# STANDARD FORM OF BIDDING DOCUMENT FOR PROCUREMENT OF GOODS

TENDER-2018/35

TENDER DOCUMENT FOR PROVIDING AND INSTALLATION OF SOLAR ENERGY SYSTEM AT SCHOOL BUILDING AND SITE OFFICE MALIR CAMPUS SMIU KARACHI.

Name of Department	Directorate of Works and Services
Name of procuring agency	SINDH MADRESSATUL ISLAM
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## PRICE SCHEDULE TO BID

### NAME OF WORK: PROVIDING AND INSTALLATION OF SOLAR ENERGY SYSTEM AT SCHOOL BUILDING AND SITE OFFICE MALIR CAMPUS (SMIU, KARACHI)

## BILL OF QUANTITIES

#### A) School Building (Malir Campus)

Dower with Flash Report   SkV A Smart Hybrid Solar Power Inverter, With Priority base and load Sharing feature, Input Voltage Range of 90 - 280 V AC, Stand By Power Inverter   Voltage Range of 90 - 280 V AC, Stand By Power Consumption 2 W, Operating temperature -15 to 60 Degree Celsius, 95% Efficiency, 48 V DC Inverter, 2 Times Torque Bearing Capacity   Voltage Range of 90 - 280 V AC, Stand By Power Consumption 2 W, Operating temperature -15 to 60 Degree Celsius, 95% Efficiency, 48 V DC Inverter, 2 Times Torque Bearing Capacity   Voltage Range of 90 - 280 V AC, Stand By Power State Soaka or equivalent   Voltage Range of 90 - 280 V AC, Stand By Power State Soaka or equivalent   Voltage Range of 90 - 280 V AC, Stand By Power Range Soaka or equivalent   Voltage Range of 16 SWG (Internal Structure)   Voltage Range of 18 SWG (Internal Structure)   Voltage Range	ITEM NAME	Description	QTY	UNIT	UNIT	AMOUNT
Sky   Smart Hybrid Solar Power Inverter, With Priority base and load Sharing feature, Input Voltage Range of 90 - 280 V AC, Stand By Power Consumption 2 W, Operating temperature -15 to 60 Degree Celsius. 95% Efficiency. 48 V DC Inverter, 2 Times Torque Bearing Capacity    Battery Banks	The second secon	10 Years manufacturing warranty and 25 years linear performance warranty at least 80% output power with Flash Report	32	Nos.		408,0001-
Battery Mild Steel Sheets of 16 SWG (Internal Structure) for Battery Banks  AC/DC (PVC)Power cables of suitable sizes, (25mm + 16mm + 4mm etc.) of brands, Pakistan Cables, New age cables or equivalent per running feet  Mild Steel Galvanized Angle Iron (25mm x25mm x Amm) Frames with Mounting Structures (25mm x 25mm x 4mm) with hooks and ravel bolts suitable for installation of PV Panels to protect against wind power with direction adjustment capability subject to the satisfaction of the VTI administration  Circuit Breakers + DC Battery Breaker + Single Phase Input Beaker of LO, Schneider, LS or equivalent), Change Over by Pass Switch (LG, Schneider, LS or equivalent), MC4 PV connectors, Junetion Boxes, Nuts/Bolts, Thimbles (Chrome plated), PVC Cable Duct & conduits etc.	Solar Power	5kVA Smart Hybrid Solar Power Inverter, With Priority base and load Sharing feature, Input Voltage Range of 90 - 280 V AC, Stand By Power Consumption 2 W, Operating temperature -15 to 60 Degree Celsius. 95% Efficiency. 48 V DC Inverter,	2	Nos.	-/who-	141,600]-
Power AC/DC (PVC)Power cables of suitable sizes, (25mm + 16mm + 4mm etc.) of brands, Pakistan Cables, New age cables or equivalent per running feet  Mild Steel Galvanized Angle Iron (25mm x25mm x 4mm) Prames with Mounting Structures (25mm x 25mm x 4mm) with hooks and ravel bolts suitable for installation of PV Panels to protect against wind power with direction adjustment capability subject to the satisfaction of the VTI administration  Circuit Breakers + DC Battery Breaker + Single Phase Input Beaker of LG, Schneider, LS or equivalent), Change Over by Pass Switch (LG, Schneider, LS or equivalent), Change Over by Pass Switch (LG, Schneider, LS or equivalent), Thimbles (Chrome plated), PVC Cable Duct & conduits etc.		200 AH 12 V Battery Banks Liquid Tubular batteries Osaka or equivalent	4	Nos.	36,5501-	146,200/
Sizes, (25mm + 16mm + 4mm etc.) of brands, Pakistan Cables, New age cables or equivalent per running feet  Mild Steel Galvanized Angle Iron (25mm x25mm x 4mm) Prames with Mounting Structures (25mm x 25mm x 4mm) with hooks and ravel bolts suitable for installation of PV Panels to protect against wind power with direction adjustment capability subject to the satisfaction of the VTI administration  Circuit Breakers + DC Battery Breaker + Single Phase Input Beaker of LG, Schneider, LS or equivalent), Change Over by Pass Switch (LG, Schneider, LS or equivalent), MC4 PV connectors, Junction Boxes, Nuts/Bolts, Thimbles (Chrome plated), PVC Cable Duct & conduits etc.			1	Nos.	28501-	2.850
Mounting Structure  Mild Steel Galvanized Angle Iron (25mm x25mm x 4mm) Frames with Mounting Structures (25mm x 25mm x 4mm) with hooks and ravel bolts suitable for installation of PV Panels to protect against wind power with direction adjustment capability subject to the satisfaction of the VTI administration  Circuit Breakers + DC Battery Breaker + Single Phase Input Beaker of LG, Schneider, LS or equivalent), Change Over by Pass Switch (LG, Schneider, LS or equivalent), MC4 PV connectors, Junction Boxes, Nuts/Bolts, Thimbles (Chrome plated), PVC Cable Duct & conduits etc.	Power	sizes,(25mm +16mm + 4mm etc.) of brands, Pakistan Cables, New age cables or equivalent per	400	rft	113	45,000
Circuit Breakers + DC Battery Breaker + Single Phase Input Beaker of LG, Schneider, LS or equivalent), Change Over by Pass Switch (LG, Schneider, LS or equivalent), MC4 PV connectors, Junction Boxes, Nuts/Bolts, Thimbles (Chrome plated), PVC Cable Duct & conduits etc.		Mild Steel Galvanized Angle Iron (25mm x 25mm x 4mm) Frames with Mounting Structures (25mm x 25mm x 4mm) with hooks and ravel bolts suitable for installation of PV Panels to protect against wind power with direction adjustment capability subject to the satisfaction of the VTI administration	16	Nos.	4,250/-	loca 28
Cite tagethering Commissioning Testing and		Circuit Breakers + DC Battery Breaker + Single Phase Input Beaker of LG, Schneider, LS or equivalent), Change Over by Pass Switch (LG, Schneider, LS or equivalent), MC4 PV connectors, Innetion Boxes, Nuts/Bolts, Thimbles (Chrome	1	Job	32,400/-	32,400
	4		1	Job	50,000	50,000
SUB TOTAL (A)		SUB TOTAL (A)				894,0

.#	ITEM NAME	Description	QTY			2.5-894250
	Panels	250 Watts Polycrystalline Solar Panels (PV Cells of USA/ Canada/ German/ Japan or equivalent) with 131 years manufacturing warranty and 25 years linear performance warranty at least 80% output power with Flash Report	8	Nos.	UNIT PRICE	AMOUNT Coca Col
2.	Hybrid	Priority Base and load Sharing feature, Input Voltage Range of 90 - 280 V AC, Stand By Power Consumption 2 W, Operating temperature 15 to 60 Degree Celsius. 95% Efficiency. 48 V DC Inverter, 2 Times Torque Benring Capacity	1	Nos.	~ Socol-	48,0001-
3.	Battery Banks	200 AH 12 V Battery Banks Liquid Tubular batteries Osaka or equivalent	2	Nos.	36,5501.	73/00/2
4.	Battery Racks	Mild Steel Sheets of 16 SWG (Internal Structure) for Battery Banks	1	Nos.	2,850 -	28201
5.	Power	AC/ DC (PVC)Power cables of suitable sizes,(25mm +16mm + 4mm etc.) of brands, Pakistan Cables, New age cables or equivalent per running feet	200	rft	113	33,600
6.	Mounting Structure	Mild Steel Galvanized Angle Iron (25mm x25mm x 4mm) Frames with Mounting Structures (25mm x 25mm x 4mm) with hooks and ravel bolts suitable for installation of PV Panels to protect against wind power with direction adjustment capability subject to the satisfaction of the VTI administration	4	Nos.	4:2504	14000/21
7.	System accessories	Circuit Breakers + DC Battery Breaker + Single Phase Input Beaker of LG, Schneider, LS or equivalent), Change Over by Pass Switch (LG, Schneider, LS or equivalent), MC4 PV	1	Job	137120	10,1501-
8.	Site Services	Installation, Commissioning, Testing and Services. Transportation	1	Job	20000	م اصورها
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			GRA	ND TO	TAL (A+	1,191,750
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