

Proposed Solar System for UNOPS Sri Lanka Head Office

Bill of Quantities



United Nations Office for Project Services
BILLS OF QUANTITIES
Proposed Solar System for UNOPS Sri Lanka Head Office
GRAND SUMMARY

#	Description	Amount
		USD
Bill No 1	Solar System for UNOPS Sri Lanka	
	Sub Total - 1	
	DDT - Discount (if any)	
	Sub Total - 2 (TOTAL EXCLUDING VAT)	
	ADD - 15% VAT	
	Grand Total Including VAT	
	BID PRICE (EXCLUDING VAT)	

Amount in Word:

USD

Tenderer's Suspended VAT Reg No. -

Name of Tenderer :

Address :

Signature and Seal :

Witnesses :-

1. Signature : 2. Signature :

Name: Name:

Address :..... Address

.....

NO	DESCRIPTION	UNIT	QTY	RATE - USD	AMOUNT - USD
B1	<u>SOLAR SYSTEM FOR UNOPS SRI LANKA</u>				
	Rate shall include for necessary chasings, trenching, conduits, cables, cable trays, fittings and clips, cutting holes and chases in brick work/ block work/ concrete work complete with all necessary accessories such as sockets, connections, cable glands and boxes, hardware clips, soldering and jointing materials etc., for proper installing and laying of cables.	Note			
	The tenderer shall submit the following information on the items/equipment quoted for together with the tender.	Note			
	a. Make				
	b. Model No	Note			
	c. Technical data				
	d. Country of manufacture	Note			
	Off grid Hybrid inverter shall meet the code and standard of CE, VDE0126-1, G83/1-1, IEC 61727, IEC62116, Shall be Approved make by Sri Lanka Sustainable Energy Authority and Sri Lanka.	Note			
B1.1	Supply, Delivery, Installation, Testing and Commissioning of 25 kW capacity Solar Hybrid Inverter comply with the specification herein. Please refer to the full specification as well. Note: 1. Brand of the Hybrid Inverter should have Sustainable Energy Authority and CEB approval. 2. Rate shall include for diverting the connection from existing inverter (15kW) to the Hybrid inverter (25kW)	Item	1.00		-
	i) MPPT facility				
	ii) Grid tie facility				
	iii) Wall mounted Cabinet to IP54 complete with AC, DC breakers and a energy meter				
	iv) System monitoring, Remote diagnosis and Data storage & Visualization Display				
	viii) Surge protective devices				
	ix) Synchronizing of battery and solar power with CEB and Generator.				
	ix) Prioritization facility to charge the battery only from solar power. And if required, CEB charging also shall be possible.				
B1.2	Supply, Delivery, Installation, Testing and Commissioning of 40 kWh Lithium Iron battery system with rack/s, cables, cooling system and all the necessary accessories comply with the specification.	Item	1.00		-

NO	DESCRIPTION	UNIT	QTY	RATE - USD	AMOUNT - USD
B1.3	Supply and Installation of Battery room internal wiring complete with DC and AC MCBs/Isolators AC and DC cables, cable containments, Earth cables and Earth terminal (c/w enclosure), surge arrestors to complete the system as per provided drawings.	Item	1.00		-
B1.4	Supply and Installation of 2x 2C 4mm2 Cu/PVC/PVC cable from DC terminal box; DC terminal Box price need to be included in the rate, to new Hybrid inverter complete with required cable containment. Note. DC terminal box to be installed at existing inverter location.	Item	1.00		-
B1.5	Supply and Installation of 4C 16mm2 Cu/PVC/PVC cable from AC terminal box; AC terminal Box price need to be included in the rate, to new Hybrid inverter complete with required cable containment. Note. AC terminal box to be installed at existing inverter location.	Item	1.00		-
B1.6	Supply and Installation of 1C 16mm2 Cu/PVC earth cable from Earth terminal box at battery room to new earth pit which to be installed at ground level. Location should be jointly finalized with UNOPS engineer.	Item	1.00		-
B1.7	Supply and installation of earth pit comply with the details provided in the drawing. the final location to be decided at site.	Item	1.00		-
B1.8	Supply, Delivery, Installation, Testing and Commissioning of 63A/4P ATS panel for CEB and Generator supply with Cables and all the necessary accessories.	Item	1.00		-
B1.9	Supply and installation of 9000btu , wall mounted, split type airconditioner unit complete with wiring, piping, condensate drain up pump, remote controller, insulation, control system and all other accessories necessary for full operation.	Item	1.00		-
B1.10	Supply and installation of light point wiring complete with 2x1 core 1.5mm2 Cu/PVC/PVC + 1.5mm2 Cu/PVC earth cable including light switch uPVC conduit	Nos	4.00		-
B1.11	Supply and installation of 13A SO (for Air conditioning) point wiring complete with 2x1 core 2.5mm2 Cu/PVC/PVC + 2.5mm2 Cu/PVC earth cable including light switch uPVC conduit	Nos	1.00		-
B1.12	Supply and Installation of 15W, 4500K LED Ceiling recessed down light	Nos	4.00		-
B1.13	Supply and Installation of 5W LED Emergency lamp with 2 hr battery backup	Nos	1.00		-

NO	DESCRIPTION	UNIT	QTY	RATE - USD	AMOUNT - USD
B1.14	Supply and installation of single station Photoelectric Smoke Detector c/w built-in 85 db/3m alarm horn and provision to connect external alarm horn. The device shall be operated with 9V battery. All as per detailed drawing.	Item	1.00		-
B1.15	3kg, CO2 portable fire extinguisher fully charged complete with metal bracket fixed on to wall at the locations shown in the drawings.	Nos	1.00		-
B1.16	6kg, ABC Dry Powder fire extinguisher fully charged complete with metal bracket fixed on to wall at the locations shown in the drawings.	Nos	1.00		-
B1.17	Supply and Installation of Powder coated 100mmx50mm GI trunking inside the battery room complete with necessary fixing accessories.	Item	1.00		-
B1.18	Supply and installation of white colour powder coated aluminium shop front partitions with aluminium framed single swing door as per the detailed drawing. 1. Approximate size of partition: 12 m2 2. Approximate size of top covering/ceiling : 9 m2 3. Door Size : 1m x 2.1m	Item	1.00		-
B1.19	Testing of existing ESE (Early Streamer Emission) Lightning Protection System; Measure the Down Conductor Resistance and Earth Electrode Resistance, and verify that the existing system provides adequate coverage for the proposed Solar equipment room.	Item	1.00		-
	<u>TESTING AND COMMISSIONING</u>				
B1.20	Allow for testing and commissioning of the Solar PV System to the entire satisfaction of the engineer and submission of commissioning report in triplicate.	Item	1.00		-
	<u>Shop drawings and As built drawings</u>				
B1.21	Allow for submission of 3 sets of shop drawings, as built drawings and e-copies, technical information and manuals.	Item	1.00		-
	<u>Any Other Item</u>				
B1.22	Allow for any other item not specified herein, but required for satisfactory operation of the solar power Supply System. All such item should be listed and unit rates shall be provided.	Item	1.00		-
	TOTAL CARRIED TO GRAND SUMMARY				-