

- 10.1 The supply of the Goods and related service shall be completed within **two months** from the date of issue of the Purchase Order/ signing of the contract.

11 Performance Security

- 11.1 The Supplier shall be required to furnish Performance Security of 10% of the quoted price in the form of cash warrant, demand draft or unconditional Bank Guarantee in the name of Chief Executive Officer, Bhutan Telecom issued by a financial institution enforceable in any Banks in Bhutan, which shall be furnished upon issuance of notification of the award. Performance Security shall be valid till the end of warranty period and will be returned after the end of warranty period.

12 Liquidated Damage

- 12.1 If the Supplier fails to deliver any or all of the Goods by the date(s) of delivery or fails to perform the Related Services within the period specified in the Contract/ Purchase Order, the Purchaser shall deduct Liquidated Damages at the rate of **0.1%** per day for each day to a maximum of 10% of the total PO value.

13 Payment Terms

- 13.1 **100% payment** shall be released on receipt of full quantity of materials and no part payment shall be entertained during the execution of the supply order.
- 13.2 At the time of release of payment, Tax shall be deducted at Source [TDS] from the gross amount of bills as per the Income Tax Act of the Bhutan. The Purchaser shall furnish necessary TDS Certificate to the Bidders, issued by the Department of Revenue & Customs, RGoB.

14 Warranty Period

- 14.1 The Supplier shall provide the warranty for a period of **one year**, for the goods to be supplied and confirm that if any faults are detected within the warranty period in the supplied/installed Goods, the Supplier shall be bound to rectify the fault or replace the Goods as the case may be. The performance security shall be used to cover the cost of supplies not delivered or defective items not replaced or rectified.
- 14.2 Any goods found defective during the warranty period shall be replaced/ repaired by the supplier at his cost. If the supplier fails to rectify and or replace the defective goods, the Purchaser shall do it at

the cost of the supplier.

15 Submission of Bid

15.1 The Bidder shall submit the Bid Submission Form using the Form in the Annexure I if so required: This form must be completed without any alterations to its format, and no substitutes shall be accepted. All blank spaces shall be filled in with the information requested.

15.2 As such a bid in which the Bid Submission Form not duly filled, signed and sealed by the bidder shall be rejected.

16 Termination

16.1 The Purchaser may, by written notice, terminate the Purchase Order or Contract in whole or in part at any time for its convenience:

16.1.1 If the Supplier fails to perform any other terms and conditions specified with the Purchase Order/ Contract, or exceeds the maximum amount of Liquidated Damages; and

16.1.2 If the Supplier fails to perform any other obligation(s) under the Purchase Order / Contract, and if the Supplier does not take any remedial action within a period of **one month** after receipt of a notice of default from the Purchaser specifying the nature of the default(s).

17 Governing Law

17.1 The Contract/ Purchase Order shall be governed by and interpreted in accordance with the Laws of Bhutan.

18 Dispute Resolution

18.1 Any settlement of dispute or arbitration of matter arising from the contract shall be settled as per the Alternative Dispute Resolution Act of Bhutan 2013 for Bhutanese Supplier and United Nations Commission on International Trade Law [UNCITRAL] Arbitration Rules of 1976 for International Supplier and will be binding for both parties.

Part III: Forms:

**Annexure-I Bid Submission Form**

*[The Bidder shall fill in this form in accordance with the instructions indicated. No alterations to its format shall be permitted and no substitutions shall be accepted.]*

Date ..... *[insert date of Bid submission]*

Tender No.....*[insert number ]*.

To : *[insert complete name of the Purchaser]*

We, the undersigned, declare that:

- (a) We have examined and have no reservations to the Bidding Documents, including Addenda number.....*[insert the number and date of issue of each addendum];*
- (b) We offer to supply in conformity with the Bidding Documents and in accordance with the Schedule of Supply the following Goods and Related Services: *[insert a brief description of the Goods and Related Services];*
- (c) The total price of our Bid, excluding any discounts offered in item is: *[insert the Bid Price in words and figures, indicating the various amounts and their respective currencies];*
- (d) The discounts offered and the methodologies for their application are:

*Discounts.* If our Bid is accepted, the following discounts shall apply: *[Specify in detail each discount offered and the specific item of the Schedule of Supply to which it applies.]*

*Methodology of Application of the Discounts.* The discounts shall be applied using the following methodology: *[Specify in detail the methodology that shall be used to apply the discounts]*;

- (e) Our Bid shall be valid for a period of *[insert number]* from the date fixed for the Bid submission deadline and it shall remain binding upon us and may be accepted at any time before expiry of that period;
- (f) If our Bid is accepted, we commit to provide a Performance Security in accordance with Clause 15 for the due performance of the Contract;
- (h) We, including any subcontractors or suppliers for any part of the Contract, have nationality from eligible countries, viz: *[insert the nationality of the Bidder, including that of all parties that comprise the Bidder if the Bidder is a JV/C, and the nationality each subcontractor and supplier]*
- (i) We have no conflict of interest;
- (j) Our firm, its affiliates or subsidiaries - including any subcontractors or suppliers for any part of the contract - has not been declared ineligible by the Purchaser under the laws or official regulations of Bhutan;
- (k) We have read the terms and conditions carefully, understood and agree to comply with all the clauses which are mentioned therein. In case of any breach of any condition on our part, we shall be liable for actions as per terms and conditions of the Contract.
- (l) We understand that this Bid, together with your written acceptance thereof included in your notification of award, shall constitute a binding contract between us, until a formal contract is prepared and executed.
- (m) We understand that you are not bound to accept the lowest evaluated Bid or any other Bid that you may receive.
- n) We accept the Vendor Performance Management System.

Signed: \_\_\_\_\_ *[insert signature of person whose name and capacity are shown]*

In the capacity of \_\_\_\_\_ *[insert legal capacity of person signing the Bid Submission Form]*



Name: \_\_\_\_\_ [insert complete name of person signing the Bid Submission Form]

Duly authorized to sign the bid for and on behalf of: \_\_\_\_\_ [insert complete name of Bidder]

Dated on \_\_\_\_\_ day of \_\_\_\_\_ [insert date of signing]

*Annexure II- Performance Security Form*

[The bank, as requested by the successful Bidder, shall fill in this form in accordance with the instructions indicated] Date: [insert date (as day, month, and year) of Bid submission]

IFB No. and title: [insert no. and title of bidding process]

Bank's Branch or Office: [insert complete name of Guarantor]<sup>[1]</sup> **Beneficiary:** [insert complete name of The company]<sup>[2]</sup> **PERFORMANCE GUARANTEE No.:** [insert Performance Guarantee number]

We have been informed that [insert complete name of Supplier] (hereinafter called "the Supplier") has entered into Contract No. [insert number] dated [insert day and month], [insert year] with you, for the supply of [description of Goods and related Services] (hereinafter called "the Contract").

Furthermore, we understand that, according to the conditions of the Contract, a Performance Guarantee is required.

At the request of the Supplier, we hereby irrevocably undertake to pay you any sum(s) not exceeding [insert amount(s)]<sup>1</sup> in figures and words upon receipt by us of your first demand in writing declaring the Supplier to be in default under the Contract, without cavil or argument, or you needing to prove or to show grounds or reasons for your demand or the sum specified therein.

This Guarantee shall expire no later than the [insert number] day of [insert month] [insert year],<sup>2</sup> and any demand for payment under it must be received by us at this office on or before that date. We agree to a one-time extension of this Guarantee for a period not to exceed [six months] [one year], in response to The company's written request for such extension, such request to be presented to us before the expiry of the Guarantee.

[signatures of authorized representatives of the bank and the Supplier]

*Annexure III- Contract Forms*

*[The successful Bidder shall fill in this form in accordance with the instructions indicated]*

THIS CONTRACT AGREEMENT made the *[insert number]* day of *[insert month]*, *[insert year]*,

BETWEEN

1. (1) *[insert complete name of Purchaser]*, a *[insert description of type of legal entity, for example, an agency of the Ministry of..... of the Government of Bhutan, or corporation incorporated under the laws of Bhutan]* and having its principal place of business at *[insert address of Purchaser]* (hereinafter called “The company”), and [SEP]
2. (2) *[insert name of Supplier]*, a corporation incorporated under the laws of [SEP] *[insert country of Supplier]* and having its principal place of business at *[insert address of Supplier]* (hereinafter called “the Supplier”). [SEP] WHEREAS The company invited Bids for certain Goods and ancillary services, viz., *[insert brief description of Goods and Services]* and has accepted a Bid by the Supplier for the supply of those Goods and Services in the sum of *[insert Contract Price in words and figures, expressed in the Contract currency/ies]* (hereinafter called “the Contract Price”). [SEP] NOW THIS AGREEMENT WITNESSETH AS FOLLOWS:

In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract referred to. [SEP]

The following documents shall constitute the Contract between The company and the Supplier, and each shall be read and construed as an integral part of the Contract, viz.: [SEP]

- (a) This Contract Agreement; [SEP]
- (b) The Special Conditions of Contract; [SEP]

- (c) The General Conditions of Contract; [L]  
[SEP]
- (d) Technical Requirements (including Schedule of Supply and Technical Specifications.) [L]  
[SEP]
- (e) The Supplier's Bid and original Price Schedules; [L]  
[SEP]
- (f) The company's Notification of Award of Contract; [L]  
[SEP]
- (g) The form of Performance Security; [L]  
[SEP]
- (h) The form of Bank Guarantee for Advance Payment; [L]  
[SEP]
- (i) *[Insert here any other document(s) forming part of the Contract]* [L]  
[SEP]

This Contract shall prevail over all other Contract documents. In the event of any discrepancy or inconsistency within the Contract documents, then the documents shall prevail in the order listed above.

In consideration of the payments to be made by The company to the Supplier as

- 3. hereinafter mentioned, the Supplier hereby covenants with The company to provide the Goods and Services and to remedy defects therein in conformity in all respects with the provisions of the Contract.
- 4. The company hereby covenants to pay the Supplier in consideration of the provision of the Goods and Related Services and the remedying of defects therein, the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.
- 5. IN WITNESS whereof the parties hereto have caused this Agreement to be executed in accordance with the laws of Bhutan on the day, month and year indicated above.
- 6. For and on behalf of The company Signed: *[insert signature]*
- 7. in the capacity of *[insert title or other appropriate designation]* [L]  
[SEP] in the presence of *[insert signature]* *[insert identification of official witness]*
- 8. For and on behalf of the Supplier [L]  
[SEP] Signed: *[insert signature of authorized representative(s) of the Supplier]*
- 9. in the capacity of *[insert title or other appropriate designation]* [L]  
[SEP] in the presence of *[insert signature]* *[insert identification of official witness]*

*Annexure IV- Technical Specifications:*

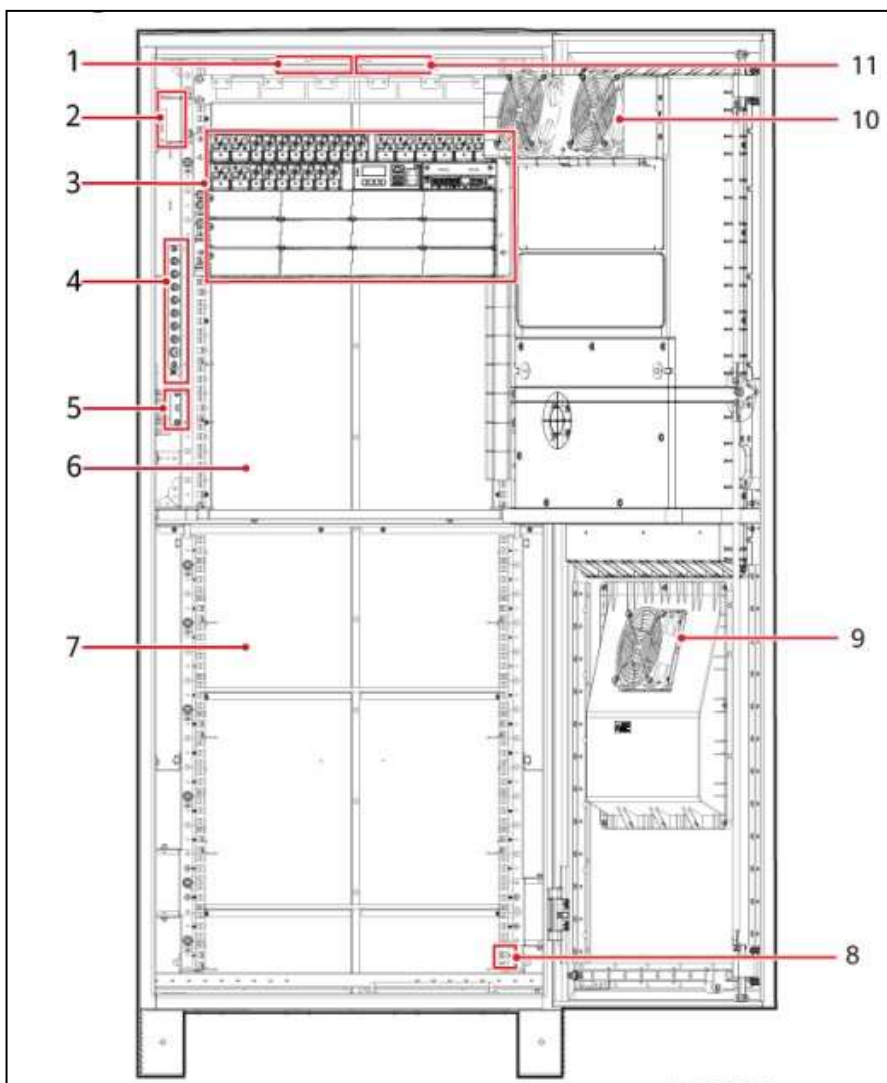
1. Please refer Material Description and model Number
2. Please submit datasheet / Catalogue:

Technical Specifications for conducting of POC

|                                      |                       |  |
|--------------------------------------|-----------------------|--|
| <b>System</b>                        | Dimension (W × D × H) | 650mm*650mm*1600mm (including base and protruding part)  |
|                                      | Weight                | < 160 kg (without rectifier modules, battery and wrapper)  |
|                                      | Installation Mode     | Floor Mounted  |
|                                      | Cabling Mode          | From the bottom  |
|                                      | Grounding Bar         | 7 × M6, 1 × M8   |
|                                      | Cable Hole            | 8 x 43 mm diameter cable hole  |
|                                      | Security Standards    | IEC60950   |
|                                      | EMC                   | EN 55032 Class A   |
| Equipment Cabin                      | Inner Rack & Space    | 8 U, 19-inch rack  |
|                                      | Protection Level      | IP55 (EN 60529)  |
|                                      | Cooling Mode          | Heat exchanger, cooling capacity@150W/K  |
| Battery Cabin                        | Battery Type          | Max 4 Pcs Li-Battery of 48V/100 Ah or 48V/150 Ah (12 U)  |
|                                      | Protection Level      | IP34 (EN 60529)  |
|                                      | Cooling Mode          | Direct ventilation heat dissipation; Average temperature of the battery compartment < 5°C+ ambient temperature |
| Rectifier (3kW x 5 modules)          | Input Voltage         | Single-phase/dual-live wire: 180–280 Vac   |
|                                      | Output Voltage        | Normal mode: -42Vdc ~ -58Vdc (Adjustable output voltage); Rated value: -48Vdc                                  |
|                                      | Efficiency            | >97%   |
|                                      | Working Temperature   | -40°C to +75°C   |
| Solar MPPT Modules (3kW x 5 modules) | Input Voltage         | 58 to 250 V DC   |
|                                      | Output Voltage        | 42 Vdc to 58 Vdc, rated voltage: 53.5 Vdc/57 Vdc   |
| ATS/AMF Panel                        | 20 kVA/16kW           | Single Phase, 230 V, 50 Hz   |
| DC Distribution                      | Output Voltage        | Normal mode: 42VDC - 58VDC, rated value: 53.5VDC   |
|                                      | Battery Branch        | 3 × 200A MCB   |
|                                      | LLVD branch           | 2 × 125A MCB, 3 × 63A MCB  |

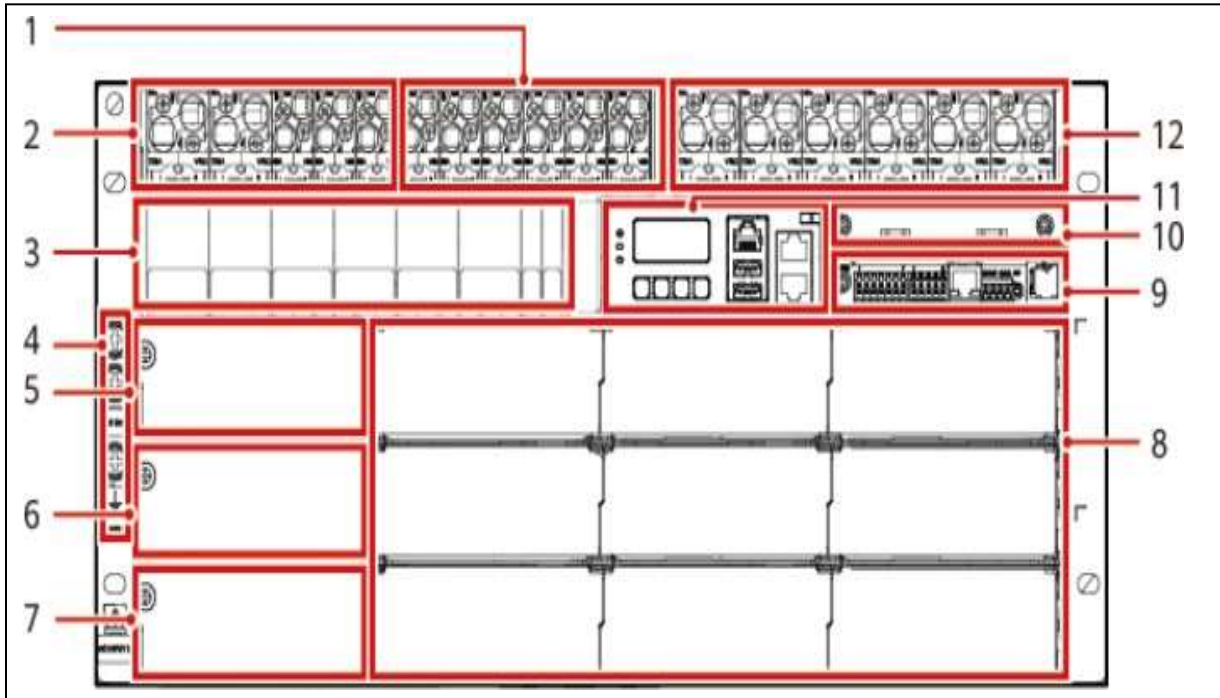
|                 |                    |  |
|-----------------|--------------------|--|
|                 | BLVD branch        | 2 × 63A MCB, 2 × 32A MCB, 2 × 16A MCB  |
|                 | SPD                | 10kA/20kA (8/20μs)   |
| AC Distribution | Input Voltage      | Single-phase/dual-live wire: 180–280 Vac                                     |
|                 | Input Capacity     | 1X100A/DP MCB  |
|                 | Output Capacity    | 2X 10 A MCB, 2X 20 A MCB   |
|                 | SPD                | Class B, 30/60 kA (8/20 μs)  |
| Controller      | Signal Input       | 2 AI (battery temp., ambient temp.)<br>4 DI (gate, smoke, water, 1 reserved) |
|                 | Alarm Output       | 8 DO   |
|                 | Communication Port | RS232, RS485, CAN, FE  |

|                            |                                    |  |
|----------------------------|------------------------------------|--|
|                            | Storage capacity                   | Up to 1000 historical records  |
|                            | Display mode                       | LCD, support optional mobile APP   |
|                            | Networking mode                    | IP, GPRS, In-band  |
| Environment                | Operating temperature              | -40°C to +65°C   |
|                            | Storage temperature                | -40°C to +70°C   |
|                            | Operating humidity                 | 5% - 95% (non-condensing)  |
|                            | Altitude                           | 0 - 4000m (High temperature derating in the environment of 2000m - 4000m, the operating temperature is reduced by 1°C for every 200m increase)   |
| Smart Site Monitoring Unit | Must be compatible with Huawei RMS | <p>To be able to monitor the parameters for the following:</p> <ul style="list-style-type: none"> <li>- Diesel Generator (Voltage, Power, Current, Fuel Level, LLOP, Battery Voltage, failed to start, etc.</li> <li>- Telecom Battery: Voltage, Current, Charging, Discharging, back up time, etc</li> <li>- Solar Systems: Solar Voltage, Current, Power, etc</li> <li>- Load current, voltage, power, etc</li> <li>- Grid Power Supply voltage, current, power</li> <li>- Environmental: Temperature, Water leak detector, smoke sensor, CCTV, etc</li> </ul> |



- 1. Smoke Sensor
- 2. Power Transfer Box for Temperature Control Device
- 3. DC PDU, ACPDU, Controller
- 4. Ground Bar
- 5. Digital Temperature and Humidity Sensor
- 6. Space for Equipment
- 7. Space for Batteries
- 8. Water Sensor
- 9. Direct Ventilation Unit
- 10. Heat Exchanger
- 11. Light

1.2DC Distribution Unit and Site Monitoring Unit



1. DCDB 1
2. DCDB 2
3. Space for expansion of circuit breakers
4. Ground Screw
5. Space for AC output module
6. Space for AC input module 1
7. Space for AC inout module 2
8. Space for Rectifier Modules/MPPT Modules
9. Interface Module
10. Space for the expansion of modules
11. Site Monitoring Unit
12. Battery Circuit Breakers



### 1.3 POC Compliance Statement for Scenario 2: Advanced Solar Hybrid (Grid + DEG + Solar)

| Item                                 | Description           |  | Complied Or Not |
|--------------------------------------|-----------------------|--|-----------------|
| System                               | Dimension (W × D × H) | 650mm*650mm*1600mm (including base and protruding part)  |                 |
|                                      | Weight                | < 160 kg (without rectifier modules, battery and wrapper)  |                 |
|                                      | Installation Mode     | Floor Mounted  |                 |
|                                      | Cabling Mode          | From the bottom  |                 |
|                                      | Grounding Bar         | Approx.. 7 × M6, 1 × M8  |                 |
|                                      | Cable Hole            | Approx. 8 x 43 mm diameter cable hole  |                 |
|                                      | Security Standards    | IEC60950 or equivalent   |                 |
|                                      | EMC                   | EN 55032 Class A   |                 |
| Equipment Cabin                      | Inner Rack & Space    | 8 U, 19-inch rack  |                 |
|                                      | Protection Level      | IP55 (EN 60529)  |                 |
|                                      | Cooling Mode          | Heat exchanger, cooling capacity@150W/K  |                 |
| Battery Cabin                        | Battery Type          | Max 4 Pcs Li-Battery of 48V/100 Ah or 48V/150 Ah (12 U)  |                 |
|                                      | Protection Level      | IP34 (EN 60529)  |                 |
|                                      | Cooling Mode          | Direct ventilation heat dissipation; Average temperature of the battery compartment < 5°C+ ambient temperature |                 |
| Rectifier (3kW x 4 modules)          | Input Voltage         | Single-phase/dual-live wire: 180–280 Vac   |                 |
|                                      | Output Voltage        | Normal mode: -42Vdc ~ -58Vdc (Adjustable output voltage); Rated value: -48Vdc                                  |                 |
|                                      | Efficiency            | >97%   |                 |
|                                      | Working Temperature   | -40°C to +75°C   |                 |
| Solar MPPT Modules (3kW x 4 modules) | Input Voltage         | 58 to 250 V DC   |                 |
|                                      | Output Voltage        | 42 Vdc to 58 Vdc, rated voltage: 53.5 Vdc/57 Vdc   |                 |
| ATS/AMF Panel                        | 20 kVA/16kW           | Single Phase, 230 V, 50 Hz   |                 |
| DC Distribution                      | Output Voltage        | Normal mode: 42VDC - 58VDC, rated value: 53.5VDC   |                 |
|                                      | Battery Branch        | 3 × 200A MCB   |                 |
|                                      | LLVD branch           | 2 × 125A MCB, 3 × 63A MCB  |                 |
|                                      | BLVD branch           | 2 × 63A MCB, 2 × 32A MCB, 2 × 16A MCB  |                 |

|                            |                                    |  |  |
|----------------------------|------------------------------------|--|--|
|                            | SPD                                | 10kA/20kA (8/20µs)   |  |
| AC Distribution Controller | Input Voltage                      | Single-phase/dual-live wire: 180–280 Vac   |  |
|                            | Input Capacity                     | 1X100A/DP MCB  |  |
|                            | Output Capacity                    | 2X 10 A MCB, 2X 20 A MCB   |  |
|                            | SPD                                | Class B, 30/60 kA (8/20 µs)  |  |
|                            | Signal Input                       | 2 AI (battery temp., ambient temp.)<br>4 DI (gate, smoke, water, 1 reserved)   |  |
|                            | Alarm Output                       | 8 DO   |  |
|                            | Communication Port                 | RS232, RS485, CAN, FE  |  |
|                            | Storage capacity                   | Up to 1000 historical records  |  |
|                            | Display mode                       | LCD, support optional mobile APP   |  |
|                            | Networking mode                    | IP, GPRS, In-band  |  |
| Environment                | Operating temperature              | -40°C to +65°C   |  |
|                            | Storage temperature                | -40°C to +70°C   |  |
|                            | Operating humidity                 | 5% - 95% (non-condensing)  |  |
|                            | Altitude                           | 0 - 4000m (High temperature derating in the environment of 2000m - 4000m, the operating temperature is reduced by 1°C for every 200m increase)   |  |
| Smart Site Monitoring Unit | Must be compatible with Huawei RMS | <p>To be able to monitor the parameters for the following:</p> <ul style="list-style-type: none"> <li>- Diesel Generator (Voltage, Power, Current, Fuel Level, LLOP, Battery Voltage, failed to start, etc.</li> <li>- Telecom Battery: Voltage, Current, Charging, Discharging, back up time, etc</li> <li>- Solar Systems: Solar Voltage, Current, Power, etc</li> <li>- Load current, voltage, power, etc</li> <li>- Grid Power Supply voltage, current, power</li> <li>- Environmental: Temperature, Water leak detector, smoke sensor, CCTV, etc</li> </ul> |  |
| Compliance and standards   |                                    | Must meet relevant Government or industry standards and certifications, such as RoHS, REACH, EN60529 IP (Ingress Protection) or other local regulations. This also ensures that environmental protection and safety requirements are met.  |  |

**19 Technical Support and Queries:**

1. [manager.powerandinfra@bt.bt](mailto:manager.powerandinfra@bt.bt)
2. [procurement@bt.bt](mailto:procurement@bt.bt)