Date: 5 February 2026

Request for Quotation (RFQ)

Project: SLIS Solar Power Module Nertitti Healthcare Center, Jebal Marra

Location: Central Darfur State - Sudan

Issued by: Save Lives In Sudan – Engineering Committee

1. Background

Save Lives In Sudan is a humanitarian initiative that provides solar energy systems to hospitals and health centers affected by prolonged electricity outages caused by the Sudan war. For more information visit https://swedishsudanese.org/website/project/save-lives-in-sudan

2. Scope of Work

The selected vendor shall be fully responsible for:

- Site assessment
- Supply of all solar equipment
- Transportation and delivery to site
- Installation and commissioning
- Training of hospital technical staff
- Warranty support and maintenance during warranty period

3. Technical Requirements

Provision and installation services of a 5.5 kW Standalone Solar Power System with MPPT Inverter and Battery Storage system. See the minimum technical requirements specifications in Appendix A.

4. Submission Deadline

Deadline: 12 February 2025 at 23:59 Sudan time (22:59 CEST). Offers received after this deadline will not be considered. *Send your quotation & profile to: info@swedishsudanese.org. For any questions call: +46 707 899 849*

5. Evaluation Criteria

Evaluation will be based on technical compliance, vendor experience, delivery timeline, warranty terms, and total cost.

6. Payment terms

100% maximum 10 European working days after delivery on site when installation is completed.

Appendix A - Specifications

The following technical requirements represent the minimum requirements for the system and are used for the evaluation of the provided quotations.

Solar PV Panels specification:

The panels shall fulfill the following specifications.

Qty: 4 panels

Solar panel brand	**Jinko-JKM445M -6TL4-B**	**Jinko-JKM550M -72HL4**
Maximum Power (Pmax)	445 watts	550 watts
Maximum power voltage (Vmp)	34V	40.90V
Maximum power current(Imp)	13.09A	13.45A

Open circuit voltage (Voc)	41.1V	49.62V
Short circuit current (Isc)	13.77A	14.03A
Module efficiency (STC)	21.01%	21.29%
Maximum system voltage	1000V DC (IEC)	1000V DC (IEC)
Operating temperature	-40C ~+85C	-40C~ +85C
Maximum series fuse rating	25A	25A
Power tolerance	0 ~ +3%	0 ~ +3%
Temperature coefficient of Pmax	-0.35%/C	-0.35%/C
Temperature coefficient of Voc	-0.28%/C	-0.28%/C
Temperature coefficient of Isc	0.048%/C	0.048%/C
Normal Operating cell temperature (NOCT)	45±2 C	45±2 C

Warranty for manufacturing defects	10 years	10 years

Inverter Specification:

The selected inverters shall fulfill the following specifications

Qty	1
Brand	Recommendation: Euronet
Rated power	5500VA/5500W
Input	
Voltage	230V AC
Selectable voltage range	170-280V AC (For personal computers) 90-280V AC (For home appliance)
Frequency range	50Hz/60Hz (Auto sensing)
High PV input voltage range	120-500VDC
Output	

AC voltage regulations	230V AC± 5%
Surge power	11000VA
Efficiency (peak) PV to INV	97%
Efficiency (peak) Battery to INV	94%
Battery and AC charger	
Battery voltage	48VDC
Floating charge voltage	54VDC
Overcharge protection	63VDC
Maximum charge current	80A
Solar charger	
Maximum PV Array power	6000W
MPPT range@ operating voltage	120~450VDC
Maximum PV Array open circuit voltage	500VDC
Maximum charging current	100A

Maximum efficiency	98%
Physical	
Dimension D*W*H (mm)	TBD
Net weight (Kg)	TBD
Communication interface	USB/RS232/GPRS/Wifi
Operating environment	
Humidity	5% to 95% relative humidity
Operating temperature	0C~55C
Specific requirements the inverter shall fulfill	
Pure sine wave solar inverter	
Wifi and GPRS available for iOS and Android	
Built-in MPPT solar charger with at least 80A charging current	
Built-in anti dusk kit for harsh environment	
Smart battery charge design to optimize battery	
Solar energy is provided directly to the load first	
Warranty	Minimum 1 year

Batteries Specification

Qyt	4
Battery type	Lead-acid

Battery capacity	200Ah
Warranty	Minimum 1 year
Brand	Recommended:GSB,Amit,Motoma, Euronet,NorthStar, LIVFAST
Year of manufacturing	Not more than six months from the date of installation

Wiring and Auxiliary equipment specification:

DC Cables from PV to INV	TBD based on size/current graph for the selected cables
DC Cables from INV to Battery	TBD based on size/current graph for the selected cables
AC Cables from INV to system	TBD based on size/current graph for the selected cables
Breakers	MCB selection will be confirmed after providing and reviewing the selected MCB datasheet
M4 connectors	The connecters shall be used for interconnection between solar panels, also to connect the DC cables toward the inverters
Battery leads	The battery shall be connected using special battery leads with minimum size 10mm2
Washer and battery connectors	The battery shall be connected using washers and battery connectors (copper connectors only shall be used)