METSEC CABLES LIMITED

DOSHI

SOLAR PRICE LIST

JUNE 2021

SAMBROOK CanadianSolar Schneider Electric Solar TE connectivity HUAWEI RITAR®

POLYCRYSTALLINE SILICON MODULE 200WP

Electrical Characteristics	
Module type	XJ200P
Pmax	200W
Tolerance	0-3W
Open-circuit Voltage（Voc）	44.22V
Short-circuit Current（Isc）	6.04A
Maximum Power Voltage（Vmp）	35.8V
Maximum Power Current（Imp）	5.59A
Maximum system voltage	1000 VDC
Maximum series fuse rating	15A
Temperature coefficient of Pmax	-0.41%/℃
Temperature coefficient of Voc	-0.33%/℃
Temperature coefficient of Isc	+0.03
Operating Temperature	-40～85℃

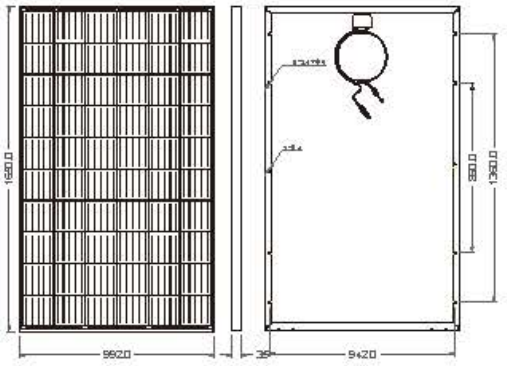
Mechanical Characteristics	
Dimension (mm)	1200*992*35mm
Weight (kg)	14.5kg
Number of cells	72(12x6)
Junction Box	IP67 rated
Output Cables	4mm², length: 900mm
Connector	MC4 compatible
Frame	Anodized Aluminium Alloy
Front Glass	3.2mm, low iron, tempered glass

POLYCRYSTALLINE SILICON MODULE 270WP

Electrical Data at STC

Module Type	Pmax	Imp	Vmp	Isc	Voc
XJ60P-260	260W	8.51A	30.6V	9.17A	37.2V
XJ60P-265	265W	8.60A	30.9V	9.22A	37.6V
XJ60P-270	270W	8.71A	31.0V	9.28A	37.9V
XJ60P-275	275W	8.81A	31.3V	9.37A	38.1V
XJ60P-280	280W	8.94A	31.4V	9.45A	38.3V
XJ60P-285	285W	9.06A	31.5V	9.54A	38.4V
XJ60P-290	290W	9.18A	31.6V	9.62A	38.6V
XJ60P-295	295W	9.29A	31.8V	9.69A	38.8V

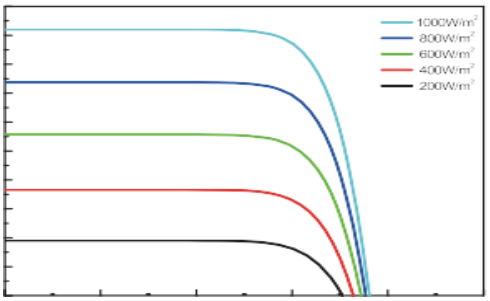
Dimension for PV Module



Maximum Rating

Operating Temperature	-40~+85℃
Maximum System Voltage	-20~+40℃
Class of Protection	Class II
Temperature	TUV 1500V/1000V DC
Maximum Over current Protection Rating	15A

I-V Curves of PV Module



Mechanical parameters

Cell Type	156.75×156.75mmpoly-crystalline
Cell Configuration	1640x992x35mm
Weight	60（6×10）
Dimension	18.5kg
Cables	PCS in series
Junction Box Frame	3.2mm, high transmission, low iron, tempered glass
Front Glass	IP67 Rated

12 years limited product warranty
First year guarantee no less than 97% power output
25 years guarantee no less than 80% power output

Characteristics

System Voltage:	The maximum voltage is promoted to 1500V and the module strings are extended by 50% which reduces the overall system BOS.
A Wide Range of Products:	Mono-crystalline module (270W-360W) Poly-crystalline module (260W-340W), depending on configurations. Guaranteed positive tolerance from 0-3% ensures power output reliability.
High Reliability:	Guaranteed mechanical resistance to severe weather conditions for reliable power output. Compliant with IEC 61215 and IEC 61730.
Traceability:	Flash report and embedded bar code ID for each module for complete traceability.
Low-light Performance:	Advanced glass and surface texturing allow for excellent performance in low - light environments.
Severe Weather Resilience:	Certified to withstand: wind load (2400 Pascal) and snow load (5400 Pascal).
Durability against extreme environmental conditions:	High salt mist and ammonia resistance certified by TUV NORD.
A Wide Range of Applications:	Independent systems (households, power supplies for remote areas, remote systems) and grid-connected photovoltaic power stations (residential, commercial, industrial power supply systems).

NEW

HiKu

SUPER HIGH POWER POLY PERC MODULE

395 W ~ 420 W

CS3W-395|400|405|410|415|420P

MORE POWER

- 24 % higher power than conventional modules
- Up to 4.5 % lower LCOE
  Up to 2.7 % lower system cost
- Low NMOT: 42 ± 3 °C
  Low temperature coefficient (Pmax): -0.36 % / °C
- Better shading tolerance

MORE RELIABLE

- Lower internal current, lower hot spot temperature
- Minimizes micro-crack impacts
- Heavy snow load up to 5400 Pa, wind load up to 3600 Pa*

25 years linear power output warranty*

12 years enhanced product warranty on materials and workmanship*

MANAGEMENT SYSTEMS CERTIFICATES

ISO 9001:2015 / Quality Management System
ISO 14001:2015/Standard of Environmental Management System
Iso 18001: 2007/International Standards for Occupational Health & Safety

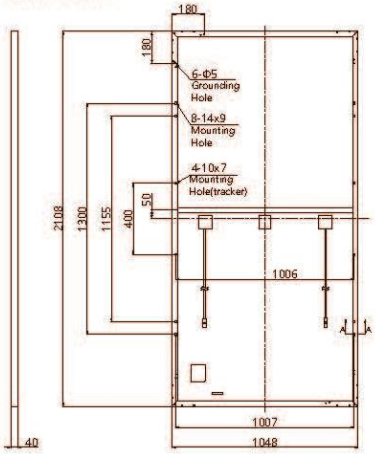
Price KShs 50.00 per WATT

CanadianSolar

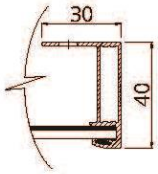
SUPER HIGH POWER POLY PERC MODULE
395 W ~ 420 W

ENGINEERING DRAWING (mm)

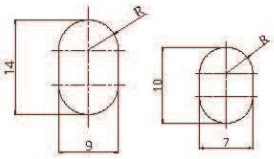
Rear View



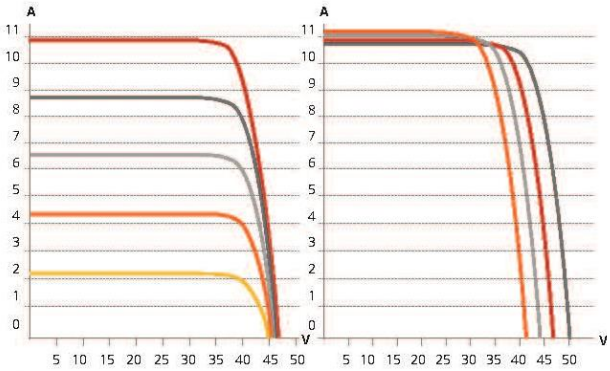
Frame Cross Section A-A



Mounting Hole



CS3W-400P / I-V CURVES



ELECTRICAL DATA | STC*

CS3W	395P	400P	405P	410P	415P	420P
Nominal Max. Power (Pmax)	395 W	400 W	405 W	410 W	415 W	420 W
Opt. Operating Voltage (Vmp)	38.5 V	38.7 V	38.9 V	39.1 V	39.3 V	39.5 V
Opt. Operating Current (Imp)	10.26 A	10.34 A	10.42 A	10.49 A	10.56 A	10.64 A
Open Circuit Voltage (Voc)	47.0 V	47.2 V	47.4 V	47.6 V	47.8 V	48.0 V
Short Circuit Current (Isc)	10.82 A	10.90 A	10.98 A	11.06 A	11.14 A	11.26 A
Module Efficiency	17.9%	18.1%	18.3%	18.6%	18.8%	19.0%
Operating Temperature	-40°C ~ +85°C					
Max. System Voltage	1500V (IEC/UL) or 1000V (IEC/UL)					
Module Fire Performance	TYPE 1 (UL 1703) or CLASS C (IEC 61730)					
Max. Series Fuse Rating	20 A					
Application Classification	Class A					
Power Tolerance	0 ~ + 10 W					

* Under Standard Test Conditions (STC) of irradiance of 1000 W/m², spectrum AM 1.5 and cell temperature of 25°C.

ELECTRICAL DATA | NMOT*

CS3W	395P	400P	405P	410P	415P	420P
Nominal Max. Power (Pmax)	294 W	298 W	302 W	305 W	309 W	313 W
Opt. Operating Voltage (Vmp)	35.8 V	36.0 V	36.2 V	36.4 V	36.6 V	36.8 V
Opt. Operating Current (Imp)	8.21 A	8.27 A	8.33 A	8.39 A	8.45 A	8.51 A
Open Circuit Voltage (Voc)	44.1 V	44.3 V	44.5 V	44.7 V	44.9 V	45.1 V
Short Circuit Current (Isc)	8.73 A	8.79 A	8.86 A	8.92 A	8.99 A	9.08 A

* Under Nominal Module Operating Temperature (NMOT), irradiance of 800 W/m² spectrum AM 1.5, ambient temperature 20°C, wind speed 1 m/s.

MECHANICAL DATA

Specification	Data
Cell Type	Poly-crystalline
Cell Arrangement	144 [2 X (12 X 6)]
Dimensions	2108 X1048 X40 mm (83.0 X41.3 X1.57 in)
Weight	24.9 kg (54.9 lbs)
Front Cover	3.2 mm tempered glass
Frame	Anodized aluminium alloy, crossbar enhanced
J-Box	IP68, 3 bypass diodes
Cable	4 mm² (IEC), 12 AWG (UL)
Cable Length (Including Connector)	Portrait: 500 mm (19.7 in) (+) / 350 mm (13.8 in) (-); landscape: 1400 mm (55.1 in); leap-frog connection: 1670 mm (65.7 in)*
Connector	T4 series or H4 UTX or MC4-EVO2
Per Pallet	27 pieces
Per Container (40' HQ)	594 pieces

* For detailed information, please contact your local Canadian Solar sales and technical representatives.

TEMPERATURE CHARACTERISTICS

Specification	Data
Temperature Coefficient (Pmax)	-0.36 % / °C
Temperature Coefficient (Voc)	-0.28 % / °C
Temperature Coefficient (Isc)	0.05 % / °C
Nominal Module Operating Temperature	42 ± 3°C

**The specification and key features contained in this datasheet may deviate slightly from our actual products due to the on-going innovation and product enhancement. Canadian Solar Inc. reserves the right to make necessary adjustment to the information described herein at any time without further notice. Please be kindly advised that PV modules should be handled and installed by qualified people who have professional skills and please carefully read the safety and installation instructions before using our PV modules.*

NEW

HiKu5 Mono PERC

475 W ~ 500 W

CS3Y-475|480|485|490|495|500MS

MORE POWER

- 500 W — Module power up to 500 W
  Module efficiency up to 21.2 %
- Up to 4.0 % lower LCOE
  Up to 4.2 % lower system cost
- Comprehensive LID / LeTID mitigation technology, up to 50% lower degradation
- Compatible with mainstream trackers, cost effective product for utility power plant
- Better shading tolerance

MORE RELIABLE

- Minimizes micro-crack impacts
- Heavy snow load up to 5400 Pa, enhanced wind load up to 2400 Pa*

- 12 Years — Enhanced Product Warranty on Materials and Workmanship*
- 25 Years — Linear Power Performance Warranty*

MANAGEMENT SYSTEM CERTIFICATES*

ISO 9001: 2015 / Quality management system

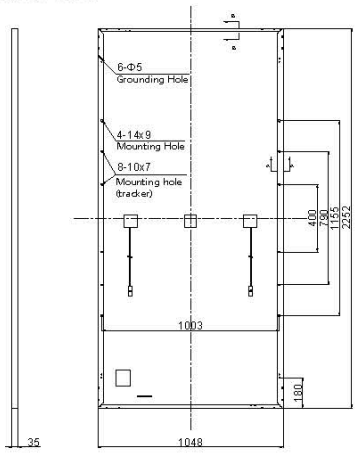
ISO 14001: 2015 / Standards for environmental management system

ISO 45001: 2018 / International standards for occupational health & safety

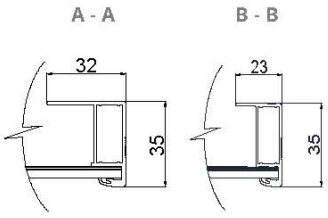
Price KShs 50.00 per WATT

ENGINEERING DRAWING (mm)

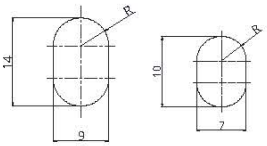
Rear View



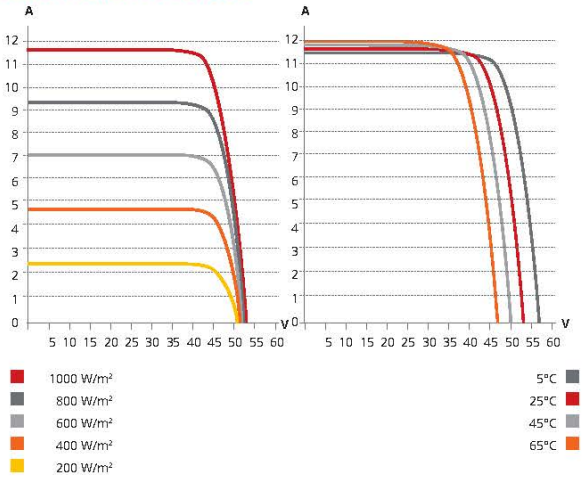
Frame Cross Section



Mounting Hole



CS3Y-490MS / I-V CURVES



ELECTRICAL DATA | STC*

CS3Y	475MS	480MS	485MS	490MS	495MS	500MS
Nominal Max. Power (Pmax)	475 W	480 W	485 W	490 W	495 W	500 W
Opt. Operating Voltage (Vmp)	44.0 V	44.2 V	44.4 V	44.6 V	44.8 V	45.0 V
Opt. Operating Current (Imp)	10.81 A	10.87 A	10.94 A	11.00 A	11.06 A	11.12 A
Open Circuit Voltage (Voc)	52.7 V	52.9 V	53.1 V	53.3 V	53.5 V	53.7 V
Short Circuit Current (Isc)	11.52 A	11.57 A	11.62 A	11.67 A	11.72 A	11.77 A
Module Efficiency	20.1%	20.3%	20.6%	20.8%	21.0%	21.2%
Operating Temperature	-40°C ~ +85°C					
Max. System Voltage	1500V (IEC/UL) or 1000V (IEC/UL)					
Module Fire Performance	TYPE 1 (UL 61730 1500V) or TYPE 2 (UL 61730 1000V) or CLASS C (IEC 61730)					
Max. Series Fuse Rating	20 A					
Application Classification	Class A					
Power Tolerance	0 ~ + 10 W					

* Under Standard Test Conditions (STC) of irradiance of 1000 W/m², spectrum AM 1.5 and cell temperature of 25°C.

MECHANICAL DATA

Specification	Data
Cell Type	Mono-crystalline
Cell Arrangement	156 [2 X (13 X 6)]
Dimensions	2252 X 1048 X 35 mm (88.7 X 41.3 X 1.38 in)
Weight	25.7 kg (56.7 lbs)
Front Cover	3.2 mm tempered glass
Frame	Anodized aluminium alloy
J-Box	IP68, 3 bypass diodes
Cable	4 mm² (IEC), 12 AWG (UL)
Cable Length (Including Connector)	500 mm (19.7 in) (+) / 350 mm (13.8 in) (-) or customized length*
Connector	T4 series or H4 UTX or MC4-EVO2
Per Pallet	30 pieces
Per Container (40' HQ)	600 pieces

* For detailed information, please contact your local Canadian Solar sales and technical representatives.

ELECTRICAL DATA | NMOT*

CS3Y	475MS	480MS	485MS	490MS	495MS	500MS
Nominal Max. Power (Pmax)	355 W	359 W	362 W	366 W	370 W	374 W
Opt. Operating Voltage (Vmp)	41.1 V	41.3 V	41.5 V	41.7 V	41.8 V	42.0 V
Opt. Operating Current (Imp)	8.64 A	8.70 A	8.74 A	8.78 A	8.86 A	8.91 A
Open Circuit Voltage (Voc)	49.7 V	49.9 V	50.1 V	50.2 V	50.4 V	50.6 V
Short Circuit Current (Isc)	9.29 A	9.33 A	9.38 A	9.42 A	9.46 A	9.50 A

* Under Nominal Module Operating Temperature (NMOT), irradiance of 800 W/m² spectrum AM 1.5, ambient temperature 20°C, wind speed 1 m/s.

TEMPERATURE CHARACTERISTICS

Specification	Data
Temperature Coefficient (Pmax)	-0.34 % / °C
Temperature Coefficient (Voc)	-0.26 % / °C
Temperature Coefficient (Isc)	0.05 % / °C
Nominal Module Operating Temperature	42 ± 3°C

HiKu7 Mono PERC

580 W ~ 600 W

CS7L-580|585|590|595|600MS

MORE POWER

- Module power up to 600 W
  Module efficiency up to 21.2 %
- Up to 3.5 % lower LCOE
  Up to 5.7 % lower system cost
- Comprehensive LID / LeTID mitigation technology, up to 50% lower degradation
- Compatible with mainstream trackers, cost effective product for utility power plant
- Better shading tolerance

MORE RELIABLE

- 40 °C lower hot spot temperature, greatly reduce module failure rate
- Minimizes micro-crack impacts
- Heavy snow load up to 5400 Pa, wind load up to 2400 Pa*

12 Years — Enhanced Product Warranty on Materials and Workmanship*

25 Years — Linear Power Performance Warranty*

1st year power degradation no more than 2%
Subsequent annual power degradation no more than 0.55%

MANAGEMENT SYSTEM CERTIFICATES*

ISO 9001: 2015 / Quality management system

ISO 14001: 2015 / Standards for environmental management system

ISO 45001: 2018 / International standards for occupational health & safety

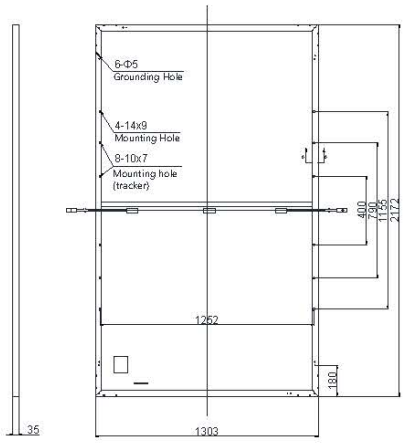
Price KShs 50.00 per WATT

HIKU7 MONO PERC

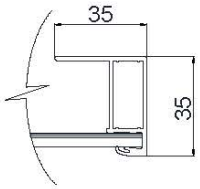
580 W ~ 600 W

ENGINEERING DRAWING (mm)

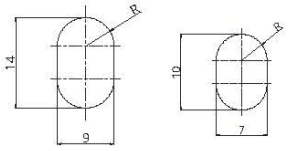
Rear View



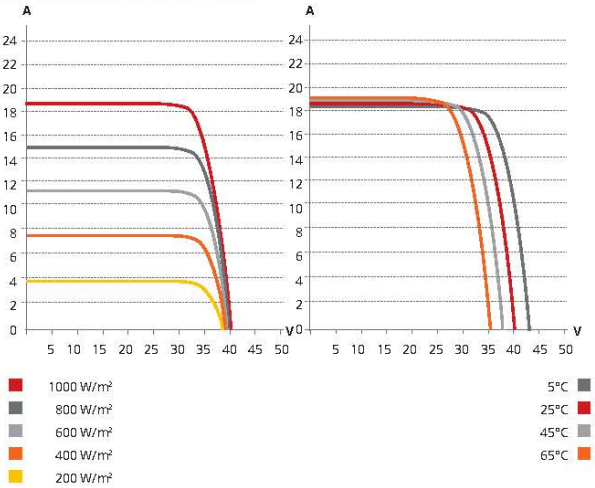
Frame Cross Section A-A



Mounting Hole



CS7L-590MS / I-V CURVES



ELECTRICAL DATA | STC*

CS7L	580MS	585MS	590MS	595MS	600MS
Nominal Max. Power (Pmax)	580 W	585 W	590 W	595 W	600 W
Opt. Operating Voltage (Vmp)	34.1 V	34.3 V	34.5 V	34.7 V	34.9 V
Opt. Operating Current (Imp)	17.02 A	17.06 A	17.11 A	17.15 A	17.20 A
Open Circuit Voltage (Voc)	40.5 V	40.7 V	40.9 V	41.1 V	41.3 V
Short Circuit Current (Isc)	18.27 A	18.32 A	18.37 A	18.42 A	18.47 A
Module Efficiency	20.5%	20.7%	20.8%	21.0%	21.2%
Operating Temperature	-40°C ~ +85°C				
Max. System Voltage	1500V (IEC) or 1000V (IEC)				
Module Fire Performance	CLASS C (IEC 61730)				
Max. Series Fuse Rating	30 A				
Application Classification	Class A				
Power Tolerance	0 ~ + 10 W				

* Under Standard Test Conditions (STC) of irradiance of 1000 W/m², spectrum AM 1.5 and cell temperature of 25°C.

ELECTRICAL DATA | NMOT*

CS7L	580MS	585MS	590MS	595MS	600MS
Nominal Max. Power (Pmax)	433 W	437 W	441 W	445 W	448 W
Opt. Operating Voltage (Vmp)	31.9 V	32.0 V	32.2 V	32.4 V	32.6 V
Opt. Operating Current (Imp)	13.60 A	13.66 A	13.70 A	13.74 A	13.76 A
Open Circuit Voltage (Voc)	38.2 V	38.4 V	38.6 V	38.7 V	38.9 V
Short Circuit Current (Isc)	14.74 A	14.77 A	14.82 A	14.87 A	14.90 A

* Under Nominal Module Operating Temperature (NMOT), irradiance of 800 W/m² spectrum AM 1.5, ambient temperature 20°C, wind speed 1 m/s.

MECHANICAL DATA

Specification	Data
Cell Type	Mono-crystalline
Cell Arrangement	120 [2 x (10 x 6)]
Dimensions	2172 × 1303 × 35 mm (85.5 × 51.3 × 1.38 in)
Weight	32.5 kg (71.6 lbs)
Front Cover	3.2 mm tempered glass
Frame	Anodized aluminium alloy, crossbar enhanced
J-Box	IP68, 3 bypass diodes
Cable	4 mm² (IEC)
Connector	T4 series or H4 UTX or MC4-EVO2
Cable Length (Including Connector)	460 mm (18.1 in) (+) / 340 mm (13.4 in) (-) or customized length*
Per Pallet	30 pieces
Per Container (40' HQ)	480 pieces

* For detailed information, please contact your local Canadian Solar sales and technical representatives.

TEMPERATURE CHARACTERISTICS

Specification	Data
Temperature Coefficient (Pmax)	-0.34 % / °C
Temperature Coefficient (Voc)	-0.26 % / °C
Temperature Coefficient (Isc)	0.05 % / °C
Nominal Module Operating Temperature	42 ± 3°C

HiKu7 Mono PERC

640 W ~ 665 W

CS7N-640|645|650|655|660|665MS

MORE POWER

- 665 W — Module power up to 665 W
  Module efficiency up to 21.4 %
- Up to 3.5 % lower LCOE
  Up to 5.7 % lower system cost
- Comprehensive LID / LeTID mitigation technology, up to 50% lower degradation
- Compatible with mainstream trackers, cost effective product for utility power plant
- Better shading tolerance

MORE RELIABLE

- 40 °C lower hot spot temperature, greatly reduce module failure rate
- Minimizes micro-crack impacts
- Heavy snow load up to 5400 Pa, wind load up to 2400 Pa*

- 12 Years — Enhanced Product Warranty on Materials and Workmanship*
- 25 Years — Linear Power Performance Warranty*

1st year power degradation no more than 2%
Subsequent annual power degradation no more than 0.55%

MANAGEMENT SYSTEM CERTIFICATES*

ISO 9001: 2015 / Quality management system

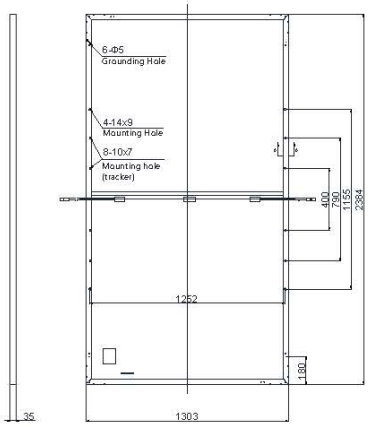
ISO 14001: 2015 / Standards for environmental management system

ISO 45001: 2018 / International standards for occupational health & safety

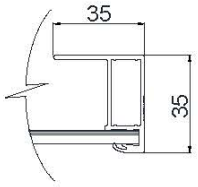
Price KShs 50.00 per WATT

ENGINEERING DRAWING (mm)

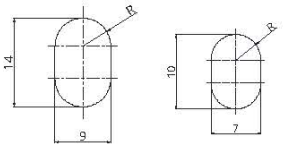
Rear View



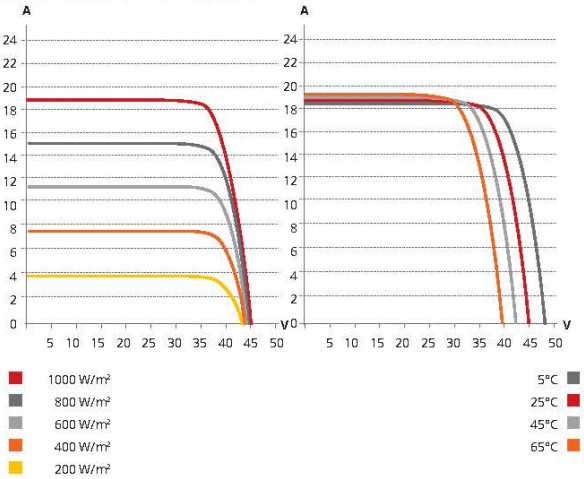
Frame Cross Section A-A



Mounting Hole



CS7N-650MS / I-V CURVES



ELECTRICAL DATA | STC*

CS7N	640MS	645MS	650MS	655MS	660MS	665MS
Nominal Max. Power (Pmax)	640 W	645 W	650 W	655 W	660 W	665 W
Opt. Operating Voltage (Vmp)	37.5 V	37.7 V	37.9 V	38.1 V	38.3 V	38.5 V
Opt. Operating Current (Imp)	17.07 A	17.11 A	17.16 A	17.20 A	17.24 A	17.28 A
Open Circuit Voltage (Voc)	44.6 V	44.8 V	45.0 V	45.2 V	45.4 V	45.6 V
Short Circuit Current (Isc)	18.31 A	18.35 A	18.39 A	18.43 A	18.47 A	18.51 A
Module Efficiency	20.6%	20.8%	20.9%	21.1%	21.2%	21.4%
Operating Temperature	-40°C ~ +85°C					
Max. System Voltage	1500V (IEC) or 1000V (IEC)					
Module Fire Performance	CLASS C (IEC 61730)					
Max. Series Fuse Rating	30 A					
Application Classification	Class A					
Power Tolerance	0 ~ + 10 W					

* Under Standard Test Conditions (STC) of irradiance of 1000 W/m², spectrum AM 1.5 and cell temperature of 25°C.

ELECTRICAL DATA | NMOT*

CS7N	640MS	645MS	650MS	655MS	660MS	665MS
Nominal Max. Power (Pmax)	478 W	482 W	486 W	489 W	493 W	497 W
Opt. Operating Voltage (Vmp)	35.0 V	35.2 V	35.4 V	35.6 V	35.8 V	36.0 V
Opt. Operating Current (Imp)	13.66 A	13.70 A	13.73 A	13.75 A	13.78 A	13.81 A
Open Circuit Voltage (Voc)	42.0 V	42.2 V	42.4 V	42.6 V	42.8 V	43.0 V
Short Circuit Current (Isc)	14.77 A	14.80 A	14.84 A	14.87 A	14.90 A	14.93 A

* Under Nominal Module Operating Temperature (NMOT), irradiance of 800 W/m² spectrum AM 1.5, ambient temperature 20°C, wind speed 1 m/s.

MECHANICAL DATA

Specification	Data
Cell Type	Mono-crystalline
Cell Arrangement	132 [2 x (11 x 6)]
Dimensions	2384 × 1303 × 35 mm (93.9 × 51.3 × 1.38 in)
Weight	34.4 kg (75.8 lbs)
Front Cover	3.2 mm tempered glass
Frame	Anodized aluminium alloy, crossbar enhanced
J-Box	IP68, 3 bypass diodes
Cable	4 mm² (IEC)
Cable Length (Including Connector)	460 mm (18.1 in) (+) / 340 mm (13.4 in) (-) or customized length*
Connector	T4 series or H4 UTX or MC4-EVO2
Per Pallet	31 pieces
Per Container (40' HQ)	527 pieces

* For detailed information, please contact your local Canadian Solar sales and technical representatives.

TEMPERATURE CHARACTERISTICS

Specification	Data
Temperature Coefficient (Pmax)	-0.34 % / °C
Temperature Coefficient (Voc)	-0.26 % / °C
Temperature Coefficient (Isc)	0.05 % / °C
Nominal Module Operating Temperature	42 ± 3°C

IMAGE	ITEM CODE	ITEM DESCRIPTION	Unit Price KSHS
SOLAR INVERTER CHARGER			
	ESCHES865252461=	Schneider Solar Inverter Charger CONEXT SW + 2524 3KVA 2.5kW 230VAC 24VDC #ES-865-2524-61	225,000.00
	ESCHES865402461=	Schneider Solar Inverter Charger CONEXT SW + 4024 4KVA 3.4kW 230VAC 24VDC #ES-865-4024-61	210,000.00
	ESCHES865404861=	Schneider Solar Inverter Charger CONEXT SW + 4048 4KVA 3.4KW 230VAC 48VDC #ES-865-4048-61	201,000.00
	ESCHES865704861=	Schneider Solar Inverter Charger CONEXT XW + 7048 7KVA 5.0KW 230VAC 48VDC #ES-865-7048-61	324,000.00
	ESCHES865854861=	Schneider Solar Inverter Charger CONEXT XW + 8548 8KVA 8.5KW 230VAC 48VDC #ES-865- 8548-61	380,815.00
	ESCHES865854855=	Schneider Solar Inverter Charger CONEXT XW PRO+ 8548 8KVA 8.5KW 230VAC 48VDC #ES-865- 8548-55	485,000.00
SCHNEIDER SOLAR CHARGE CONTROLLER PWM			
	ESCHESC1200000A=	Schneider Solar Charge Controller PWM 12A #ES-C12	$ 98.00
	ESCHESC4000000A=	Schneider Solar Charge Controller PWM 40A #ES-C40	$ 123.00
	ESCHESC6000000A=	Schneider Solar Charge Controller PWM 60A #ES-C60	$ 123.00
SCHNEIDER SOLAR CHARGE CONTROLLER MPPT			
	ESCHES86510301A=	Schneider Solar Charge Controller CONEXT MPPT 60 2.5W 150VDC #ES-865-1030-1	95,000.00
	ESCHES86510320A=	Schneider Solar Charge Controller CONEXT MPPT 80 600 #ES-865-1032	152,000.00
	ESCHES86510340A=	Schneider Solar Charge Controller CONEXT MPPT 100 600 #ES-865-1034	173,000.00
SCHNEIDER GRID TIE STRING			
	ESCHPVSCL36E00A=	Schneider CONEXT CL36E 3P Inverter + Essential #PVSCL36E	442,000.00
	ESCHPVSCL60E00A=	Schneider CONEXT CL60E 3P Solar Inverter #PVSCL60E	575,000.00
	ESCHPVSCL125E0A=	Schneider CONEXT CL125E 3P Solar Inverter #PVSCL125E	1,073,000.00
SCHNEIDER BATTERY FUSE DISCONNECT			
	ESCHES865103001=	Schneider CONEXT Battery Fuse Disconnect Box 160A DC FUSES #ES-865-1030-01	30,400.00
	ESCHES865103101=	Schneider CONEXT Battery Fuse Disconnect Box 250A DC FUSES #ES-865-1031-01	51,000.00

IMAGE	ITEM CODE	ITEM DESCRIPTION	UNIT PRICE KSHS
	ESCHES86510580A=	Schneider CONEXT Combox for Solar System #ES-865-1058	76,500.00
	ESCHES865115501=	Schneider Solar CONEXT XW Configuration Tool #ES-865-1155-01	87,000.00
	ESCHES86503290A=	Schneider Solar Conext Gateway #865-0329	75,300.00
	ESCHES865105001=	Schneider Solar XW-System Control Panel #ES-865-1050-01	37,500.00
		XW + Power Distribution Panel (W/O AC BREAKERS) #865-1014-01	117.000.00
	ESCHES865106001=	Schneider Solar Xw-Auto Generator Start #ES-865-1060-01	23,400.00
	ESCHES86510650A=	Schneider Solar Circuit Breaker 250A 160VDC 865-DCBRK-250	16,100.00
	ESCHES86510800A=	Schneider Solar Circuit Breaker 100A 125VDC PANEL MOUNT 865-DCBRK-100	7,750.00
		CONEXT XW+ Conduit Box #865-1025-01	17,000.00
	ESCHES865108001=	Schneider Solar CONEXT Battery Monitor 24/48V #ES-865-1080-01	80,600.00

PRODUCT APPLICATION DETAILS

- Residential grid tie with backup
- Off-grid solar solutions
- Back-up power

PRODUCT INTRODUCTION DETAILS

- Product is a unique combination of grid connectivity & energy generation through renewable source - solar
- Product design for reliability
- Scalable system that allows for integration of any solar capacity required
- Integrates both grid and generator power with dual AC inputs
- Supports DC coupled off grid & grid tie architectures
- Single or three phase systems up to 102 kW with conext XM Stack 2 units to double output with conext SW inverter/chargers

Power Backup with Solar Panel

Code	Model	Inverter Charger	Qty	Solar AR PVC Module	Qty	Gel Batteries	Qty	SCC	Qty	Unit Price KShs
ESCHSOVILSMA02A=	VILLA SMART 2	Conext SW 2524 2.5W/24V	1	360Wp/24V	2	200AH/12V	2	60A/12-24V C-60	1	514,000.00
ESCHSOVILSMA04A=	VILLA SMART 4	Conext SW 4024 4.0KW/24V	1	360Wp/24V	4	200AH/12V	4	60A/12-24V C-60	1	747,000.00
ESCHSOVILSMA08A=	VILLA SMART 8	Conext XW+ 8548 8.5KW/48V	1	360Wp/24V	8	200AH/12V	8	MPPT 60A - 150V	1	1,437,000.00

Power Backup W/O Solar Panel

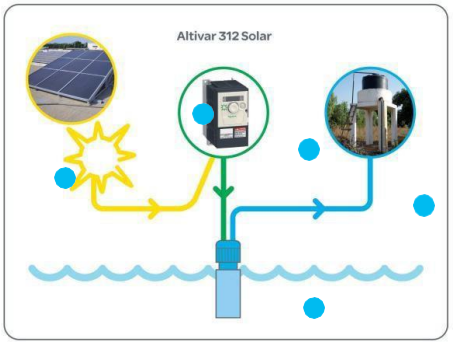
Code	Model	Inverter Charger	Qty	Gel Batteries	Qty	Unit Price KShs
ESCHPOVILSMA02A=	Power Backup 2kw/5kwh	Conext SW 2524	1	200AH/12V	2	460,000.00
ESCHPOVILSMA04A=	Power Backup 4kw/10kwh	Conext SW 4024	1	200AH/12V	4	657,000.00
ESCHPOVILSMA08A=	Power Backup 8kw/20kwh	Conext XW+ 8548	1	200AH/12V	8	1,125,000.00

The Altivar 312 Solar drive is designed to help provide drinking water at a lower cost for people with limited or no access to electrical grids.

WHY USE ALTIVAR

- Converts Solar DC to 3phase AC
- Controlled ramp-up speed in liquid systems can eliminate water hammer problems
- Allows for controlling of speed of the pump rather than flow of the water resulting in energy savings Reduces maintenance costs of the pump or motor

COMPONENTS AVAILABLE ON SITE



Drive with heat sink – IP20 – Three – Phase 400V – Up to 5.5kW for 200V motors Vmpp – 537VDC – 777VDC (1)/Voc=792VDC max.

IMAGE	CODE	DESCRIPTION	PRICE KSHS
	ESCHA312H037M2B=	SCHNEIDER SOLAR VARIABLE SPEED DRIVE ALTIVAR 0.37KW 240V 1 PHASE #ATV312H037M2412	52,000.00
	ESCHA312H075M2B=	SCHNEIDER SOLAR VARIABLE SPEED DRIVE ALTIVAR 0.75KW 240V 1 PHASE #ATV312H075M2412	54,000.00
	ESCHA312HU11M2B=	SCHNEIDER SOLAR VARIABLE SPEED DRIVE ALTIVAR 1.1KW 240V 1 PHASE 15 KVA #ATV312HU11M2412	58,000.00
	ESCHA312HU15M2B=	SCHNEIDER SOLAR VARIABLE SPEED DRIVE ALTIVAR 1.5KW 240V 1 PHASE 4.2KVA #ATV312HU15M2412	58,000.00
	ESCHA312H037N4B=	SCHNEIDER SOLAR VARIABLE SPEED DRIVE ALTIVAR 0.37KW 500V 3 PHASE #ATV312H037N4412	60,000.00
	ESCHA312H055N4B=	SCHNEIDER SOLAR VARIABLE SPEED DRIVE ALTIVAR 0.55KW 500V 3 PHASE #ATV312H055N4412	45,000.00
	ESCHA312H075N4B=	SCHNEIDER SOLAR VARIABLE SPEED DRIVE ALTIVAR 0.75KW 500V 3 PHASE #ATV312H075N4412	49,000.00
	ESCHA312HU11N4B=	SCHNEIDER SOLAR VARIABLE SPEED DRIVE ALTIVAR 1.1KW 500V 3 PHASE 15 KVA #ATV312HU11N4412	52,000.00
	ESCHA312HU15N4B=	SCHNEIDER SOLAR VARIABLE SPEED DRIVE ALTIVAR 1.5KW 500V 3 PHASE 4.2KVA #ATV312HU15N4412	60,000.00
	ESCHA312HU22N4B=	SCHNEIDER SOLAR VARIABLE SPEED DRIVE ALTIVAR 2.2KW 500V 3 PHASE #ATV312HU22N4412	65,000.00
	ESCHA312HU30N4B=	SCHNEIDER SOLAR VARIABLE SPEED DRIVE ALTIVAR 3.0KW 500V 3 PHASE #ATV312HU30N4412	76,000.00
	ESCHA312HU40N4B=	SCHNEIDER SOLAR VARIABLE SPEED DRIVE ALTIVAR 4.0KW 500V 3 PHASE #ATV312HU40N4412	88,000.00
	ESCHA312HU55N4B=	SCHNEIDER SOLAR VARIABLE SPEED DRIVE ALTIVAR 5.5KW 500V 3 PHASE 15 KVA #ATV312HU55N4412	99,000.00
	ESCHAECWPS01DEA=	SCHNEIDER VILLAYA SOLAR DRIVE ENCLOSURE #AEC-WPS01-DE	60,000.00

MOBIYA Lite an ingenious mobile charging solar lantern

Benefits

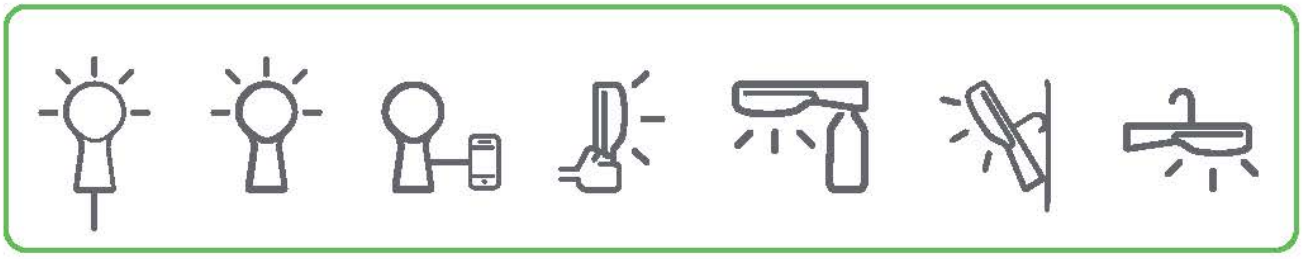
- Rechargeable by the sun or through any USB port
- Lithium battery
- Light weight
- 4 dimmings
- SOS feature

Schneider Electric, specialist in energy management and automation, provides a complete set of end to end solutions for people without access to energy.

Mobiya Lite is a portable solar lantern providing safe, reliable, green and efficient access to energy. With its multiple mounting options, Mobiya Lite conveniently lights up your surroundings in all circumstances. It also charges your basic mobile phone where ever you are.

Product Specifications	
Commercial reference number	AEP-LL01-S1000
Light output	110 lumens
Levels of brightness and backup duration	110 lumens at 6 hours
	80 lumens at 7 hours
	50 lumens at 11 hours
	10 lumens at 50 hours
SOS feature	Long press the button to use SOS feature to express distress or attract attention during emergency
Battery	Lithium Ferro Phosphate 5.12Wh (3.2 V, 1.6 Ah)
Solar panel	1.5 Wp with 5m cable
IP degree of protection	IP54
Other sources of charging	5 V USB charging port or any other 5 V DC source
Accessory	Universal charging cable
Certifications	Lighting Global, SONCAP, SABS(IEC), CE, LM79
Price – KShs	1,500.00 + VAT

Way to use

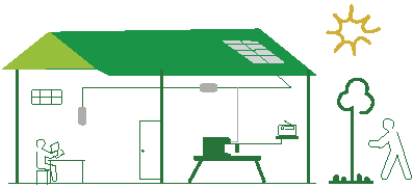


*Mobile charging reduces lighting backup hours

Image	Metsec Code	Product Description	Price Kshs
	ESCHSOISSLSQ01A=	Villaya Type 2, Integrated Aligned LED Solar Light without Motion Sensor, 20W, 3200lm, 5700k (Road Lighting) Ref: AEC-SLI20-U25-A, 50,000hours, Pole Height: 5-7mtrs, NiMH Battery, 19kg	180,000.00
	ESCHSOISSLSQ01B=	Villaya Type 2, Integrated Aligned LED Solar Light complete with Motion Sensor, 20W to 50W (when sensor activated), 3200 to 5600lm, 5700k (Road Lighting) Ref: AEC-SLI20-U50-SA, Pole Height: 5-7mtrs, NiMH Battery, 19kg	190,000.00
	ESCHSOISSLSQ01C=	Villaya Type 2, Integrated Opposite LED Solar Light, 20W, 1600lm on each side, 164lm/W, 5700K (Square, Area Lighting) Ref: AEC-SLI20-U50-O, 50,000hours, Pole Height: 4-6mtrs, NiMH Battery, 19kg	180,000.00
	ESCHSOISSLSQ01D=	Villaya Type 2, Integrated Opposite LED Solar Light complete with Motion Sensor, 20W to 50W (when sensor activated), 1600 to 2800lm on each side, 164lm/W, 5700K (Square, Area Lighting) Ref: AEC-SLI20-U50-SO, 50,000hours, Pole Height: 4-6mtrs, NiMH Battery, 19kg	190,000.00
	ESCHSOISSLZZ01A=	Villaya Type 1 Integrated Solar LED Light without Motion Sensor, 10W, 1600lm, 164lm/W, 5700k (Road Lighting), Ref: AEC-SLI10-U12, 50,000hours, Pole Height: 4-6mtrs, NiMH Battery, 14kg	130,000.00
	ESCHSOISSLZZ01B=	Villaya Type 1 Integrated Solar LED Light complete with Motion Sensor, 10W to 25W (when sensor activated),1600 to 2800lm, 164lm/W, 5700k, (Area/Road Lighting), Ref: AEC - SLI10 - U25 - S, 50,000hours, Pole Height: 4-6mtrs, NiMH Battery, 14kg	140,000.00
	ESCHSOISSLVI03A=	Villaya Type 3, Non-Integrated Solar LED Light complete with Motion Sensor,20W to 50W (when sensor activated), 3200 to 5600lm, 164lm/W, 5700k, (Area/Road Lighting), Ref: AEC-SLN30 - U50-S, 50,000hours, Pole Height: 5-7mtrs, NiMH Battery, 19kg	200,000.00
	ESCHSOISSLVI03B=	Villaya Type 3, Non-Integrated Solar LED Light complete with Motion Sensor, 20W to 50W (when sensor activated), 3200 to 5600lm, 164lm/W, 5700k, (Area/Road Lighting), Ref: AEC-SLN30 - U50-S, 50,000hours, Pole Height: 5-7mtrs, NiMH Battery, 19kg	210,000.00
	ESCHSOISSLVI04A=	Villaya Type 4, Non- Integrated Solar LED Light,40W, 6400lm, 164lm/W, 5700k, (Road Lighting), Ref: AEC-SLI40-U40, 50,000hours, Pole Height: 6-8mtrs, NiMH Battery, 42kg	375,000.00

AEH-LSHS01-06W3L

AEH-LSHS02-12W4L



Application

Schneider Electric the global specialist in energy management and automation/provides a complete set of end to end solutions for people without access to energy.

Homaya Solar Home System is a portable solar home system solution with the latest battery technology designed to meet all the critical energy needs for a home. With its portable lamps and 3 USB charger ports it can conveniently light up all rooms and living areas around the home and also can charge the mobile of all family members.

Product Specifications

Specifications	Solar Home System S01	Solar Home System S02
Light output	500+ lm in total	650+ lm in total
Number of fixed and portable lambs	2fixed + 1portable	2fixed + 2 portable
	(with 3 hours backup)	(with 3 hours backup)
	+ 1inbuilt Lamb	+ 1inbuilt Lamb
Solar panel Wp	6Wp,12V	12Wp,12V
Inbuilt battery type	19.2Wh UfeP04 battery	57.6Wh LifeP04 battery
Backup time	12 hours for 1 lamp or	36 hours for 1 lamp or
	6 hours for 2 lamps.	18 hours for 2 lamps.
	3 hours additionally	3 hours additionally
	with portable lamp	with portable lamp
Certifications	**Lighting Global, SONCAP, SAB (IEC), LM79, LM80 (in progress)**	

Solar Home System

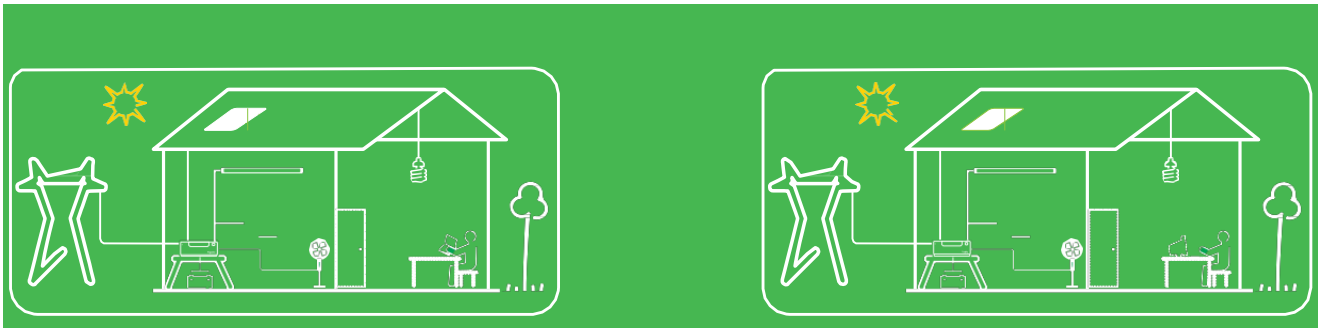
Item Code	Description	Price – KShs
ESCHSOHOMHSA01A=	Schneider HOMAYA Home System Solar Panel Kit S01 C/W 3 Tubes #AEH-LSHS01-6W3L	15,000.00
ESCHSOHOMHSA02A=	Schneider HOMAYA Home System Solar Panel Kit S02 C/W 4 Tubes #AEH-LSHS02-12W4L	20,000.00

Let the sun light up your life!

Powers both AC and DC loads from the smart synergy of solar and grid energy.

AEH-SHI01-0850

AEH-SHI01-1500



Specifications	Solar Homaya Hybrid System 850	Solar Homaya Hybrid System 1500
Recommended Solar Panel Wattage	800 Wp, 12V with OCV of 17V to 21V	1000 Wp, 24V with OCV of 36V to 45V
AC Input	230V AC, 50 Hz	230V AC, 50 Hz
AC output	850VA - 230V AC, 50 Hz	1500VA - 230V AC, 50Hz
DC output	12V, 20A	12V, 5A
Recommended Battery Size	12V, 100Ah to 200Ah	24V, 100Ah to 200Ah
Recommended Battery type	Supports Tubular, Flat plate, GEL/VRLA battery	
Product dimensions in mm (LxWxH)	375 x 315 x 135	375 x 315 x 150
Safety and reliability	Protected against short-circuit, High temperature and internal fault protection	

Solar Hybrid System

Item Code	Description	Price – KShs
ESCHSOHOMHHS085=	Schneider HOMAYA Hybrid Home System Solar 850va #Aeh-Shi01- 0850	15,000.00
ESCHSOHOMHHS150=	Schneider HOMAYA Hybrid Home System Solar 1500va #Aeh-Shi01- 1500	20,000.00

DESIGN FEATURES

Type designation:	METSEC (PV) PV1-F
Conductor:	**Electrolytic Tinned Copper, Class 5 in accordance with IEC 60228**
Insulation:	**Crosslinked Polyethylene**
Core Identification:	Natural Colour – White
Sheath:	Low Smoke Zero Halogen
Sheath-Colours:	Black, Blue, Red
Marking:	**METSEC (PV) PV1-F (cross-section) 0.6/1kV**

SELECTION AND ORDERING DATA

Nominal cross-section and colour	Stock Code	Overall diameter of cable Min. value	Overall diameter of cable Max. value	Approx. net weight	Minimum bending radius	Maximum permissible tensile load	Current carrying capacity at 60°C ambient temperature	Permissible short circuit current (1s)	Unit Price Per Mtr
		[mm]	[mm]	[kg/km]	[mm]	[N	[A]	[kA]	
1.5mm²	CZSLXT001501BK0	4.4	4	29	14.4	23.000	29	0.19	
1.5mm²	CZSLXT001501BL0	4.4	4	29	14.4	23.000	29	0.19	
1.5mm²	CZSLXT001501RD0	4.4	4	29	14.4	23.000	29	0.19	
2.5mm²	CZSLXT002501BK0	4.7	5	43	15.3	38.000	41	0.32	70.00
2.5mm²	CZSLXT002501BL0	4.7	5	43	15.3	38.000	41	0.32	70.00
2.5mm²	CZSLXT002501RD0	4.7	5	43	15.3	38.000	41	0.32	70.00
4.0mm²	CZSLXT004001BK0	5.2	5	58	16.8	60.000	55	0.50	100.00
4.0mm²	CZSLXT004001BL0	5.2	5	58	16.8	60.000	55	0.50	100.00
4.0mm²	CZSLXT004001RD0	5.2	5	58	16.8	60.000	55	0.50	100.00
6.0mm²	CZSLXT006001BK0	5.7	6	76	18.3	90.000	70	0.76	150.00
6.0mm²	CZSLXT006001BL0	5.7	6	76	18.3	90.000	70	0.76	150.00
6.0mm²	CZSLXT006001RD0	5.7	6	76	18.3	90.000	70	0.76	150.00
10mm²	CZSLXT010001BK0	6.8	7	120	21.6	150.000	98	1.26	250.00
16mm²	CZSLXT016001BK0	8.3	9	178	3	240.000	132	2.01	
25mm²	CZSLXT025001BK0	10.0	10.7	273	4	375.000	176	3.15	
35mm²	CZSLXT035001BK0	11.1	11.8	364	4	525.000	218	4.41	
50mm²	CZSLXT050001BK0	12.6	13.3	500	5	750.000	276	6.30	
70mm²	CZSLXT070001BK0	14.4	15.2	686	6	1.050	347	8.82	
95mm²	CZSLXT095001BK0	16.2	17.0	899	6	1.425	416	12.0	
120mm²	CZSLXT120001BK0	17.7	18.7	1.131	7	1.800	488	15.1	
150mm²	CZSLXT150001BK0	19.7	20.7	1.382	8	2.250	566	18.9	
185mm²	CZSLXT185001BK0	21.3	22.3	1.669	8	2.775	644	23.3	
240mm²	CZSLXT240001BK0	24.2	25.5	2.208	10	3.600	775	30.4	

SOLAR CABLE

Manufacturer:	**Metsec Cables Ltd**
Trademark:	METSEC (PV)
Type designation:	PV1-F
Application:	METSEC (PV) PV1-F PV-Wire is intended for use in Photovoltaic Power Supply Systems: Indoor and /or outdoor, in industrial and agriculture fields. They are suitable for applications in/at equipment with protective insulation (Protecting Class II), in explosion hazard areas (METSEC internal Testing) and may be installed as well as fixed or freely suspended or free movable. Installation in cable trays, conduits, on
METSEC Internal Testing:	(PV) PV1-F PV-Wire is permitted for direct burial.
Rated Voltage:	(Uo/U) 600/1000V AC Maximum PV-System voltage:
	DC up to 2000V possible
Maximum permissible operating voltage in AC systems:	700/1200V
Maximum permissible operating voltage in DC systems:	900/1800V
Test voltage:	6500V AC / 15000V / 5 min.
Tests	Meets VDE 0282 Section 2, HD 22.2 and EN 50395 Conductor Resistance, Test Voltages AC and DC, Electric Strength, Surface Resistance, Spark Test on Insulation, EN 50305 Part 6 DC stability (10 days, 85°C, salt water, 1500V DC), Insulation Resistance at 20°C and 90°C in Water.
Internal Testing:	Insulation Resistance at 120°C in Air.

THERMAL PARAMETERS	
Ambient Temperature:	From -40°C up to +90°C (-40°F up to +194°F) for fixed and flexible installation
Maximum Permissible	+120°C (+248°F) per IEC 60216 permanent temperature 120°C for 20.000 h
Conductor Operating Temperature:	(= 2.3 years), at max. 90°C permanent temperature (= 30 years)
Short-circuit temperature	
-Internal Testing:	+200°C (392°F) at the conductor max. 5 sec.
	+250°C (482°F) at the conductor max. 5 sec.
Resistance to cold:	Cold Bend Test at -40°C temperature per DIN EN 60811-1-4
	Impact Test -40°C temperature similar to DIN EN 50305
Damp-Heat Test:	Meets EN 60068-2-78
MECHANICAL PARAMETERS	
Tensile Rating:	15 N/mm² in operation, 50 N/mm² during installation per HD 516
	DIN VDE 0298 Section 3 § 7.1 and Section 300§ 5.4.1
Minimum bending Radius:	min. 4 x D (D=Overall Cable Diameter)
Abrasion	Meets DIN EN 53516: against abrasive paper,
Internal Testing:	Sheath against sheath,
	Sheath against metal,
	Sheath against plastics
Shrinkage Test:	<2% per EN 60811-1-3
Pressure Test at High Temperature:	<50% per EN 60811-3-1
Dynamic Penetration Test:	Meets requirements for PV-Wire
Shore-Hardness A:	85 per DIN EN 53505 (Internal Testing)
Gnawer resistance:	Safety can be optimized by utilizing protective hoses and cables with spinning or braid metallic coatings
CHEMICAL PARAMETERS	
Mineral Oil Resistance:	Meets VDE 0473-811-2-1, DIN EN 60811-2-1 24h, 100°C
Acid and Alkaline Resistance:	Meets EN 60811-2-1
Ammonia Resistance:	30 days in Saturated Ammonia Atmosphere
Weather resistance	Ozone resistance per DIN EN 50396 Test Type B, HD 22.2 Test Type B UV-Resistance per UL 1581 (Xeno-Test), ISO 4892-2 (Method A) and HD506/A1-2.4.20
Internal Testing:	Absorption of Water (Gravimetric) per DIN EN 60811-1-3
Fire Behavior	Flame propagation:
	Single Cable Flame Test per IEC 60332-1-2, DIN EN 60332-1-2
	Halogen-free per IEC 60754-1
	No Corrosivity per IEC 60754-2
Internal Testing:	Multiple Cable Flame Test per DIN EN 50305-9
	Low Smoke Emission per IEC 61034, EN 61034 (Light Transmittance > 70%)
	Low Toxicity per DIN EN 50305, ITC < 3
Environmentally Friendly:	METSEC (PV) PV-Wire complies with RoHS directives 2002/95/EG, 2005/69/EG and 2006/122/EG of the European Union
DIRECT BURIAL	
Installation Instruction:	Installation Conditions per VDE 0800 Section 174§ 5.4.2 and VDE 0891 Section 6 § 4.2 ratings

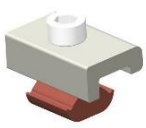
MCB 1P	Ref No.	Item Description	Price KShs
	A9F74101	Acti 9 MCB C60N 1P 1A C	952.00
	A9F74102	Acti 9 MCB C60N 1P 2A C	952.00
	A9F74103	Acti 9 MCB C60N 1P 3A C	952.00
	A9F74104	Acti 9 MCB C60N 1P 4A C	952.00
	A9F79110	Acti 9 MCB C60N 1P 10A C	698.00
	A9F79116	Acti 9 MCB C60N 1P 16A C	698.00
	A9F79120	Acti 9 MCB C60N 1P 20A C	698.00
	A9F79125	Acti 9 MCB C60N 1P 25A C	698.00
	A9F79132	Acti 9 MCB C60N 1P 32A C	698.00
	A9F79140	Acti 9 MCB C60N 1P 40A C	872.00
	A9F79150	Acti 9 MCB C60N 1P 50A C	872.00

MCB 2P	Ref No.	Item Description	Price KShs
	A9F79206	Acti 9 MCB C60N 2P 6A C	1,396.00
	A9F79210	Acti 9 MCB C60N 2P 10A C	1,396.00
	A9F79216	Acti 9 MCB C60N 2P 16A C	1,396.00
	A9F79220	Acti 9 MCB C60N 2P 20A C	1,396.00
	A9F79225	Acti 9 MCB C60N 2P 25A C	1,396.00
	A9F79232	Acti 9 MCB C60N 2P 32A C	1,396.00
	A9F79240	Acti 9 MCB C60N 2P 40A C	1,743.00
	A9F79250	Acti 9 MCB C60N 2P 50A C	1,743.00
	A9F79263	Acti 9 MCB C60N 2P 63A C	1,947.00

MCB 3P	Ref No.	Item Description	Price KShs
	A9F79306	Acti 9 MCB C60N 3P 6A C	2,285.00
	A9F79310	Acti 9 MCB C60N 3P 10A C	2,285.00
	A9F79316	Acti 9 MCB C60N 3P 16A C	2,285.00
	A9F79320	Acti 9 MCB C60N 3P 20A C	2,285.00
	A9F79325	Acti 9 MCB C60N 3P 25A C	2,285.00
	A9F79332	Acti 9 MCB C60N 3P 32A C	2,285.00
	A9F79340	Acti 9 MCB C60N 3P 40A C	2,879.00
	A9F79350	Acti 9 MCB C60N 3P 50A C	2,879.00
	A9F79363	Acti 9 MCB C60N 3P 63A C	3,213.00

MCB 4P	Ref No.	Item Description	Price KShs
	A9F74406	Acti 9 MCB C60N 4P 6A C	3,814.00
	A9F79410	Acti 9 MCB C60N 4P 10A C	3,814.00
	A9F79416	Acti 9 MCB C60N 4P 16A C	3,814.00
	A9F79420	Acti 9 MCB C60N 4P 20A C	3,814.00
	A9F79425	Acti 9 MCB C60N 4P 25A C	3,814.00
	A9F79432	Acti 9 MCB C60N 4P 32A C	3,814.00
	A9F79440	Acti 9 MCB C60N 4P 40A C	5,407.00
	A9F79450	Acti 9 MCB C60N 4P 50A C	5,407.00
	A9F79463	Acti 9 MCB C60N 4P 63A C	6,641.00

ALUMINIUM RAILS

Image	Item Code	Item No	Unit	Price KShs
	EZZZSORLEA2506A=	Aluminium Solar Module Mounting Rail #2 x 2506mm	Pc	1,640.00
	EZZZSORLEA4100A=	Aluminium Solar Module Mounting Rail #2 x 4100mm	Pc	2,600.00
	EZZZSORLSPLKITA=	Universe Solar Rail Splice Kit for 2# Rail UL-R-SP Al 6005-T5 190mm 105g	Pc	130.00
	EZZZSOTPZRFRLAA=	Solar Aluminium Mini Rail for Trapezoidal Metal Roof 240mm Length Ul-SS-04 Al 6005-T5	Pc	300.00
	EZZZSORLEA4100B=	Aluminium Rail 5# for Trusses in Ground Mounted 40 x 40 x 4100 R5A - 75# Ul-AR-SP Al 6005-T5	Pc	5,750.00
	EZZZSORLSPL200A=	Solar Rail Splice for R5A – Length 200mm Ul-AR-SP Al 6005-T5	Pc	475.00
	EZZZSOENFCLEGAA=	Aluminium Angle for Brace 40*40* 4100mm Extruded Aluminum Ul-ST3-TFR4100 Al 6005-T5	Pc	2,550.00
	EZZZSOCLMPFSTAA=	Universe Fastener Clamp 60mm UI-Clamp-F Al 6005-T5	Pc	100.00

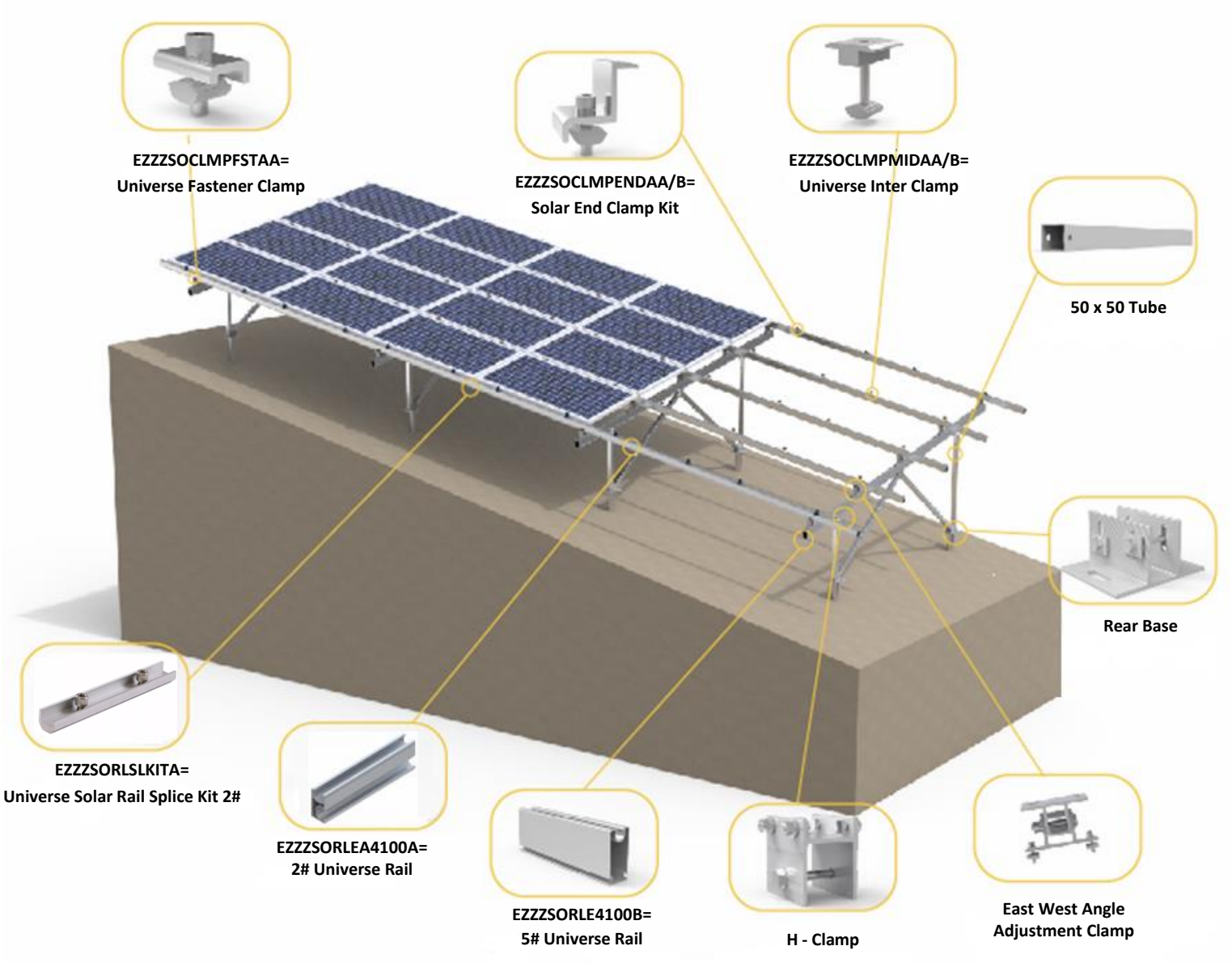
SOLAR MOUNTING COMPONENTS

Image	Item Code	Item No	Unit	Price KShs
	EZZZSOLFTWSWBEA=	Universe L Feet + 6.3*80 wooden screw for wooden beam Extruder Aluminium Ul-IK-L	Pc	180.00
	EZZZSOLFTHBWBEA=	Universe L Feet + Hanger bolt M10*200mm for wooden beam Ul-IK-01L	Pc	400.00
	EZZZSOLFTTBSBEA=	Universe L Feet + Threaded bolt M10*195mm for steel beam Ul-IK-H04L	Pc	400.00
	EZZZSOSSHKTLRFA=	Tile Roof Hook Stainless Steel Ul-IK-07 SUS 304 Plate 150x60 667.5g	Pc	575.00
	EZZZSOCLPCBL01A=	Cable Clip 1-2 cable – 2.5g – Ul-CCI	Pc	10.00

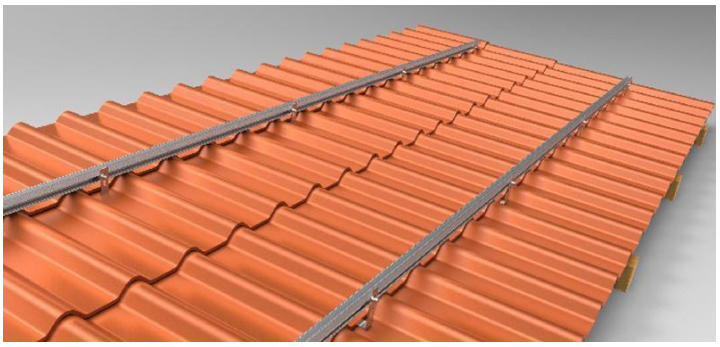
FRAMED PANEL CLAMPS

Image	Item Code	Item No	Unit	Price KShs
	EZZZSOCLMPMIDAA=	Universe Inter Clamp 35mm Ul-IC-35 Al 6005-T5 58.0g	Pc	100.00
	EZZZSOCLMPMIDAB=	Universe Inter Clamp 40mm Ul-IC-40 Al 6005-T5 40mm	Pc	100.00
	EZZZSOCLMPENDAA=	Solar End Clamp Kit 35mm Ul-EC-35 Al 6005-T5 50.4g	Pc	100.00
	EZZZSOCLMPENDAB=	Solar End Clamp Kit 40mm Ul-EC-40 Al 6005-T5 52.8g	Pc	100.00
	EZZZSOBLTCNA08A=	Bolt M8*140mm Connectors for Ul-ST3-TFR Al 6005-T5	Pc	90.00

GROUND SOLAR MOUNTING COMPONENTS



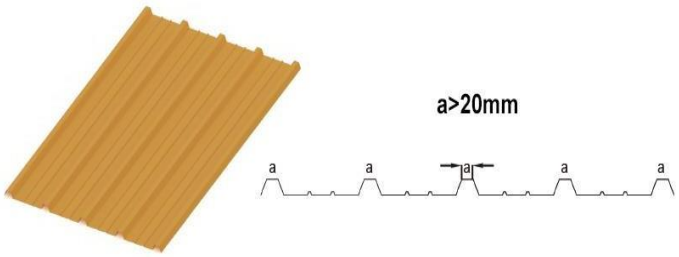
Technical Data



Module Angle	0 degree
Max. Wind Speed	60m/s
Snow Load	1.4kN/m2
Material	Al6005-T5&Stainless Steel SUS304
Max. Building Height	up to 65ft(22m), customized available

TRAPEZOIDAL METAL ROOF MOUNTING

The Trapezoidal metal roof sheet rib should be more than 20mm.



Item No	Rail	Installation Site	Flat/Slope Tin Roof
Material	Aluminium 6005 T5	Max Wind Speed	60 m/s
Warranty	10 Years	Max Snow Load	1.4 KN/M^2
Service Life	25 Years	Max Building Height	65 ft (20m)

MC4 Solar Connector

- Simple on-site processing.
- Accommodates PV cable with different insulation diameters.
- Mating safety provided by keyed housings.
- Multiple plugging and unplugging cycles.
- High current carrying capacity.
- TUV and Ul approved.

Specifications

Order No.	Part P/N		Cable	
	Connector	Terminal	Conductor size ($2.5mm^2$)	Cable OD (<l> Dmm)
SMC4-CMMM-	SMC4-CMMM-H	SMC4-CM-Tl4	AWG 14(2.5 mm2)	ø 4.5 - ø8.5
SMC4-CMMM-		SMC4-CM-Tl2	AWG 12(4.0 mm')	
SMC4-CMMM-1		SMC4-CM-Tl 0	AWG 10(6.0 mm2)	
Order NO.	Part P/N		Cable	
	Connector	Terminal	Conductor size (mm1)	Cable OD (mm)
SMC4-CFPM-14	SMC4-CFPM-H	SMC4-CF-Tl4	AWG 14(2.5 mm2)	ø4.5 - ø8.5
SMC4-CFPM-12		SMC4-CF-Tl2	AWG 12(4.0 mml)	
SMC4-CFPM-l 0		SMC4-CF-Tl0	AWG 10(6.0 mm2)	

Rated current	30A(2.5-6mm^2)
Rated voltage	1000v DC
Test voltage	6000V(50Hz, 1 min)
Overvoltage type/pollution *degree*	CAT III /2
Contact resistance of plug connector	1m0
Contact material	Copper, Tin- plated
Insulation material	PPO
Degree of protection	IP2X/IP67
Flame doss	UL94-VO
Safety class	II
Suitable cable	OD 4.5-8.5(2.5-6.0 mm^2)
Insertion force/withdrawal *force*	s50N/2:50N
Connecting system	Crimp connection
Temperature range	40^0C - +125^0C
Price – KShs	**200.00**

SOLARLOK PV4-S CONNECTOR 1500V DC

The SOLARLOK PV4-S connector is an upgrade of the industry leading SOLARLOK PV4 connector to meet a minimum 1500V rating with IP68 protection. The SOLARLOK PV4-S connector has been tested to assure reliable and safe connections of solar arrays. The connectors use industry standard crimp tooling that is readily available and used by installers today.

Applications

- Solar panels
- Inverters
- Micro inverters
- DC optimizers

Electrical

- UL 15 A and TÜV 30 A: 2.5 mm2 / 14 AWG (at 85 °C)
- UL 20 A and TÜV 40 A: 4.0 mm2 / 12 AWG (at 85 °C)
- UL 30 A and TÜV 45 A: 6.0 mm2 / 10 AWG (at 85 °C)
- Rated Voltage: 1000V DC / 1500V DC (UL)
  1000V DC / 1500V DC (TUV/IEC)
- Contact Resistance: 0.35mΩ

Mechanical

- 63mm x 24.5mm (Male)
- 59.5mm x 18.7mm (Female)
- Protection Degree: IP68 (1m / 24 hours)

Specifications

- Product Specification: 108-137077
- Application Specification: 114-137077
- PV4-PV4-S Intermateability: 501-137294

Materials

- Housing: PPE & PS
- Contact: Tinned copper

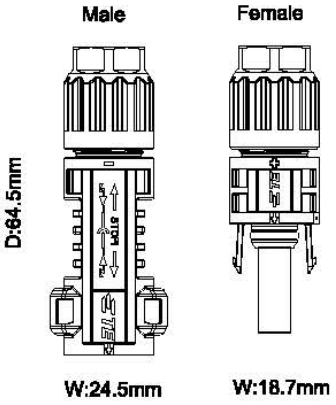
Standards

- 1000V DC / 1500V DC UL approved - UL6703
- 1000V DC / 1500V DC TUV approved - IEC62852

Benefits

- Provides waterproof protection and is rated IP68 (1 m / 24 hours)
- Minimizes power loss by providing low contact resistance

Dimensions



PV4-S Kits for 4mm² – 6mm² Contacts (AWG 12-10)

Type	Part Number	Description	Price - KSHS
ETEZSOPV4CONCTA=	2270024-1	TE Solar PV4 Connector Male – 4mm² – 6mm²	285.00
ETEZSOPV4CONCTB=	2270025-1	TE Solar PV4 Connector Female – 4mm² – 6mm²	285.00

PV4-S Kits for 2.5mm² – Contacts (AWG 14)

Type	Part Number	Description	Price -KSHS
	2270024-3	PV4-S Connector Kit Pin-Male (with pin-contact) – 2.5mm²	285.00
	2270025-3	PV4-S Connector Kit Socket-Female (with socket-contact) – 2.5mm²	285.00

DG12-200 (12V200Ah)

SPECIFICATION

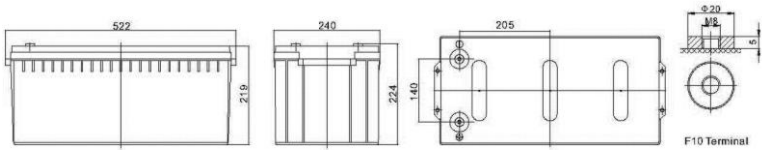
Cells Per Unit	**6**
Voltage Per Unit	12
Capacity	200Ah@20hr-rate to 1.75V per cell @25℃
Weight	Approx. 58.0 Kg (Tolerance±3.0%)
Internal Resistance	Approx. 5.2 mΩ
Terminal	F10(M8)/F16(M8)
Max. Discharge Current	2000A (5 sec)
Design Life	15 years (floating charge)
Max. Charging Current	40.0 A
Reference Capacity	C3 - 136.5AH
	C5 - 154.0AH
	C10 - 176.0AH
	C20 - 200.0AH
Float Charging Voltage	13.6 V~13.8 V @ 25℃
	Temperature Compensation: -3mV/℃/Cell
Cycle Use Voltage	14.2 V~14.4 V @ 25℃
	Temperature Compensation: -4mV/℃/Cell
Operating Temperature Range	Discharge: -40℃~60℃
	Charge: -20℃~50℃
	Storage: -40℃~60℃
Normal Operating Temperature Range	25℃±5℃
Self Discharge	RITAR Valve Regulated Lead Acid (VRLA) batteries can be stored for up to 6 months at 25℃, and then recharging is recommended. Monthly Self-discharge ratio is less than 2% at 20℃.Please charged batteries before using.
Container Material	A.B.S. UL94-HB, UL94-V0 Optional

DG (Deep Cycle GEL) series is pure GEL battery with 15 years floating design life, it is ideal for standby or frequent cyclic discharge applications under extreme environments. By using strong grids, high purity lead and patented GEL electrolyte, the DG series offers excellent recovery capability after deep discharge under frequent cyclic discharge use, and it can offers 2 times cyclic life than the standard series. It is suitable for solar & wind system, marine, deep discharge UPS etc.

ISO 9001 ISO 14001 OHSAS 18001

Price – KShs 42,860.00

Dimensions



Length	522±2mm (20.6 inches)
Width	240±2mm (9.45 inches)
Height	219±2mm (8.62 inches)
Total Height	224±2mm (8.82 inches)
Terminal	Value
M5	6~7 N*m
M6	8~10 N*m
M8	10~12 N*m
	Unit: mm

Constant Current Discharge Characteristics : A(25℃)

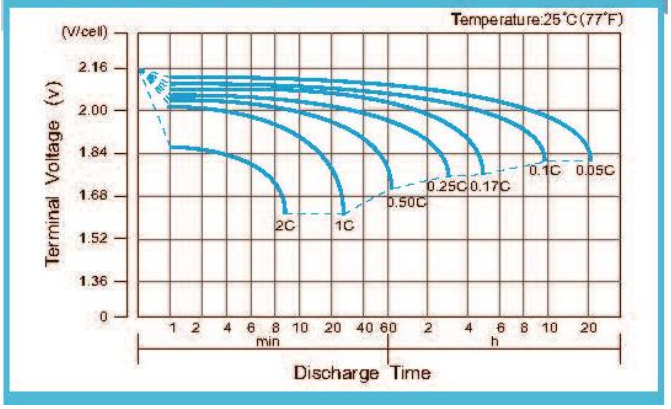
F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	327.4	265.5	174.2	108.6	66.4	49.7	39.7	33.3	22.5	18.6	10.4
1.65V	309.4	253.9	167.3	104.9	64.2	48.2	38.6	32.4	22.3	18.3	10.2
1.70V	284.9	237.8	159.9	101.5	62.1	46.9	37.6	31.6	21.9	18.1	10.1
1.75V	260.7	221.3	152.8	97.8	60	45.5	36.6	30.8	21.6	17.8	10
1.80V	236	204.3	146.1	94	57.8	44.1	35.6	30	21.2	17.6	9.9
1.85V	192.9	169.5	125.8	84.3	53	40.8	33	28	19.9	16.6	9.4

Constant Power Discharge Characteristics : WPC(25℃)

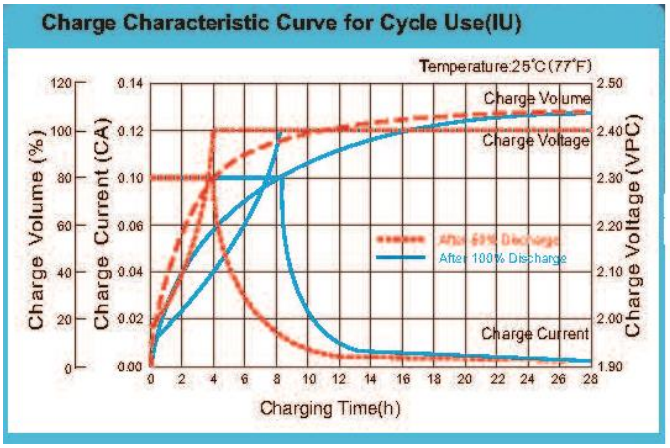
F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	632.5	527.5	359.6	231.9	142.9	108	86.6	72.9	50	41.5	23.3
1.65V	601.8	507	348.2	225.6	139.1	105.3	84.6	71.3	49.4	41	23
1.70V	571.1	486.5	336.8	219.3	135.2	102.7	82.6	69.7	48.8	40.5	22.7
1.75V	532.2	459.3	325.2	212.6	131.1	100	80.8	68.2	48.3	40	22.5
1.80V	490.2	430.1	314	205.6	127	97.3	78.7	66.7	47.6	39.5	22.3
1.85V	407.7	362	273.1	185.5	117	90.4	73.5	62.4	44.7	37.3	21.2

DG12-200 (12V200Ah)

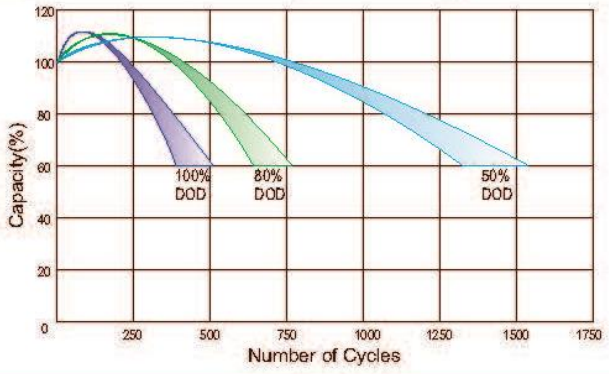
Discharge Characteristics Curve



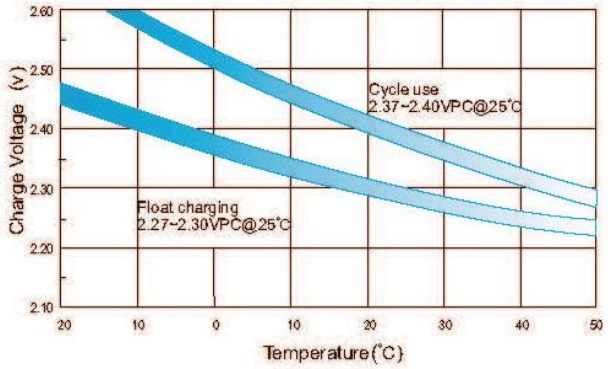
Charge Characteristic Curve for Cycle Use(IU)



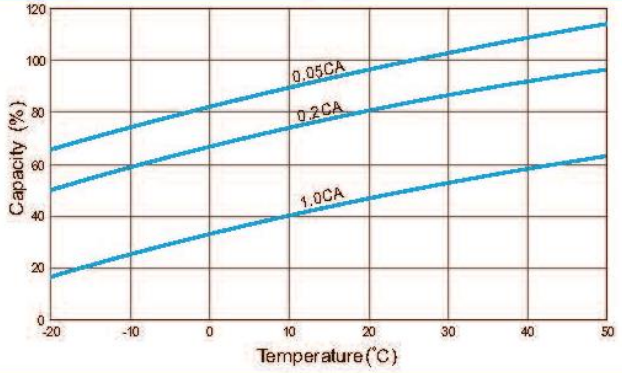
Cycle Life in Relation to Depth of Discharge



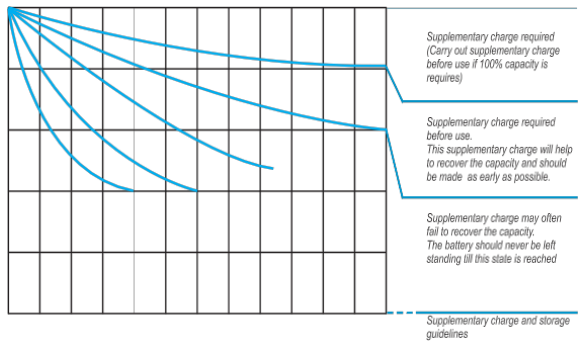
Relationship Between Charging Voltage and Temperature



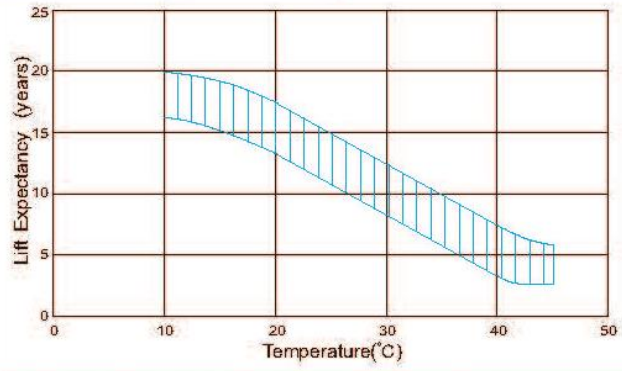
Temperature Effects on Capacity



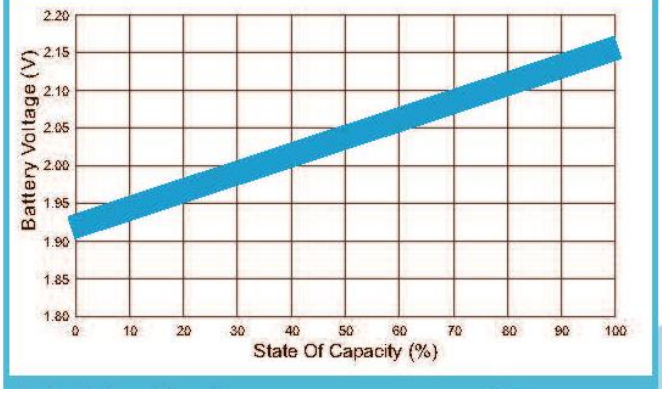
Storage Characteristics



Effect of Temperature on Long Term Life



Relationship of OCV And State of Charge(20°C)



Series	Model	Rated output power (kW)	Rated input current (A)	Rated output current (A)	Unit Price KShs
Three-phase 415V	GD100-2R2G-4-PV	2.2	5.8	5.5	54,000.00
	GD100-004G-4-PV	4.0	13.5	9.5	63,900.00
	GD100-5R5G-4-PV	5.5	19.5	14.0	83,750.00
	GD100-7R5G-4-PV	7.5	25.0	18.5	101,350.00

Product Function Parameters				
Model	-S52	-S2	-2	-4
AC input voltage (V)	220(-15%)-240(+10%) (1PH)		220(-15%)-240(+10%) (3PH)	380(-15%)-440(+10%) (3PH)
Max. DC input voltage (v)	440	440	440	800
Start - up voltage (V)	200	200	200	300
Lowest working Voltage (V)	150	150	150	250
Recommended DC input Voltage range (V)	200-400	200-400	200-400	300-750
Recommended MPP Voltage (V)	330	330	330	5500
Rated output Voltage (V)	220 (1PH)	220 (3PH)	220 (3PH)	380 (3PH)
Output frequency range (V)	0-400			
MPPT	99%			
Installation Manner	Wall mounting/Rail mounting/Flange mounting			
Environment Temperature	-10^0C-+50^0C If above 40^0C, derate 2% for every additional 1^0C			
Attitude	Below 1000m If above 1000m, derate 1% for every additional 100m			
Cooling Manner	Fan Cooling			
Protection Level	IP20, IP54 (Cabinet)			

Rooftop Scenario Product Details refer to the data sheet			Unit Price KShs
	**SUN2000L-Single Phase – Grid Tie Inverters** • 98.6%, European Efficiency 98.0% 10.6kg, allows one-person simple installation • Optimized AC connector for quick wiring • Supports one-click inverter configuration • Integrated Plug & Play energy storage interface for Lithium (or Batteries) • IP65, Natural cooling • Integrated lightening protection for both DC and AC	**SUN2000L-2KTL (2.2kW)** **SUN2000L-3KTL (3.3kW)** **SUN2000L-4KTL (4.4kW)** **SUN2000L-5KTL (5.5kW)**	109,000.00 130,000.00 156,000.00 163,000.00
	**SUN2000-6KTL inverter (6.6kVA, 6.0kW) 3Ph** • 2 MPPT, Max no. of Inputs: 2 • Recommended max PV Power 12.3kWp • Max Output Current 10.1A, Max Input Voltage 1.1kV • RS 485 and WLAN, 4G, 3G via Smart Dongle • Startup Voltage 200V • DC and AC lightning protection, Anti Islanding Protection, Input Side protection, DC Reverse polarity protection • RCD protection function • No need of external fan with natural cooling technology • Outdoor installation (IP65), Weight 17kg • Dimension: 525x470x166mm		212,000.00
	**SUN2000-10KTL Inverter (11kVA, 10kW) 3Ph** • 2 MPPT, Max no. of Inputs: 2 • Recommended max PV Power 14.88kWp • Max Output Current 16.9A, Max Input Voltage 1.1kV • WLAN, 4G, 3G via Smart Dongle • Startup Voltage 200V • DC and AC lightning protection, Anti Islanding Protection, Input Side protection, DC Reverse polarity & RCD protection • No need of external fan with natural cooling technology • Outdoor installation (IP65), Weight 17kg • Dimension: 525x470x166mm		283,000.00
	**SUN2000-15KTL Inverter (16.5kVA, 15kW) 3Ph** • 2 MPPT, Max no. of Inputs: 4 • Recommended max PV Power 29.76kWp • Max Output Current 25.2A, Max Input Voltage 1.1kV • WLAN, 4G, 3G via Smart Dongle • Startup Voltage 200V • DC and AC lightning protection, Anti Islanding Protection, Input Side protection, DC Reverse polarity & RCD protection • No need of external fan with natural cooling technology • Outdoor installation (IP65), Weight 25kg • Dimension: 525x470x262m		339,000.00

Rooftop Scenario Product Details refer to the data sheet		Unit Price KShs
	**SUN2000-17KTL Inverter (18.5kVA, 17kW) 3Ph** • 3 MPPT for versatile adaption to different module types or quantities built up with different alignments • 6 strings intelligent monitoring and 80% time saving for fault detection • RS 485 and USB ports for connectivity and data management • Local graphic LCD and remote monitoring • Max. Efficiency 98.6%, European Efficiency 98.3% • Residual Current Detection (RCD) protection • Type II surge arresters for both DC and AC, IP65	346,000.00
	**SUN2000-20KTL Inverter (20kW) 3Ph** • 2 MPPT, Max no. of Inputs: 4 • Recommended max PV Power 29.76kWp • Max Output Current 33.5A, Max Input Voltage 1.1kV • WLAN, 4G, 3G via Smart Dongle • Startup Voltage 200V • DC and AC lightning protection, Anti Islanding Protection, Input Side protection, DC Reverse polarity & RCD protection • No need of external fan with natural cooling technology • Outdoor installation (IP65), Weight 25kg • Dimension: 525x470x262mm	365,000.00
	**SUN2000-36KTL Inverter (40kVA, 36kW) 3Ph** • 4 MPPT, Max no. of Inputs: 8 • Max current per MPPT: 22A • Max Output Current 57.8A @ 400V • RS485, USB, MBUS • Startup Voltage 250V • DC and AC surge protection, Anti Islanding Protection, Input Side protection, DC Reverse polarity & PV string fault monitoring • No need of external fan with natural cooling technology • Outdoor installation (IP65), Weight 62kg • Dimension: 930x550x283mm	445,000.00
	**SUN2000-50KTL-M0 (55 kVA, 50kW) 3Ph** • 6 MPPT, Max no. of Inputs: 12 • Max current per MPPT: 22A • Max Output Current 79.4A @ 400V • RS485, USB, MBUS • Startup Voltage 200V • DC and AC surge protection, Anti Islanding Protection, Input Side protection, DC Reverse polarity & PV string fault monitoring • No need of external fan with natural cooling technology • Outdoor installation (IP65), Weight 74kg • Dimension: 1075x555x300mm	591,000.00

Product Description Ground-Mounted Scenario		Unit Price KShs
	**SUN2000-60KTL-M0 (66kVA, 60kW) 3Ph** • 6 MPPT, Max no. of Inputs: 12 • Max current per MPPT: 22A • Max Output Current 95.3A @ 400V • RS485, USB, MBUS • Startup Voltage 200V • DC and AC surge protection, Anti Islanding Protection, Input Side protection, DC Reverse polarity & PV string fault monitoring • No need of external fan with natural cooling technology • Outdoor installation (IP65), Weight 74kg • Dimension: 1075x555x300mm	608,000.00
	**SUN2000- 100KTL – M1** • 10 MPPTs, with two string inputs each MPPT for 20 total string inputs • 3 DC disconnect switches allows for maintenance on your array in thirds without shutting down entire production • Power Line Communication (PLC) supported • Smart I-V Curve Diagnosis supported • Max. efficiency 98.8% European efficiency 98.6% • Bi-Facial Module Compatible • Natural cooling technology • 25-year lifespan • Protection degree of IP66 (high pressure water and dust) • Type II surge arresters, for both DC and AC • DC Switch integrated, safe and convenient for maintenance • Residual Current Monitoring Unit (RCMU) integrated Fuse Free design	975,000.00
	**SUN2000-185KTL-H1** • 9 MPPTs, with two string inputs each MPPT for 18 total string inputs • Power Line Communication (PLC) supported • Smart I-V Curve Diagnosis supported • Max. efficiency 99.03% European Efficiency 98.69% • Bi-Facial Module Compatible • Natural cooling technology • 25-year lifespan • Protection degree of IP66 (high pressure water and dust) • Type II surge arresters, for both DC and AC • DC Switch integrated, safe and convenient for maintenance • Residual Current Monitoring Unit (RCMU) integrated Fuse Free design	1,430,000.00

Accessories Items Details refer to the data sheet		Unit Price KShs
	**SmartLogger3000A** • MODBUS-TCP for connections to Huawei NetEco • IEC60870-5-104 for connections to third-party monitoring systems • USB and embedded web for data reading and software upgrade • Automatically detecting facilities and mapping RS485 addresses • Remote control of active & reactive power • Up to 80 inverters per SmartLogger1000 • Up to 30 devices per RS485 bus • Max. reliable communication range of 1,000m	103,000.00
	**SmartLogger3000B** • Functioning as communication manager, data logger, PLC master and Ethernet switch • Multiple communication interfaces including PLC, RS485, Fast • Ethernet, and SFP ports, flexible applications • STP and RSTP supported for fiber ring network and ring protection • Bluetooth, embedded WEB and USB supported, user- friendly • Fast and reliable active and reactive power compensation control • I-V Curve Diagnosis supported Up to 200 devices supported, including up to 150 inverters • An integration of data collection, protocol conversion and Ethernet switch	430,000.00
	**Smart Dongle (WLAN)** Standard: 802.11b/g/n, 2.4GHz **Smart Dongle (4G)** Standard: 4G, 3G, EDGE, GPRS Max no. of manageable devices: 10 Max no. of manageable inverters: 10 via RS485	12,100.00 27,000.00
	**Smart Power Sensor** • DTSU666-H: Three Phase 3P4, 3CT,250A • Accuracy: Voltage ±0.5%, Power ±1% • Interface: RS485 • Baud Rate: 4800/9600bps • Protocol: Modbus-RTU • 3 Road voltage detection	41,657.00

Residential Scenario		Unit Price KShs
	**SMART POWER SENSOR** • DDSU666-H: Single Phase	20,000.00
	**Smart PV Optimizer** • Max. efficiency 99.5%, weighted efficiency 99.0% • Allows more panels on each roof to achieve higher system Yields • Supports installation in shade prone areas and in different directions • Quick frame mount at warehouse, less rooftop installation time • Supports remote module-level monitoring • IP68, support outdoor application • Communication through DC Power Line Communication • Single module shutdown capability to secure people and assets safety	10,000.00
	**Smart PV Safety Box (Preliminary)** • Communicate with optimizers through Power Line communication • Support module-level real time monitoring & Management • Single module shutdown capability to secure people and assets safety • IP65, support outdoor application	48,000.00

WATER SPRINKLER ACCESSORIES

S.NO	IMAGE	ITEM DESCRIPTION	UNIT	PRICE - KSHS
1		Filter 1 Sapphire Alpha Black Screen 50 Micron Prevent - 6210087511	Pc	26,628.16
2		ELE. VLV+STEM 1.5AC2W NDJ BSP - 6310058020	Pc	7,454.72
3		Valve 1.5 Electric Control 2w 24vac Blue Flow Control BSP - 6310248060	Pc	6,067.36
4		Ball Valve 3/4 Male/Female Long Handle- 200 - 6355180425	Pc	1,547.52
5		Ball Valve 1.5 Male/Female Long Handle- 200 - 6355180440	Pc	4,973.28
6		Coupler Metal 20x20 2way Male - 6410026220	Pc	224.64
7		Male Adaptor (Silver) 25-3/4 - 6412010625	Pc	237.12
8		Male Adaptor (Silver) 25-1 - 6412010630	Pc	237.12
9		Male Adaptor (Silver) 50-1.5 - 6412010660	Pc	671.84
10		Female Adaptor (Silver) 20-3/4 -6412010815	Pc	226.72
11		Silver Tee Conn. 50X50X50 - 6414012020	Pc	1,543.36
12		Compress Tee Connector 20mm X 3/4F X 20mm - 6415020512	Pc	247.52

S.NO	IMAGE	ITEM DESCRIPTION	UNIT	PRICE - KSHS
13		Silver Elbow 50mmX50mm - 6417015050	Pc	1,012.96
14		90° Elbow Male(Silver) 25-3/4 - 6417016015	Pc	282.88
15		90°Elbow Female(Silver)50-1.5 - 6417017045	Pc	1,048.32
16		PLASSON End Plug Silver 50MM - 6419010200	Pc	642.72
17		End Line 20mm Thick - 6419300425	Pc	13.25
18		Saddle Smooth 2 Bolts 50mm X1 - 6430020045	Pc	185.12
19		Bushing PVC Threaded 1.5 Male X 3/4 Female PLASSON 050201 - 6441010024	Pc	370.24
20		PVC/Threaded Elbow 90 DEG 1-1/2F - 6442010440	Pc	497.12
21		PVC Riser 1.5 X 20cm - 6443560515	Pc	401.44
22		TEE 90° PVC/THR Female 1.5 PLASSON 050401 - 6448010440	Pc	624.00
23		Double Nipple PVC/THR 1.5 PLASSON 050601 - 6452010050	Pc	245.44

WATER SPRINKLER ACCESSORIES

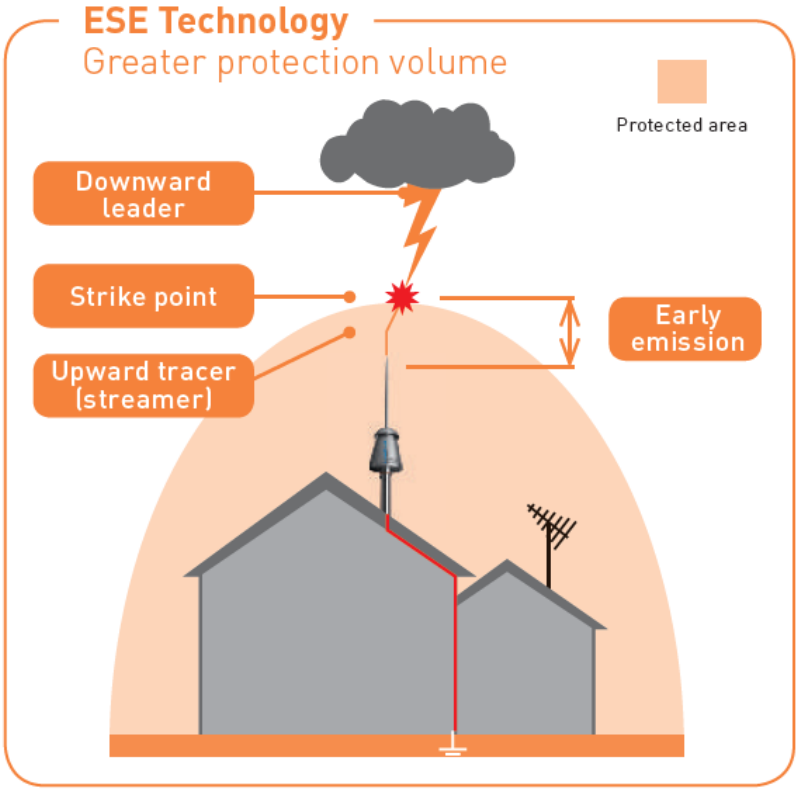
S.NO	IMAGE	ITEM DESCRIPTION	UNIT	PRICE KSHS
24		PVC/Threaded Record 1.5 F - 6454010030	Pc	1,146.08
25		Plas. Bushing M/F 1.5M X 1F - 6460590036	Pc	131.04
26		Plastic Elbow Street 1M X 1F - 6461590020	Pc	299.52
27		Plastic Reducing Nipple 1.5X1 - 6465590240	Pc	174.72
28		AC-12S 80512 230V Outdoor G3box English - 6600130080	Pc	31,489.12
29		Pressure Regul. Scope 1.5 90850328150016IMT 6665530402	Pc	45,472.96
30		CABLE XLP 5 X 1.5mm - 6675570615	Mtr	253.76
31		3.2 Mm Green Punch & Pusher For Micro Stand - 897285	Pc	1,562.88
32		Spark Solar Panel Cleaning 105 LPH - Spcm12020s	Pc	391.04
33		Spark Edge Solar Panel Clening 70 Lph+20cm Length - SPCM22020S	Pc	391.04
34		PRV 1”, 1.5”	Pc	

EARLY STREAMER EMISSION AIR TERMINALS (ESE) CERTIFIED WITH REMOTE TESTING & AUTODIAGNOSTIC FEATURES

- Operation of early streamer emission air terminals is based on the electric characteristics of lightning formation. Lightning begins with a down-conductor which spreads in any direction. Once it approaches the objects on the ground, any of them can be struck. The objective of an external lightning protection system is to control the lightning strike point and provide the lightning current with a path to earth avoiding damage to the structure.

- The main feature of Early Streamer Emission (ESE) air terminals is the generation of the continuous upward leader before any other object within its protected area. The standards define this characteristic using a parameter called advance time (ΔT): ”Difference expressed in microseconds between the emission time of an early streamer emission air terminal and a simple rod air terminal measured in a laboratory under the conditions defined in the reference standard.”

- This advance time determines the protection radius of each air terminal. If the triggering occurs earlier, then the distance at which the downward leader is intercepted increases, thus avoiding a lightning strike in a wider area. The advance time must be measured in a high voltage laboratory, following the test procedure described in the ESE lightning protection regulations.



Protection radius (in Metres) depending on the model of lightning rod - NFC 17-102 and similar ESE Standards

NP →	Level I (D=20 m)				Level II (D=30 m)				Level III (D=20 m)				Level IV (D=60 m)			
↓ h (m)	CPT-L	CPT 1	CPT 2	CPT 3	CPT-L	CPT 1	CPT 2	CPT 3	CPT-L	CPT 1	CPT 2	CPT 3	CPT-L	CPT 1	CPT 2	CPT 3
2	14	17	24	32	15	18	25	35	18	23	30	40	21	26	33	44
3	19	25	35	48	22	29	40	52	27	34	45	59	30	39*	50	65
4	25	34	46	64	29	40	55	69	35	46	60	78	40	52	67	87
5	31	42	58	79	36	51	70	86	43	57	75	97	50	65	84	107
6	31	43	58	79	37	52	70	87	44	58	76	97	51	66	84	107
8	32	43	59	79	38	53	71	87	46	59	77	98	53	67	8	108
10	32	44	59	79	39	53	71	88	47	61	77	99	55	69	87	109

h: height (in metres) between the tip of the lightning rod and the highest surface to be protected.

Protection radius (metres) of the air terminal according to standards UNE 21186, NP 4426, NFC 17102 & UNC 1185, etc

DATA CONTROLLER® PLUS – AT-1515, AT-1530, AT-1545, AT-1560

DATA CONTROLLER® REMOTE – AT-2515, AT-2530, AT-2545, AT-2560

	Level I					Level II					Level III					Level IV				
h/mt	**2**	**4**	**6**	**8**	**10**	**2**	**4**	**6**	**8**	**10**	**2**	**4**	**6**	**8**	**10**	**2**	**4**	**6**	**8**	**10**
AT-2515	13	25	32	33	34	15	30	38	39	40	18	36	46	47	49	20	41	52	54	56
AT-2530	19	38	48	49	49	22	44	55	56	57	25	51	64	65	65	28	57	72	73	75
AT-2545	25	51	63	64	64	28	57	71	72	72	32	64	81	82	83	36	72	90	91	92
AT-2560	31	63	79	79	79	35	69	87	87	88	39	78	97	97	99	43	85	107	108	109

Required efficiency (E)	**Level of protection**	
E > 0.98	Level 1:	Maximum safety
0.95 < E < 0.98	Level II:	High safety
0.80 < E < 0.95	Level III:	Maximum safety
0 < E < 0.80	Level IV:	Standard safety

METSEC CABLES LTD - NAIROBI

P O Box 75963, 00200 Nairobi, Kenya

Tel: +254-703 030 000/100-500

Cellphone: +254 725 913898

Fax: +254-703 030 333/777

Email: solar@doshigroup.com

METSEC CABLES LTD - MOMBASA

P O Box 80434 - 80100 Mombasa, Kenya

Tel: +254 041 2224414/2223013

Cell Safaricom: +254-722 411555

Cell Airtel: +254 733-411555

Fax: +254-041-2229904/2224526

Email: electrical-sales@msa.doshigroup.com

METSEC CABLES LTD - ELDORET

P O Box 1788 - 30100 Eldoret, Kenya

Tel: +254-053-2031030/2030341

Fax: +254-053-2030828

Cell Safaricom: +254-721-704777/ 722-325162

Cell Airtel: +254 734 704 777

Email: eldoret@eld.doshigroup.com

METSEC (T) LIMITED - TANZANIA

P O Box 438, Dar-Es-Salaam, Tanzania

Tel: +255 222 866215-8

Fax: +255 222 866219

Email: doshitz @tz.doshigroup.com

Website - www.metsec.co.ke