



Ceylon Electricity  
Board (CEB)



SRI LANKA  
SUSTAINABLE ENERGY AUTHORITY

Approved Service Provider



ARCHER PRIME  
INTERNATIONAL (PVT) LTD

"ENERGY CONSERVED IS LIFE PRESERVED"

Date	16	09	2023
Ref No	AP/AS/16092023-02		

# PROPOSAL FOR SUPPLYING AND INSTALLATION OF 5KW ON GRID ROOF TOP SOLAR PV SYSTEM – SINGLE PHASE



ARCHER PRIME  
INTERNATIONAL (PVT) LTD

Proposal for:  
**Indunil Lakshitha**  
Dsdfsdfs

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Archer Prime International (Pvt.) Ltd  
No.556, Bangalawa Junction,  
Pita Kotte, Sri Lanka  
Tel: 112 875 588



ARCHER PRIME  
INTERNATIONAL (PVT) LTD

## PROPOSAL FOR SUPPLYING AND INSTALLATION OF 5 KW ON GRID SOLAR PV SYSTEM

Dear Sir/Madam,

We are extremely glad you selecting us as your solar power system service and solution provider by trusting and keeping the utmost confidence on us. Let me have a brief description regarding how and why your decision is added with more value when it comes to the responsibility of **Archer Prime International (Pvt.) Ltd**



### GENIUNE PRODUCT QUALITY

We bring out the best quality products to give our clients the service they desire with a standardized procedure offering uncompromising quality and aggregate consumer loyalty



### CUSTOMISED SERVICE

It comes in all shapes and sizes, and it varies from customer to customer that's why we offer our customer tailor made product as they wish



### FRIENDLY SUPPORT

To offer some benefits included energy solutions coordinating our aptitude in the outline and establishment to our clients.

Below few of our long standing products.



## PROJECT PROPOSAL FOR SUPPLYING AND INSTALLATION OF 5 KW ON GRID SOLAR PV SYSTEM

We help utilize energy effectively, while creating a clean and sustainable power source. We try to help our customers to accomplish their objectives of clean energy with genuine products, provided at the highest possible quality at a reasonable price.

### Proposal Carries Weight of

- ☞ Requirement Analysis
- ☞ Survey on Installation Site
- ☞ Solar Modules + Inverter Mounting
- ☞ Surge Protection for AC line
- ☞ Surge Protection for DC line
- ☞ Finalizing the Installed System
- ☞ System Commissioning
- ☞ Handing Over the System

### System Includes

- ☞ 5KW Capacity of AE/JA - Monocrystalline Solar Panels
- ☞ 5KW Capacity SMA/SOLIS inverter – On Grid –Single phase
- ☞ Aluminum mounting structures with fittings/Cabling
- ☞ AC & DC Surge Protection
- ☞ Long Last Effective Earthing
- ☞ **2 Free Services**
- ☞ **Free fire insurance for the first year of installation**

## SYSTEM PRICE DETAILS

Panel Details	Inverter Details	Price
<b>AE</b>	<b>SMA</b>	<b>1175000.00</b>
<b>AE</b>	<b>SOLIS</b>	<b>850000.00</b>

- **Expected Generation per month (units) - 345.**



*Our warranty details and product details included in appendix below*

## **DECLARATION**

### **Terms & Conditions**

Delivery Point	:	Customer's site of installation.
Payment Terms	:	80% Advance Payment. 20% Balance Payment after delivering goods to the site.
Quotation Validity Period	:	14 days
Additional Works	:	Additional works not mentioned above is subject to occur extra charges. Above price is quoted based on standard cost relating to an Installation and any additional customization cost to be paid by the customer.
Completion	:	Installation is started after receiving the advance payment and CEB/LECO approval. Job completion time will be depend on time occur for process of importation & process of Local Authorities/ Government Regulations at the date processing transactions /Additional works required by the customer/Weather conditions and Site Conditions. Archer Prime International will not be liable for any completion delay which is occurred beyond the control of the company.

We hope that our offer is in line with your requirements and look forward to receive your valued order confirmation. Should you need any further clarification regarding the above please do not hesitate to contact under signed any time.

Thanking You,  
Yours Faithfully,  
**Archer Prime International (Pvt.) Ltd**

### **Assumptions**

**Electricity tariff increases by 1% annually**

Notes:

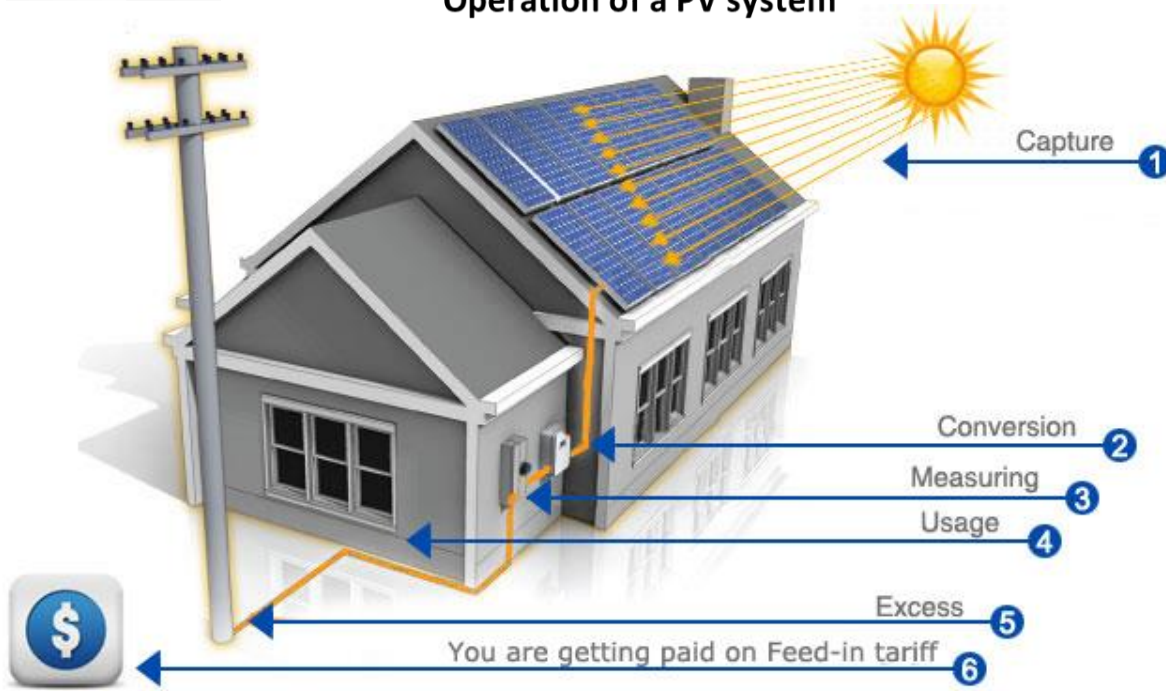
- ✓ System prices may vary according to the USD rates and material costs as per the time of installation and according to the actual site requirements.
- ✓ All CEB/LECO charges shall be paid by the customer.
- ✓ Additional structure cost is not included in above quoted price.
- ✓ All above quoted prices are valid for 14 days.
- ✓ Capacity calculations done with the assumption of 3.5 optimum sun hours per day will be received for Solar Energy harvest (source "Sri Lanka Sustainable Energy Authority" - SEA)
- ✓ Internet connections facility for inverter to be provided by the client.





## APPENDIX 1

### Operation of a PV system



**Capture** -Sunlight falls on high capacity solar panels during day light hours. The solar panels convert the sun's energy into Direct Current (DC) electricity which is sent to an inverter.

**Conversion** -The inverter converts the Direct Current (DC) into Alternating Current (AC) electricity. This is sometimes called "conditioning" the power.

**Measuring** -The meter measures the amount of electricity your system produces.

**Usage** -The 230V AC electricity is used to power your appliances in your premises. Solar Power System produces very high quality electricity that reduces the chance of power fluctuations that could damage the electronic equipment of your household. The utility grid (CEB/ LECO) continuously supply power at night and during when demand exceeds solar production.

**Excess Energy, Earning and getting paid** -When Solar Energy System produces more electricity than is needed during the peak sun hours, excess electricity is automatically sent to the utility company(CEB/ LECO) and you will be credited or get paid for free- in tariff based on the existing tariff rates.



## Net Metering System

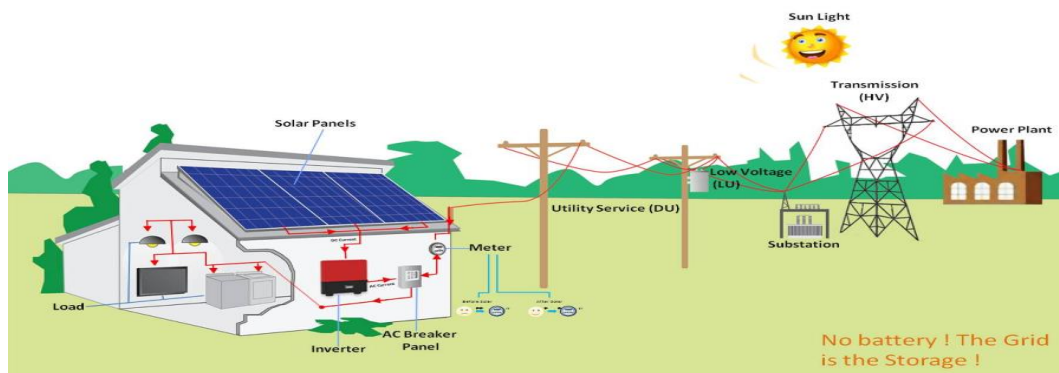
The Net Metering System provides you a reliable way of producing solar power. This allows you to use the electricity that the system produces and only requires you to pay any additional electricity you consume from the national grid. Your local utility grid acts as a virtual battery for the system, eliminating the need for batteries. No payment will be made for the excess electricity production of the system. The amount of units produced will be accounted for the next month's usage.

## Net Accounting System







If the power generated from your Solar Power System is greater than the amount you consume, you will be paid an amount of Rs. 37 per unit for solar system capacity up 500KW, Rs. 34.5 per unit for solar system capacity more than 500KW for 20 years agreement period. If you do consume more electricity than the amount produced by the system, you will be charged only for that amount based on the existing electricity tariff.

## Net Plus

Getting paid for the amount of electricity generated using the solar panels fixed on their houses/premises. Unlike net metering method there is no linkage in-between the electricity consumption of the customer and the electricity generation. The customer has to pay for the electricity consumed according to the existing tariff. Electricity Board will pay for the total amount of electricity he generates. (Net Plus).



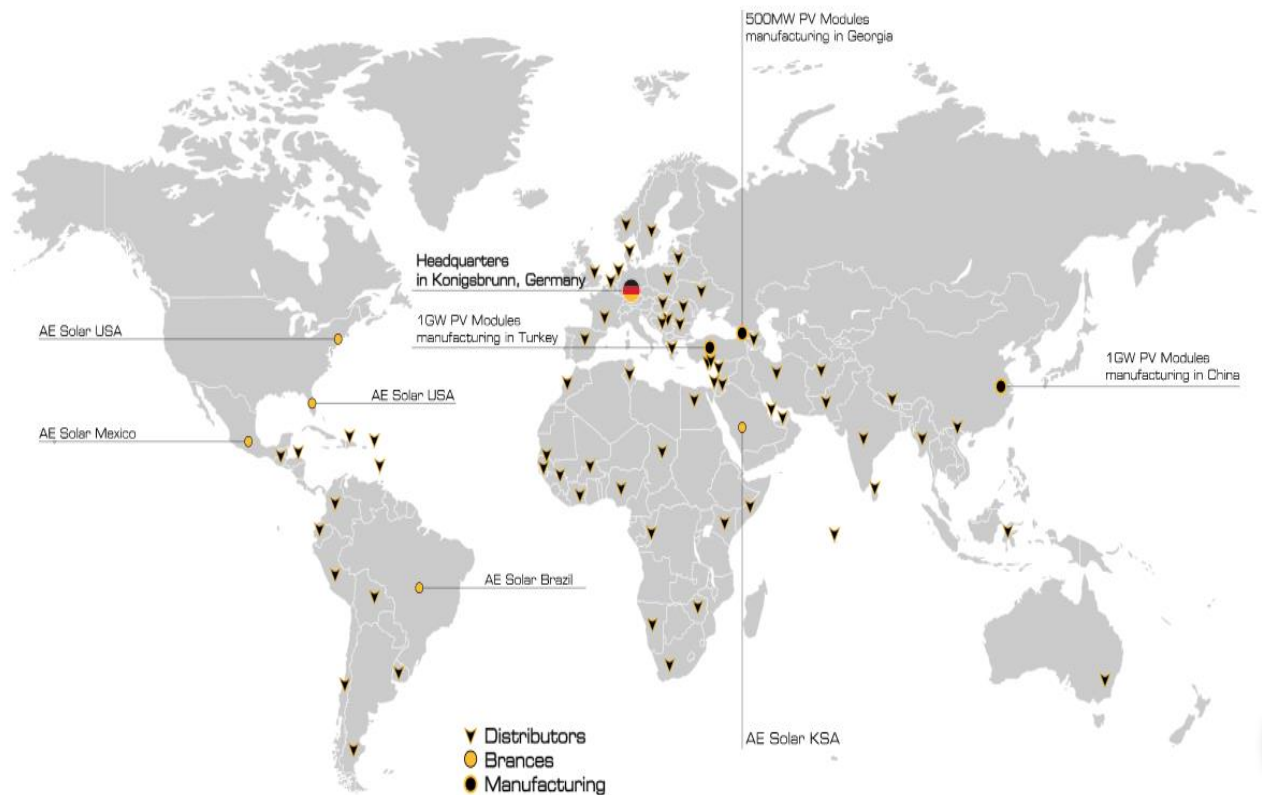
## APPENDIX 2

Seq	Product	Description	Remarks
01		<b>Monocrystalline</b> Photovoltaic solar panels 5KW Capacity.	Monocrystalline solar panels have the highest efficiency rates since they are made out of the highest-grade silicon. The efficiency rates of Monocrystalline solar panels are typically 15-21%. Since these solar panels yield the highest power outputs, they also require the least amount of space compared to any other types. Tend to perform better than similarly rated polycrystalline solar panels at low-light conditions and live longest.
02		SMA Inverter 5KW x 1 Nos (German)	Being most rewarded and the faultless inverters SMA gives a 10-year product warranty!
		Solis Inverter 5KW x 1 Nos (China)	Being most rewarded and the faultless inverters Solis gives a 10 years of product warranty!
04		AC & DC Surge Protection Devices (German)	Phoenix Contact is dedicated to providing professional application solutions to solar photovoltaic and power equipment and systems, with advanced surge Protection techniques and large selections of surge protection device products.
05		UV Protected DC Cable (German)	KBE/LAPP/TOP PV cables manufactured in Europe under the specific considerations to be used for Direct current carrying in outdoor applications.
06		Aluminum Mounting Frames	Quality assured Aluminum mounting structures to make sure the system is firm and performs well. Required inclination can be achieved using the accessories.
07		Installation, Testing & Commissioning Charges	Our professional installation team is ready to serve you the best we have in order to zero out your Electricity Bill.

## WORLD RENOWNED PRODUCTS – PV Module



- Factories in Europe and Asia
- Presence in 95+ countries
- 3200+ successful PV installations
- Experience since 2003



12 YEAR

PRODUCT WARRANTY

30 YEAR

LINEAR PERFORMANCE WARRANTY

*"Energy Conserved Is Life Preserved"*

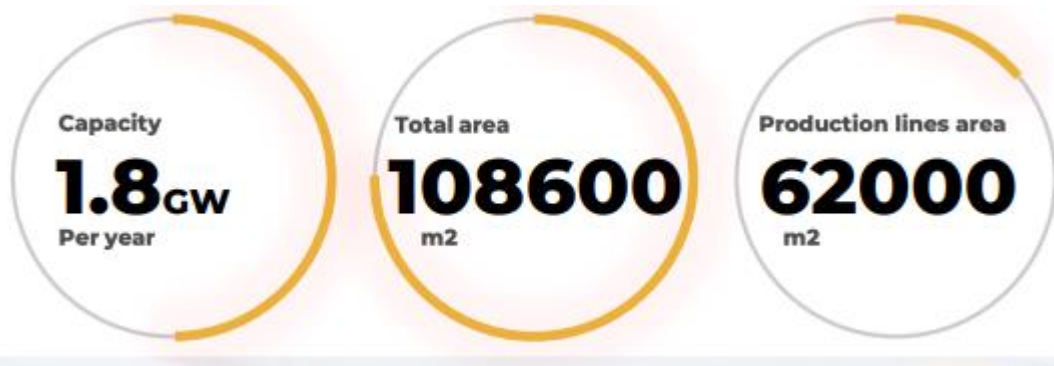
📍 **Archer Prime International (Pvt.) Ltd**  
No.556, Bangalawa Junction,  
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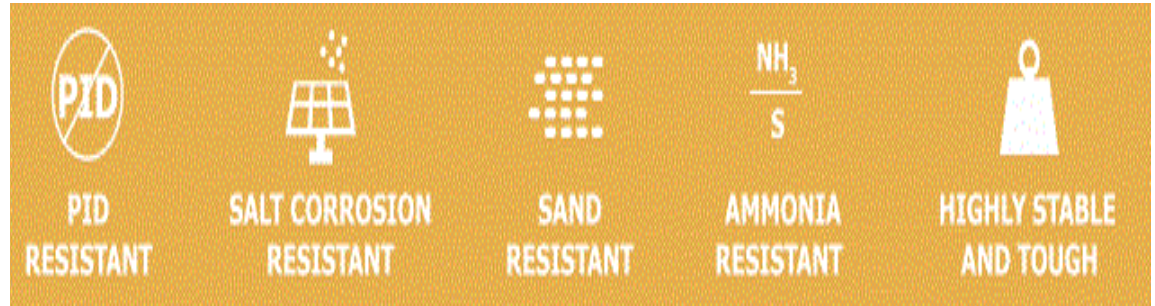


## Factories

AE Solar is already one of the leading brands in the renewable energy industry, providing high-quality new energy products and services since 2003. Renewable and especially photovoltaic is a very competitive industry where constant development is crucial.



## WORLD RENOWNED PRODUCTS – PV Module



2021

Forefront of providing Solar Tech solutions and transforming businesses



2020

Top design 2020



2019

Inter Solar 2019 Photovoltaics award finalist.



2018

PV magazine 2018 Top innovation award.



2017

SNEC 2017 PV Power Expo Top 10 Highlights award.

Inspiring green energy since 2003



## **WORLD RENOWNED PRODUCTS – Inverter**

**SMA Solar Technology is the most popular inverter brand in the world.**

Safety and quality are non-negotiable for SMA because in the end, exactly these factors guarantee maximum and sustainable efficiency of PV systems in all application areas and sizes for years.

Therefore, at SMA, quality starts with the product engineering process. Feedback from service employees and customers on previous models, such as field data from users and findings from production lines and requalification, is incorporated into the development of new products.

Extensive tests during the development phases, field experiments before series launch and supporting quality controls during production are all parts of SMA rigorous quality assurance process. SMA carries out thorough quality inspections at their certified test centers and on their PV systems. Their trained engineers and technicians simulate different environmental and connection conditions, subject the devices to artificial aging processes and test their electromagnetic compatibility. This allows to guarantee not only the high quality of products and solutions, but also compliance with all international standards.

SMA quality management is certified in accordance with the internationally recognized DIN ISO 9001 standard and is constantly evolving.

According to a survey from IMS research, SMA Solar Technology AG (SMA) is the most popular inverter brand in the world. The institute, which offers market research and consulting for the electronics industry, surveyed 400PV inverter customers including distributors, installers, integrators and wholesalers.





## WORLD RENOWNED PRODUCTS - Inverter

**SOLIS Solar Technology is the most popular inverter brand in the world.**

Established in 2005, Ginlong (Solis) Technologies. Today has one of the widest installed base of string inverters globally with Solis inverter Covering DC to AC power and interchanging with utility grid in market around the world, reducing the carbon footprint, and helping us enrich society around the world. Solis is the first publicly owned and listed company with a primary focus on string inverters and the first inverter manufacturer to complete PVEL's (Formerly part of DNV-GL) 3<sup>rd</sup> party inverter Reliability Testing.

Solis has achieved rapid growth in revenue and profit for many years in a row because of its leading technology and its decision to product quality. Solis ranked No.3 in the global PV inverter Shipment in 2021. No 2 in global single-phase and No.3 in global three-phase string market share by shipments.

Solis is committed to a global vision built on product-centered engineering, putting customers at the center of our most critical decisions, and ensuring that we play our role in the transition to clean by helping make it more efficient, safe and dependable.





## WORLD RENOWNED PRODUCTS – DC Cables



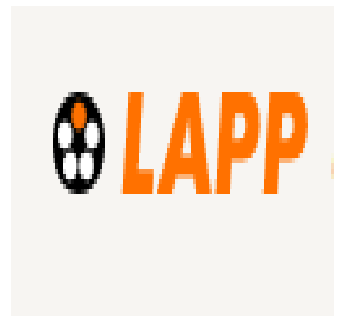
### KBE PRODUCTS POWER IN WIRE AND CABLES. MADE IN GERMANY

KBE Elektrotechnik GmbH is an internationally recognized manufacturer of automotive wires (FLRY, FLY), harmonized VDE wires (H05 / H07), wires adhering to UL 758, solar cables (TÜV/UL) as well as special cables for specific customer requirements. Their high levels of quality and reliability are valued by many renowned wire harness manufacturers and OEM; we have accordingly received OEM, TÜV, UL and VDE approvals. In their state-of-the-art manufacturing plants, they insulate bare and zinc-plated copper and aluminium strands with a wide variety of materials such as e.g. PVC, FEP, PUR, Hytrel, XPE and different TPE. Their extensive product program includes single core wires along with twisted pair cables, plastic-sheathed cables, twin and multiple cables as well as hybrid cables.

Together with their associate company DLB Draht and Litzen GmbH, they have extraordinary longstanding competencies in the development and production of wires and cables along the entire value chain – from 8 mm rods all the way to wire surface galvanization.

**LAPP:** This name stands for innovative connection solutions like no other. Their brand stands for quality, customer service and a deep understanding of the industries and applications in which their products are used. They are the world market leader, supplying everything from cable, connectors and accessories to fully integrated connection solutions. LAPP products are used in production machinery, industrial robots, public transport, food processing, alternative energy, charging systems for electric vehicles, oil drilling platforms and much more. LAPP products are even the first choice for climbing 8000m peaks or polar expeditions. With a global workforce of 4,575 people, we generated 1,128 million euros of turnover in the past year.

LAPP is well positioned for the future, just like Oskar and Ursula Ida Lapp were when they founded the company in 1959. In 1957, Oskar Lapp created the ÖLFLEX® control cable, the first protected trademark in the industry. More quickly followed. Throughout its history, the business has always been in family ownership. In Matthias Lapp, the third generation of the family has taken over the management of the family business



## RENOWNED PRODUCT IN ASIA– AC Cable

### ACL - SINCE 1962

ACL Cables PLC is the largest manufacturer of cables in Sri Lanka having pioneered the industry in 1962. ACL holds 45% share of the local market and produce the widest range of cables in Sri Lanka. Today, ACL has grown to be a Group of companies holding 70% share of the cable market in Sri Lanka.



ACL is the most sought – after brand of cables in Sri Lanka, having supplied 80% of the requirements of Duty Free projects owned by overseas investors and approved by the Board of Investment, beating foreign supplies of cables. All leading factories, hotels, commercial buildings and warehouses have used ACL Cables.



ACL continues to innovate and lead the field in the introduction of new products modern technology and machinery. In the five decades of it's existence, the Company has evolved as a specialized manufacturer and supplier of the widest range of quality cables and conductors in the country, while possessing the **most advanced technology in the Asian region** for the manufacture of low voltage Cross Linked Polyethylene cables (XLPE).

## WORLD RENOWNED PRODUCTS- AC/DC Surge

### About Phoenix Contact

Phoenix headquarter is in Germany. The Group includes fifteen German and four international companies as well as 55 sales companies all over the world. Internationally, Phoenix presents in more than 100 countries.

- **Company headquarters:** 32825 Blomberg, Germany
- **Founding year:** 1923 in Essen, North Rhine-Westphalia, Germany
- **Employees worldwide:** 20,300
- **Turnover in 2021:** 2.97 billion euros
- **Production sites:** 11
- **Sales locations:** 55



## APPENDIX 3

### WARRANTY AND SYSTEM HEALTH CHECK

-  AE solar panel's product warranty covers the integrity of the panel itself, and protects you against failures due to manufacturing defects. Archer Prime International partners up with **AE SOLAR** which comes with a **30** years long manufacturer's performance warranty and **12** years long manufacture's product warranty.
-  Archer Prime International partners up with **JA SOLAR** which comes with a **25** years long manufacturer's performance warranty and **12** years long manufacture's product warranty.
-  Archer Prime International partners up with **SMA** which comes with a **10** years long manufacturer's product warranty which can be extendable up to 20 years.
-  Archer Prime International partners up with **SOLIS** which comes with a **10** year long manufacturer's product warranty.
-  We, **Archer Prime International** Offers warranties up to **5** years for the other system parts.
-  We are committed to ensuring total customer satisfaction. We offer long term maintenance service to guarantee the optimal functioning of the Solar Power System.





## OUR PROJECTS



**Mrs. Ishara 6KW Domestic Solar System**

**Location: Piliyandala Area**



**Mr. Rajapaksha 5KW Domestic Solar System**

**Location: Minuwangoda Area**



**Mr. Sampath 5KW Domestic Solar System**

**Location: Kekirawa**



**Mr. Hirantha 5KW Domestic Solar System**

**Location: Dehiwala Area**





**Dr. Ratnapallie 6KW Domestic Solar System**

**Location: Boralasgamuwa Area**



**Mrs. Nelum 8KW Domestic Solar System**

**Location: Ambagaha Junction**

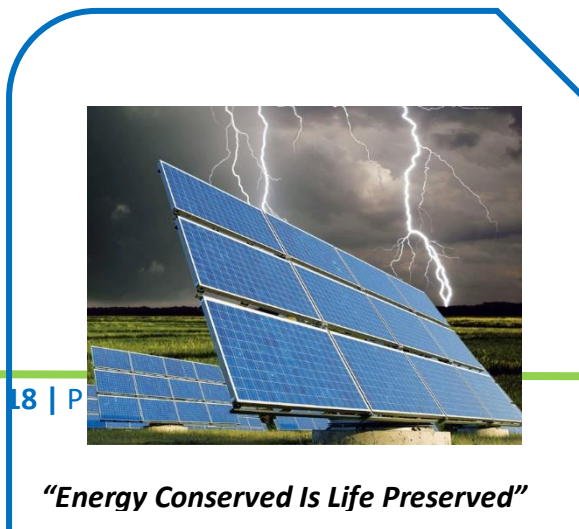
## APPENDIX 5

### *When you are with Archer Prime International (Pvt.) Ltd*



#### See what you have being far away also

Ideally suited for online monitoring of small PV systems with up to four inverters, Web connect provides free access to Sunny Portal and Sunny Places, the community portal. It's simple to use, requiring only Internet access and a DSL router. Following the simple installation of the factory integrated inverter interface, Web connect commissioning is plug-and-play. Once configured, key system data can be accessed and displayed in a clear format whenever needed. Furthermore, Sunny Places now offers PV system operators the opportunity to exchange ideas with other users and compare their systems to others in the community.



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*"Energy Conserved Is Life Preserved"*

#### Protection from Surges!

In most of the cases we have found the cause of the PV system to fail other than a mistake are the outside influences which are unexpected and unavoidable. Surges coming through the main supply lines due to direct strike on the lines can burn out your inverter and damage the panels as well.

Our main focus is to protect your and your system from these sought of disasters where we have chosen the excellent surge arresters in order to gain that satisfaction.



Tel: 112 875 588



## These things are for you only!

Archer Prime International (Pvt.) Ltd is an energized and geared team of young power dedicated to serve you with the best options and the services island wide. Starting from the design till you get the harvest, not stooping there further for more than 30 years of time we are there at your service.

Imagine when you are in a trouble and just by a little call we are there at your door step and you get nothing to worry about! That's our spirit!



## Meet the skilled Solar Installation Team

Archer Prime International (Pvt.) Ltd has a well skilled and experienced team to do their installation on your roof top. We do fastest possible installation with international quality standards in supervision of our principles.

## You've got our promise!

OUR After Sales team is dedicated on monitoring your solar system performance in-house. We will be able to send you monthly reports on your performance and attend any faults or within 48 hours.

Archer Prime

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Pita Kotte, S

Tel: 112 875 588



*Get in touch with us today to discuss more about your unique solution for your Solar Power requirements. We are here to provide you true knowledge regarding the system, why it is right for you and how it will benefit you further more.*



***Make yourself proud by choosing  
Prime International!***



***clean green energy with Archer***



**No 556, Bangalawa Junction, Pitta Kotte**



**0112 875 588**

***Thank You for Business with Us!***

***If you have further any clarifications Contact Us!***

