

9786769961



- ★ Air Conditioner
- ★ Refrigerator
- ★ Solar PV Panel
- ★ Inverter

Boys HS School Opposite – Thirumayam.

Date: 08.01.2020

To

The Principal,
Sri Bharathi Engineering College for Women,
Kaikkurichi,
Pudukkottai – 622 303.

Respected Madam,

With the previous consultancy services offered by Department of Electrical and Electronics Engineering in the domain of solar panel estimation and selection is satisfactory, we would like to continue with the same. We kindly request the consulting team to reach out to us for any additional information or details.

Forwarded to

C. Palani Samy

HOD / EEG



Dr. S. THILAGAVATHI M.E., Ph.D.,
PRINCIPAL

SRI BHARATHI ENGINEERING
COLLEGE FOR WOMEN
Kaikkurichi - 622 303, Pudukkottai

KSP Services, Thirumayam.



SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN

(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)

Pudukkottai - Aranthangi Road,
Kaikkurichi, Pudukkottai - 622 303.

Date : 14.01.2020

To

KSP Services,
Boys GHS School Opposite,
Thirumayam – 622 507.

Dear Sir/Madam,

Greetings from Sri Bharathi Engineering College for Women!

We are delighted to extend our consultancy activities for identifying the rating of solar panel for your clients. Mr. J. Sathyaraj, Assistant Professor/ Electrical and Electronics Engineering, Sri Bharathi Engineering College for Women is designated to complete the task promptly. The cost for the proposed work estimation is approximately Rs. 3500. We await your favourable response.

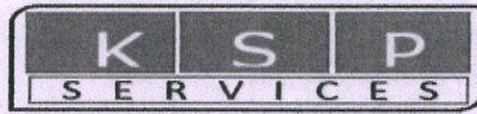
Thanking you

Dr. S. THILAGAVATHI M.E., Ph.D.,
PRINCIPAL
SRI BHARATHI ENGINEERING
COLLEGE FOR WOMEN
Kaikkurichi - 622 303, Pudukkottai Dt.

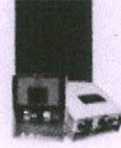
PRINCIPAL

14/01/20

PRINCIPAL
SRI BHARATHI ENGINEERING
COLLEGE FOR WOMEN
KAIKKURICHI - 622 303.
PUDUKKOTTAI DISTRICT



9786769961



- ★ Air Conditioner
- ★ Refrigerator
- ★ Solar PV Panel
- ★ Inverter

Boys HS School Opposite – Thirumayam.

Date: 29.01.2020

From

KSP Services,
Boys GHS School Opposite,
Thirumayam – 622 507.

To

The Principal,
Sri Bharathi Engineering College for women,
Kaikkurichi,
Pudukkottai – 622 303.

Respected Madam,

We are satisfied with your quotation for the estimation of PV panel rating and its quantity for our clients and on negotiation we grant Rs. 3000 towards the consultancy work on submission of the proposed work report within 5 to 7 days.

17/01/2020
for receiving

action
Please
29/01/20

C. Palanisamy



Dr. S. THILAGAVATHI M.E., Ph.D.,
PRINCIPAL

SRI BHARATHI ENGINEERING
COLLEGE FOR WOMEN
Kaikkurchi - 622 303, Pudukkottai Dt.

KSP Services, Thirumayam.



SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN

(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)

Kaikkurichi, Pudukkottai - 622 303.

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

CONSULTANCY PROJECT WORK

REPORT

**Estimation of Power Rating and Numbers of Solar PV Panel Require For
Installation in Domestic Appliances**

SUBMITTED

TO

KSP Services,

Boys GHS School Opposite,

Thirumayam – 622 507.

REPORT DATE: 5.2.2020


Dr. S.THILAGAVATHI M.E., Ph.D.,
PRINCIPAL
SRI BHARATHI ENGINEERING
COLLEGE FOR WOMEN
Kaikkurichi - 622 303, Pudukkottai Dt.

As requested, / Order by KSP Services, Thirumayam dated 29.1.2020, the following are the details for your kind perusal.

1. Load estimation

Load	Watts	Hour/Day	Number of loads	Watt-Hr
CFL	12	7	4	336
Fan	60	10	3	1800
TV (21'')	150	5	1	750
Personal Computer	250	5	1	1250
Total Daily Watt-Hour/day or Wh/day	628			4136

1.a. Load Estimation with power factor of 0.8 approximately.

Load	Watts	Hour/Day	Number of loads	Watt-Hr
CFL	12	7	4	336
Fan	60	10	3	1800
TV (21'')	150	5	1	750
Personal Computer	250	5	1	1250
Total Daily Watt-Hour/day or Wh/day	785			5170

2. Determining the inverter rating:

The require energy is supplied from a battery bank through an inverter. The total load that would be connected to the inverter is around 785 Watt [628 W/0.8].

Then, the inverters power handling capacity should be around 1000 Watt as available in market.


3. Daily energy supplied to the inverter:

The daily energy consumed by the load is 5170 Wh.

The energy input to the inverter with the efficiency of 93%, is $(5170)/(0.93) = 5559.13$ Wh, approximated to 5560 Wh.

4. Deciding the system voltage:

2 Batteries each of 12V connected in series to have typical PV system voltage as 24V.


Dr. S. THILAGAVATHI M.E., Ph.D.,
PRINCIPAL
SRI BHARATHI ENGINEERING
COLLEGE FOR WOMEN
Kalkkurchi - 622 303, Pudukkottai Dt.

5. Sizing of batteries:

The required charge capacity = $(5560 \text{ Wh}) / (24 \text{ V}) = 231.66 \text{ Ah}$.

The number of batteries of rating 12V, 100 Ah with Depth of Discharge (DOD) of 70% required is $(231.66 \text{ Ah}) / (100 * 0.70) = 3.30$, so 4 number of batteries can be preferred.

Now extra charge capacity will be available, to the load i.e., 280 Ah instead of 231.66 Ah.

6. Sizing of PV modules:

The energy supplied at the input of battery terminal with battery efficiency of 90% is, $(5170 \text{ Wh}) / (0.90) = 5744.44 \text{ Wh}$.

The total Ampere hour to be supplied by PV Panel should be, $5744.44 \text{ Wh} / (24 \text{ V}) = 239.35 \text{ Ah}$.

The total amperes from the PV modules, $(239.35 \text{ Ah}) / (8 \text{ h}) = 29.91 \text{ Ampere}$.

The typical value of voltage and current of 330 W_p module at maximum power point (V_m and I_m) would be about 37.67 V and 8.79 A, respectively.

The number of PV modules required is, $29.91 / 8.79 = 3.40$. Therefore, 4 PV Panels required as per calculation.

Considering various environmental factors and solar efficiency 4 panels of rating 330 W_p is required to deliver Total Daily Watt- Hour/day of 4136.

Design Details:

Sl. No	Description	Rating	Quantity
1.	Inverter	1000 Watt	01
2.	Battery	12V, 100 Ah	08
3.	Solar PV Panel	330 W_p , 37.67 V/ 8.80 A	04


PROJECT INVESTIGATOR

[J. SATHYARAJ, M. EEE]


Dr. S. THILAGAVATHI M.E., Ph.D.,
PRINCIPAL
SRI BHARATHI ENGINEERING
COLLEGE FOR WOMEN
Kaikkurchi - 622 303, Pudukkottai Dt.


PRINCIPAL

PRINCIPAL

SRI BHARATHI ENGINEERING
COLLEGE FOR WOMEN
KAIKKURICHI - 622 303.
PUDUKKOTTAI DISTRICT



SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN

(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)
Pudukkottai - Aranthangi Road,
Kaikkurichi, Pudukkottai - 622 303.

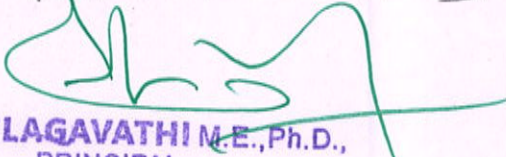
Date : 05.02.2020

Utilization Certificate

Certified that the amount of rupees Rs.3000 (Three thousand only) was sanctioned by KSP Services, Thirumayam during the academic year (2019-2020), in favour of Department of Electrical and Electronics Engineering, Sri Bharathi Engineering College for Women, Kaikkurichi, Pudukkottai has been fully utilized for Estimation of solar PV Panel requirement for your clients. The purpose of amount sanctioned has been fulfilled and delivered as per conditions of grant were satisfied.

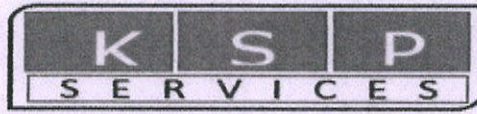

PROJECT INVESTIGATOR

[J. SANYARAJ, AIEEE]

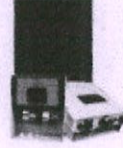

Dr. S. THILAGAVATHI M.E., Ph.D.,
PRINCIPAL
SRI BHARATHI ENGINEERING
COLLEGE FOR WOMEN
Kaikkurichi - 622 303, Pudukkottai Dt.


PRINCIPAL

PRINCIPAL
SRI BHARATHI ENGINEERING
COLLEGE FOR WOMEN
KAIKKURICHI - 622 303.
PUDUKKOTTAI DISTRICT



9786769961



- ★ Air Conditioner
- ★ Refrigerator
- ★ Solar PV Panel
- ★ Inverter

Boys HS School Opposite – Thirumayam.

Date: 27.11.19

From

KSP Services,
Boys GHS School Opposite,
Thirumayam – 622 507.

To

The Principal,
Sri Bharathi Engineering College for Women,
Kaikkurichi,
Pudukkottai – 622 303.

Forwarded to

1/10/19 / EEE

27/11/19

Respected Madam,

With the previous consultancy work offered by the Department of Electrical and Electronics Engineering of the institution regarding solar panel estimation and selection, we would like to proceed with the same services. We kindly request the consulting team to get in touch with us for additional details.

Dr. S. THILAGAVATHI M.E., Ph.D.,
PRINCIPAL
SRI BHARATHI ENGINEERING
COLLEGE FOR WOMEN
Kaikkurchi - 622 303, Pudukkottai Dt.

C. Balani Sany



KSP Services, Thirumayam.



SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN

(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)
Pudukkottai - Aranthangi Road,
Kaikkurichi, Pudukkottai - 622 303.

Date : 4.12.2019

To

KSP Services,
Boys GHS School Opposite,
Thirumayam – 622 507.

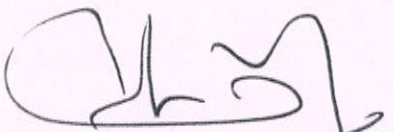
Dear Sir/Madam,

Greetings from Sri Bharathi Engineering College for Women!

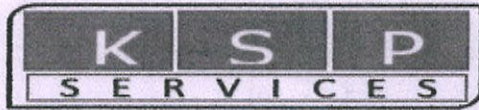
We are delighted to extend our consultancy activities for identifying the rating of solar panel for your clients. Mr. J. Sathyaraj, Assistant Professor/ Electrical and Electronics Engineering, Sri Bharathi Engineering College for Women is designated to complete the task promptly. The cost for the proposed work estimation is approximately Rs. 5000. We await your favourable response.

Thanking you

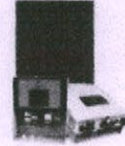

Dr. S. THILAGAVATHI M.E., Ph.D.,
PRINCIPAL
SRI BHARATHI ENGINEERING
COLLEGE FOR WOMEN
Kaikkurichi - 622 303, Pudukkottai Dt.


PRINCIPAL
04/12/19

PRINCIPAL
SRI BHARATHI ENGINEERING
COLLEGE FOR WOMEN
KAIKKURICHI - 622 303.
PUDUKKOTTAI DISTRICT



9786769961



- ★ Air Conditioner ★ Refrigerator
- ★ Solar PV Panel ★ Inverter

Boys HS School Opposite – Thirumayam.

Date: 16.12.19

From

KSP Services,
Boys GHS School Opposite,
Thirumayam – 622 507.

To

The Principal,
Sri Bharathi Engineering College for Women,
Kaikkurichi,
Pudukkottai – 622 303.

Respected Madam,

We are satisfied with your quotation for the estimation of PV panel rating and its quantity for our clients and on negotiation we grant Rs. 5000 towards the consultancy work on submission of the proposed work report within 5 to 7 days.

Handwritten: 16/12/19

Handwritten signature in green ink

Handwritten: action please

Handwritten: C. Palani Sany

Dr. S. THILAGAVATHI M.E., Ph.D.,
PRINCIPAL
SRI BHARATHI ENGINEERING
COLLEGE FOR WOMEN
Kaikkurichi – 622 303, Pudukkottai Dt.

Handwritten signature and date: 16/12/19



KSP Services, Thirumayam.



SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN

(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)

Kaikkurichi, Pudukkottai - 622 303.

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

CONSULTANCY PROJECT WORK

REPORT

Estimation of Power Rating and Numbers of Solar PV Panel Require For Installation in Mobile Store

SUBMITTED

TO

KSP Services,

Boys GHS School Opposite,

Thirumayam – 622 507.

REPORT DATE: 24.12.2019

Dr. S. THILAGAVATHI M.E., Ph.D.,
PRINCIPAL
SRI BHARATHI ENGINEERING
COLLEGE FOR WOMEN
Kaikkurchi - 622 303, Pudukkottai Dt.

As requested, / Order by KSP Services, Thirumayam dated 16.12.19, the following are the details for your kind perusal.

1. Load estimation

Load	Watts	Hour/Day	Number of loads	Watt-Hr
Tue Light	36	05	04	720
CFL	20	11	10	2200
Fan	60	10	3	1800
LCD TV (55'')	150	09	2	2700
Laptop	35	10	1	350
Personal computer	200	09	1	1800
Total Daily Watt-Hour/day or Wh/day	1059			9570

1.a. Load Estimation with power factor of 0.8 approximately.

Load	Watts	Hour/Day	Number of loads	Watt-Hr
Tue Light	36	05	04	720
CFL	20	11	10	2200
Fan	60	10	3	1800
LCD TV (55'')	150	09	2	2700
Laptop	35	10	1	350
Personal computer	200	09	1	1800
Total Daily Watt-Hour/day or Wh/day	1324			11963

2. Determining the inverter rating:

The require energy is supplied from a battery bank through an inverter. The total load that would be connected to the inverter is around 1324 [1059/0.8] Watt.

Then, the inverters power handling capacity should be around 1500 Watt as available in market.

3. Daily energy supplied to the inverter:

The daily energy consumed by the load is 11963 Wh.

The energy input to the inverter with the efficiency of 93%, is $(11963)/(0.90) = 13293$ Wh.


Dr. S.THILAGAVATHI M.E., Ph.D.,
 PRINCIPAL
 SRI BHARATHI ENGINEERING
 COLLEGE FOR WOMEN
 Kaikkurchi - 622 303, Pudukkottai Dt.

4. Deciding the system voltage:

1 Battery of 24V can be used to have typical PV system voltage as 24V.

5. Sizing of batteries:

The required charge capacity = $(13293 \text{ Wh}) / (24 \text{ V}) = 553.875 \text{ Ah}$.

The number of batteries of rating 24V, 200 Ah with Depth of Discharge (DOD) of 70% required is $(554 \text{ Ah}) / (100 \times 0.70) = 7.91$.

6. Sizing of PV modules:

The energy supplied at the input of battery terminal with battery efficiency of 90% is, $(11963 \text{ Wh}) / (0.90) = 13292.22 \text{ Wh}$.

The total Ampere hour to be supplied by PV Panel should be, $13293 \text{ Wh} / (24 \text{ V}) = 553.875 \text{ Ah}$.

The total amperes from the PV modules, $(554 \text{ Ah}) / (8 \text{ h}) = 69.25 \text{ Ampere}$.

The typical value of voltage and current of 440 W_p module at maximum power point (V_m and I_m) would be about 49 V and 11 A, respectively.

The number of PV modules required is, $70 / 11 = 6.36$. Therefore, 7 PV Panels required as per calculation.

Considering various environmental factors and solar efficiency 6 panels of rating 440 W_p is required to deliver Total Daily Watt- Hour/day of 9570.

Design Details:

Sl. No	Description	Rating	Quantity
1.	Inverter	1500 Watt	01
2.	Battery	24V, 200 Ah	08
3.	Solar PV Panel	440 W_p , 49 V / 11 A	07


PROJECT INVESTIGATOR

[J. SATYARAJ, AP/EEE]


PRINCIPAL

PRINCIPAL

SRI BHARATHI ENGINEERING
COLLEGE FOR WOMEN
KAIKKURICHI - 622 303.
PUDUKKOTTAI DISTRICT

Dr. S. THILAGAVATHI M.E., Ph.D.
PRINCIPAL
SRI BHARATHI ENGINEERING
COLLEGE FOR WOMEN
Kaikkurchi - 622 303, Pudukkottai Dt.



SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN

(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)

Pudukkottai - Aranthangi Road,

Kaikkurichi, Pudukkottai - 622 303.

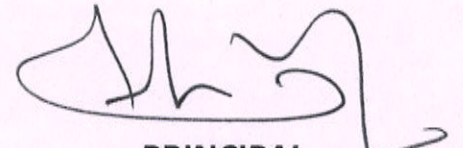
Date : 24.12.2019

Utilization Certificate

Certified that the amount of rupees Rs.5000 (Five thousand only) was sanctioned by KSP Services, Thirumayam during the academic year (2019-2020), in favour of Department of Electrical and Electronics Engineering Sri Bharathi Engineering College for Women, Kaikkurichi, Pudukkottai has been fully utilized for Estimation of solar PV Panel requirement. The purpose of amount sanctioned has been fulfilled and delivered as per conditions of grant were satisfied.

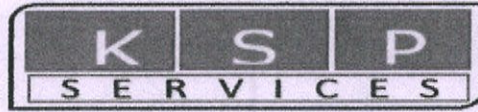

PROJECT INVESTIGATOR

[J SATHIYARAJ, AP/EEE]

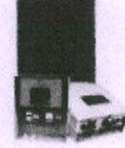

PRINCIPAL
24/12/19


Dr. S. THILAGAVATHI M.E., Ph.D.,
PRINCIPAL
SRI BHARATHI ENGINEERING
COLLEGE FOR WOMEN
Kaikkurichi - 622 303, Pudukkottai Dt.

PRINCIPAL
SRI BHARATHI ENGINEERING
COLLEGE FOR WOMEN
KAIKKURICHI - 622 303.
PUDUKKOTTAI DISTRICT



9786769961



- ★ Air Conditioner
- ★ Refrigerator
- ★ Solar PV Panel
- ★ Inverter

Boys HS School Opposite – Thirumayam.

Date: 11.9.2019

To

The Principal,
Sri Bharathi Engineering College for Women,
Kaikkurichi,
Pudukkottai – 622 303.

Respected Madam,

With the previous consultancy services offered by the Department of Electrical and Electronics Engineering in the domain of solar panel estimation and selection, we would like to continue with the same. We kindly request the consulting team to reach out to us for any additional information.

Forwarded to

C. Palani Samy

HOD/EEE


Dr. S. THILAGAVATHI M.E., Ph.D.,
PRINCIPAL
SRI BHARATHI ENGINEERING
COLLEGE FOR WOMEN
Kaikkurichi - 622 303, Pudukkottai Dt.



KSP Services, Thirumayam.



SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN

(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)

Pudukkottai - Aranthangi Road,
Kaikkurichi, Pudukkottai - 622 303.

Date : 19.9.2019

To

KSP Services,
Boys GHS School Opposite,
Thirumayam – 622 507.

Dear Sir/Madam,

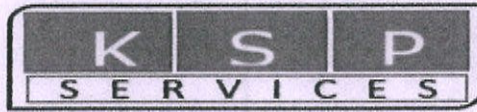
Greetings from Sri Bharathi Engineering College for Women!

We are delighted to extend our consultancy activities for identifying the rating of solar panel for your clients. Mr. J. Sathyaraj, Assistant Professor/ Electrical and Electronics Engineering, Sri Bharathi Engineering College for Women is designated to complete the task promptly. The cost for the proposed work estimation is approximately Rs. 3500. We await your favourable response.

Thanking you

Dr. S. THILAGAVATHI M.E., Ph.D.,
PRINCIPAL
SRI BHARATHI ENGINEERING
COLLEGE FOR WOMEN
Kaikkurichi - 622 303, Pudukkottai Dt.

PRINCIPAL
SRI BHARATHI ENGINEERING
COLLEGE FOR WOMEN
KAIKKURICHI - 622 303.
PUDUKKOTTAI DISTRICT



9786769961



- ★ Air Conditioner ★ Refrigerator
- ★ Solar PV Panel ★ Inverter

Boys HS School Opposite – Thirumayam.

Date: 27.9.2019

From

KSP Services,
Boys GHS School Opposite,
Thirumayam – 622 507.

1700/EEG

for necessary action
please

[Signature]
27/9/19

To

The Principal,
Sri Bharathi Engineering college for women,
Kaikkurichi,
Pudukkottai – 622 303.

Respected Madam,

We are satisfied with your quotation for the estimation of PV panel rating and its quantity for our clients and on negotiation we grant Rs. 3000 towards the consultancy work on submission of the proposed work report within 5 to 7 days.

[Signature]

Dr. S.THILAGAVATHI M.E., Ph.D.,
PRINCIPAL
SRI BHARATHI ENGINEERING
COLLEGE FOR WOMEN
Kaikkurchi - 622 303, Pudukkottai Dt.

C. Palani Sany



KSP Services, Thirumayam.



SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN

(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)

Kaikkurichi, Pudukkottai - 622 303.

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

CONSULTANCY PROJECT WORK

REPORT

**Estimation of Power Rating and Numbers of Solar PV Panel Require For
Installation in Domestic Appliances**

SUBMITTED

TO

KSP Services,

Boys GHS School Opposite,

Thirumayam – 622 507.

REPORT DATE: 3.10.2019

Dr. S. THILAGAVATHI M.E., Ph.D.,
PRINCIPAL
SRI BHARATHI ENGINEERING
COLLEGE FOR WOMEN
Kalkkurchi - 622 303, Pudukkottai Dt.

As requested, / Order by KSP Services, Thirumayam dated 27.9.2019, the following are the details for your kind perusal.

1. Load estimation

Load	Watts	Hour/Day	Number of loads	Watt-Hr
Tue light	40	7	4	1120
BLDC Fan	30	11	2	660
LCD TV (37'')	80	5	1	400
Desktop Computer	200	6	1	1200
Total Daily Watt- Hour/day or Wh/day	500			3380

1.a. Load Estimation with power factor of 0.8 approximately.

Load	Watts	Hour/Day	Number of loads	Watt-Hr
Tue light	40	7	4	1120
BLDC Fan	30	11	2	660
LCD TV (37'')	80	5	1	400
Desktop Computer	200	6	1	1200
Total Daily Watt- Hour/day or Wh/day	625			4225

2. Determining the inverter rating:

The require energy is supplied from a battery bank through an inverter. The total load that would be connected to the inverter is around 625 [500/0.8] Watt.

Then, the inverters power handling capacity should be around 1000 Watt as available in market.

3. Daily energy supplied to the inverter:

The daily energy consumed by the load is 4225 Wh.

The energy input to the inverter with the efficiency of 93%, is $(4225) / (0.93) = 4543$ Wh.


Dr. S.THILAGAVATHI M.E., Ph.D.,
PRINCIPAL
SRI BHARATHI ENGINEERING
COLLEGE FOR WOMEN
Kaikkurchi - 622 303, Pudukkottai Dt.

4. Deciding the system voltage:

2 Batteries each of 12V connected in series to have typical PV system voltage as 24V.

5. Sizing of batteries:

The required charge capacity = $(4543 \text{ Wh}) / (24 \text{ V}) = 189.29 \text{ Ah}$.

The number of batteries of rating 12V, 100 Ah with Depth of Discharge (DOD) of 70% required is $(190 \text{ Ah}) / (100 * 0.70) = 2.71$, so 3 number of batteries can be preferred.

6. Sizing of PV modules:

The energy supplied at the input of battery terminal with battery efficiency of 90% is, $(4225 \text{ Wh}) / (0.90) = 4694.44 \text{ Wh}$.

The total Ampere hour to be supplied by PV Panel should be, $4694.44 \text{ Wh} / (24 \text{ V}) = 195.60 \text{ Ah}$.

The total amperes from the PV modules, $(196 \text{ Ah}) / (9 \text{ h}) = 21.77 \text{ Ampere}$.

The typical value of voltage and current of 440 W_p module at maximum power point (V_m and I_m) would be about 49 V and 11 A, respectively.

The number of PV modules required is, $22 / 11 = 2$ Therefore, 2 PV Panels required as per calculation.

Considering various environmental factors and solar efficiency 2 panels of rating 440 W_p is required to deliver Total Daily Watt- Hour/day of 3380.

Design Details:

Sl. No	Description	Rating	Quantity
1.	Inverter	500/1000 Watt	01
2.	Battery	12V, 100 Ah	06
3.	Solar PV Panel	440 W_p , 49 V / 11 A	02


PROJECT INVESTIGATOR

[J. SATHYARAJ, AP / EEE]

Dr. S. THILAGAVATHI M.E., Ph.D.,
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SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN

(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)

Pudukkottai - Aranthangi Road,
Kaikkurichi, Pudukkottai - 622 303.

Date :3.10.19.....

Utilization Certificate

Certified that the amount of rupees Rs.3000 (Three thousand only) was sanctioned by KSP Services, Thirumayam during the academic year (2019-2020), in favour of Department of Electrical and Electronics Engineering, Sri Bharathi Engineering College for Women, Kaikkurichi, Pudukkottai has been fully utilized for Estimation of solar PV Panel requirement for your clients. The purpose of amount sanctioned has been fulfilled and delivered as per conditions of grant were satisfied.


PROJECT INVESTIGATOR

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