

**National Institute of Solar Energy**

(Formerly known as Solar Energy Centre)

(An autonomous institute of Ministry of New &amp; Renewable Energy)

Village &amp; Post-Gwalpahari, Dist.-Gurgaon, (Haryana), Pin - 122003

Ph. 0124-2579251 (CSC), Fax: 0124-2579207

2015-2016

**TEST REPORT ON BATTERY**

Sample ID No. 24/15/BT

Manufactured by : M/s A.H. ENTERPRISES, Village BhatoliKalan, PO-Baddi,  
Tehsil-Nalagarh, Distt.-Solan (H.P.)Submitted by : M/s A.H. ENTERPRISES, Village BhatoliKalan, PO-Baddi,  
Tehsil-Nalagarh, Distt.-Solan (H.P.)

This is a report on measurement of **Self Discharge Only** carried out on the battery (sample no. 24/15/BT) submitted at National Institute of Solar Energy as per IS 13369:1992 standard. **The data reported in this TEST REPORT are valid at the time of and under the stipulated conditions of measurement and the test results are applicable to this battery only and do not apply to other batteries even though declared to be identical.** The data contents in this report do not constitute a qualification test certificate. NISE does not accept any liability for any consequences including commercial or otherwise arising out of the utilization of the information contained in this report.

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Manish  
24/11/15

Rajesh Kumar  
24/11/2015



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# TEST REPORT OF LEAD ACID BATTERY

Sample ID No. 24/15/BT

Manufactured by : M/s A.H. ENTERPRISES, Village BhatoliKalan, PO-Baddi,  
Tehsil-Nalagarh, Distt.-Solan (H.P.)

Submitted by : M/s A.H. ENTERPRISES, Village BhatoliKalan, PO-Baddi,  
Tehsil-Nalagarh, Distt.-Solan (H.P.)

S.No	Test Description	Manufacture's Claim	Observations	Remarks
1	(i) Brand/Model (ii) Type (iii) S.No. (iv) Year (v) <u>Rating</u> (a) Voltage (b) Capacity at C10 discharge rate (vi) Dimension (mm) (vii) Weight before testing (kg)	Altima/6ALS 20 Lead Acid D15G-27-100 2015  12V 20Ah  259x170x200 15Kg	Altima/6ALS 20 Lead Acid D15G-27-100 2015  12V 24.89Ah  260x175x220 14.10Kg	cut off voltage 10.8 V
2	<b>Charging Efficiency:</b> (A) Capacity on discharging at (C 10) constant current continuously up to cut off voltage. (B)Capacity after recharging the battery by <b>24.48Ah</b> and then again discharging up to cut off voltage. (C)Efficiency-Ah & Wh		24.48Ah  22.92Ah  93.63% & 83.43%	Average Charging Voltage =13.58V  Average discharging voltage =12.10V

Prepared by: Manish

Date: 27/12/15

Rajesh Kumar  
27/12/15

Approved by:

Date:

Issued by

Date:



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Ph. 0124-2579251 (CSC), Fax: 0124-2579207

2015-2016

**TEST REPORT ON BATTERY**

Sample ID No. 25/15/BT

Manufactured by : M/s A.H. ENTERPRISES, Village BhatoliKalan, PO-Baddi,  
Tehsil-Nalagarh, Distt.-Solan (H.P.)

Submitted by : M/s A.H. ENTERPRISES, Village BhatoliKalan, PO-Baddi,  
Tehsil-Nalagarh, Distt.-Solan (H.P.)

This is a report on measurements of **Capacity rating & Charge efficiency** carried out on the battery (sample no. 25/15/BT) submitted at National Institute of Solar Energy as per **IS 13369:1992** standard. **The data reported in this TEST REPORT are valid at the time of and under the stipulated conditions of measurement and the test results are applicable to this battery only and do not apply to other batteries even though declared to be identical.** The data contents in this report do not constitute a qualification test certificate. NISE does not accept any liability for any consequences including commercial or otherwise arising out of the utilization of the information contained in this report.

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*Monish*  
*27/10/15*

*Rajesh Kumar*  
*27/10/15*



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# TEST REPORT OF LEAD ACID BATTERY

Sample ID No. 25/15/BT

Manufactured by : M/s A.H. ENTERPRISES, Village BhatoliKalan, PO-Baddi,  
Tehsil-Nalagarh, Distt.-Solon (H.P.)

Submitted by : M/s A.H. ENTERPRISES, Village BhatoliKalan, PO-Baddi,  
Tehsil-Nalagarh, Distt.-Solon (H.P.)

S.No	Test Description	Manufacture's Claim	Observations	Remarks
1	(I) Brand Model (ii) Type (iii) S.No (iv) Year (v) <u>Rating</u> (a) Voltage (b) Capacity at C10 discharge rate (vi) Dimension (mm) (vii) Weight before testing (kg)	Altima/6ALS 40 Lead Acid D15G-05-013 2015  12V 40Ah  404x175x255 21Kg	Altima/6ALS 40 Lead Acid D15G-05-013 2015  12V 44.11Ah  410x175x240 22.59Kg	cut off voltage 10.8 V
2	<b>Charging Efficiency:</b> (A) Capacity on discharging at (C 10) constant current continuously up to cut off voltage. (B) Capacity after recharging the battery by <b>43.54Ah</b> and then again discharging up to cut off voltage. (C) Efficiency-Ah & Wh		43.54Ah  41.18Ah  94.58% & 83.85%	Average Charging Voltage =13.57V  Average discharging voltage =12.03V

Prepared by: Monish

Date : 27/8/15

Approved by:

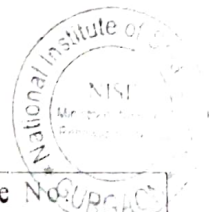
Date:

P. K. Kumar  
27/8/15

Issued by

Date:

Shush  
27/8/2015



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Ph. 0124-2579251 (CSC), Fax: 0124-2579207

2015-2016

**TEST REPORT ON BATTERY**

Sample ID No. 26/15/BT

Manufactured by : M/s A.H. ENTERPRISES, Village BhatoliKalan, P.O-Baddi,  
Tehsil-Nalagarh, Distt.-Solan (H.P.)

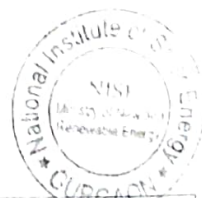
Submitted by : M/s A.H. ENTERPRISES, Village BhatoliKalan, P.O-Baddi,  
Tehsil-Nalagarh, Distt.-Solan (H.P.)

This is a report on measurements of **Capacity rating & Charge efficiency** carried out on the battery (sample no. 26/15/BT) submitted at National Institute of Solar Energy as per **IS 13369:1992** standard. **The data reported in this TEST REPORT are valid at the time of and under the stipulated conditions of measurement and the test results are applicable to this battery only and do not apply to other batteries even though declared to be identical.** The data contents in this report do not constitute a qualification test certificate. NISE does not accept any liability for any consequences including commercial or otherwise arising out of the utilization of the information contained in this report.

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*Manish*  
27/10/15

*P. J. Kumar*  
27/10/15



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Manufactured by : M/s A.H. ENTERPRISES, Village BhatoliKalan, PO-Baddi,  
Tehsil-Nalagarh, Distt.-Solan (H.P.)

Submitted by : M/s A.H. ENTERPRISES, Village BhatoliKalan, PO-Baddi,  
Tehsil-Nalagarh, Distt.-Solan (H.P.)

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1	(i) Brand Model (ii) Type (iii) S.No. (iv) Year (v) <u>Rating</u> (a) Voltage (b) Capacity at C10 discharge rate (vi) Dimension (mm) (vii) Weight before testing (kg)	Altima/6ALS 75 Lead Acid D15G-05-018 2015  12V 75Ah  504x218x266 40Kg	Altima/6ALS 75 Lead Acid D15G-05-018 2015  12V 84.60Ah  500x222x250 35.94Kg	cut off voltage 10.8 V
2	<b>Charging Efficiency:</b> (A) Capacity on discharging at (C 10) constant current continuously up to cut off voltage. (B) Capacity after recharging the battery by 83.74Ah and then again discharging up to cut off voltage. (C) Efficiency-Ah & Wh		83.74Ah  78.52Ah  93.77% & 84.24%	Average Charging Voltage =13.38V  Average discharging voltage =12.02V

Prepared by: Manish

Date: 27/11/15

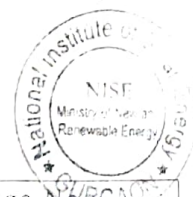
Approved by:

Date:

Rajendra Kumar  
27/11/15

Issued by:

Date:



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2015-2016

**TEST REPORT ON BATTERY**

Sample ID No. 27/15/BT

Manufactured by : M/s A.H. ENTERPRISES, Village BhatoliKalan, PO-Baddi,  
Tehsil-Nalagarh, Distt.-Solan (H.P.)Submitted by : M/s A.H. ENTERPRISES, Village BhatoliKalan, PO-Baddi,  
Tehsil-Nalagarh, Distt.-Solan (H.P.)

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M. Bhat  
27/10/15Rajesh Kumar  
27/10/15

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# TEST REPORT OF LEAD ACID BATTERY

Sample ID No. 27/15/BT

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Tehsil-Nalagarh, Distt.-Solan (H.P.)

Submitted by : M/s A.H. ENTERPRISES, Village BhatoliKalan, P.O-Baddi,  
Tehsil-Nalagarh, Distt.-Solan (H.P.)

S.No	Test Description	Manufacture's Claim	Observations	Remarks
1	(i) Brand/Model (ii) Type (iii) S.No. (iv) Year (v) <u>Rating</u> (a) Voltage (b) Capacity at C10 discharge rate (vi) Dimension (mm) (vii) Weight before testing (kg)	Altima/6ALS 100 Lead Acid D15G-05-019 2015  12V 100Ah  504x218x266 44Kg	Altima/6ALS 100 Lead Acid D15G-05-019 2015  12V 106.3Ah  500x222x250 39.39Kg	cut off voltage 10.8 V
2	<b>Charging Efficiency:</b> (A) Capacity on discharging at (C 10) constant current continuously up to cut off voltage. (B) Capacity after recharging the battery by 104.7Ah and then again discharging up to cut off voltage. (C) Efficiency-Ah & Wh		104.7Ah  94.49Ah  90.25% & 81.16%	Average Charging Voltage =13.40V  Average discharging voltage =12.05V

Prepared by: Mandh  
Date: 27/11/15

Approved by:  
Date:

P. J. Kumar  
27/11/15

Issued by  
Date:



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2015-2016

**TEST REPORT ON BATTERY**

Sample ID No. 28/15/BT

Manufactured by : M/s A.H. ENTERPRISES, Village BhatoliKalan, PO-Balldi,  
Tehsil-Nalagarh, Distt.-Solan (H.P.)Submitted by : M/s A.H. ENTERPRISES, Village BhatoliKalan, PO-Balldi,  
Tehsil-Nalagarh, Distt.-Solan (H.P.)

This is a report on measurements of **Capacity rating & Charge efficiency** carried out on the battery (sample no. 28/15/BT) submitted at National Institute of Solar Energy as per **IS 13369:1992** standard. **The data reported in this TEST REPORT are valid at the time of and under the stipulated conditions of measurement and the test results are applicable to this battery only and do not apply to other batteries even though declared to be identical.** The data contents in this report do not constitute a qualification test certificate. NISE does not accept any liability for any consequences including commercial or otherwise arising out of the utilization of the information contained in this report.

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Manish  
24/11/15

P. J. K. Kumar  
24/11/2015



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Tehsil-Nalagarh, Distt.-Solan (H.P.)

Submitted by : M/s A.H. ENTERPRISES, Village BhatoliKalan, P.O-Baddi,  
Tehsil-Nalagarh, Distt.-Solan (H.P.)

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1	(i) Brand/Model (ii) Type (iii) S.No. (iv) Year (v) <u>Rating</u> (a) Voltage (b) Capacity at C10 discharge rate (vi) Dimension (mm) (vii) Weight before testing (kg)	Altima/6ALS 120 Lead Acid D15G-27-022 2015  12V 120Ah  517x273x266 52Kg	Altima/6ALS 120 Lead Acid D15G-27-022 2015  12V 125.1Ah  495x190x405 53.38Kg	cut off voltage 10.8 V
2	<b>Charging Efficiency:</b> (A) Capacity on discharging at (C 10) constant current continuously up to cut off voltage. (B)Capacity after recharging the battery by 126.9Ah and then again discharging up to cut off voltage. (C)Efficiency-Ah & Wh		126.9Ah  119.4Ah  94.09% & 82.78%	Average Charging Voltage =13.64V  Average discharging voltage =12.7

Prepared by: Mamukh  
Date : 24/11/15

Approved by:  
Date

P. J. Lal Kumar  
24/11/2015

P. Shreshth  
24/11/2015  
Issued by  
Date  
NISE  
National Institute of Standards and  
GURGAON

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2015-2016

**TEST REPORT ON BATTERY**

Sample ID No. 29/15/BT

Manufactured by : M/s A.H. ENTERPRISES, Village BhatoliKalan, PO-Baldi,  
Tehsil-Nalagarh, Distt.-Solan (H.P.)Submitted by : M/s A.H. ENTERPRISES, Village BhatoliKalan, PO-Baldi,  
Tehsil-Nalagarh, Distt.-Solan (H.P.)

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Monika  
28/11/15Rajendra Kumar  
24/11/2015

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Tehsil-Nalagarh, Distt.-Solan (H.P.)

Submitted by : M/s A.H. ENTERPRISES, Village BhatoliKalan, P.O-Baddi,  
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1	(i) Brand/Model (ii) Type (iii) S.No. (iv) Year (v) <u>Rating</u> (a) Voltage (b) Capacity at C10 discharge rate (vi) Dimension (mm) (vii) Weight before testing (kg)	Altima/6ALS 150 Lead Acid D15G-05-024 2015  12V 150Ah  474x180x385 67Kg	Altima/6ALS 150 Lead Acid D15G-05-024 2015  12V 174Ah  500x190x405 59.28Kg	cut off voltage 16.5 V
2	<b>Charging Efficiency:</b> (A) Capacity on discharging at (C 10) constant current continuously up to cut off voltage. (B) Capacity after recharging the battery by 168.3Ah and then again discharging up to cut off voltage. (C) Efficiency-Ah & Wh		168.3Ah  156.6Ah  93.05% & 87.14%	Average Charging Voltage =12.91V  Average discharging voltage =12.09V

Prepared by: Mansh  
Date: 24/11/15

Approved by:  
Date:

P. J. Kumar  
24/11/15

Issued by:  
Date:



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