Test Report No. 24/15/BT/NISE

Date: 24.11.15

National Institute of Solar Energy

(Formerly known as Solar Energy Centre)
(An autonomous institute of Ministry of New & Renewable Energy)
Village&Post-Gwalpahari, Dist.-Gurgaon, (Haryana), Pin - 122003
Ph. 0124-2579251 (CSC), Fax: 0124-2579207

2015-2016

TEST REPORT ON BATTERY

The state of the s

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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Test Report No.	Takelin	
	Total No. of pages	Page No.
24/15/BT/NISE	2	1
		1

Sample ID No. 24/15/BT

Manufactured by : M/s A.H. ENTERPRISES, VIIIage BhatoliKalan, PO-Baddi,

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

: M/s A.H. ENTERPRISES, Village BhatoliKalan, PO-Baddi, Submitted by

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

S.No	Test Description	Manufacture's Claim	Observations	Remarks
1	(1) Brand/Model	Altima/6ALS 20	Altima/6ALS 20	cut off
1	(ii) Type	Lead Acid	Lead Acid	voltage
	(iii) S.No.	D15G-27-100	D15G-27-100	10.8 V
	(iv) Year	2015	2015	
	(v) Rating			
	(a) Voltage	12 V	12 V	
	(b) Capacity at C10	20 A h	24.89Ah	
	discharge rate			
	(vi) Dimension (mm)	259x170x200	260x175x220	
	(vii) Weight before	15 K g	14.10Kg	
	testing (kg)			
2	Charging Efficiency:			
	(A) Capacity on discharging		24.48Ah	Average
	at (C 10) constant current			Charging
1	continuously up to cut off			Voltage
1	voltage.			=13.58V
	(B)Capacity after recharging		22.92Ah	
	the battery by 24.48Ah and		22.52711	Average
	then again discharging up to			discharging
	cut off voltage.			voltage
	C)Efficiency-Ah &		93.63% & 83.43%	=12.10V
,	Wh		93.03 10 00 03.43 70	

Prepared by: Manish Date : 27/x/15

Approved by:

Date:

Issued by

Date:

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Test Report No.	Total No. of pages	Page No Co
24/15/BT/NISE	2	2
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Village&Post-Gwalpahari, Dist.-Gurgaon, (Haryana), Pin - 122003
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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, FO-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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Test Report No.	Total No. of pages	Page No.
25/15/BT/NISE	2	

Sample ID No. 25/15/BT

Manufactured by : M/s A.H. ENTERPRISES, Village BhatoliKalan, P()-Baddi,

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

Submitted by

: M/s A.H. ENTERPRISES, Village BhatoliKalan, P()-Baddi,

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

S.No	Test	Manufacture's Claim	Observations	Remarks
-	Description	the state of the s	Altima/6ALS 40	cut off
1	(1) Brand/Model	Altima/6ALS 40		voltage
	(ii) Type	Lead Acid	Lead Acid	10.8 V
	(iii) S.No	D15G-05-013	D15G-05-013	10.0 4
	(iv) Year	2015	2015	
	(v) Rating			
	(a) Voltage	12 V	12 V	
	(b) Capacity at C10	40 A h	44.11Ah	
	discharge rate			
	(vi) Dimension (mm)	404x175x255	410x175x240	
	(vii) Weight before	21Kg	22.59Kg	
	testing (kg)			
2	Charging Efficiency:			
	(A) Capacity on discharging		43.54Ah	Average
	at (C 10) constant current			Charging
	continuously up to cut off			Voltage
	voltage.			= 13.57 V
	(B)Capacity after recharging		41.18Ah	
	the battery by 43.54Ah and		41.18 All	Average
				discharging
	then again discharging up to			voltage
	cut off voltage.			= 12.03 V
	(C)Efficiency-Ah &		94.58% & 83.85%	-12.03 V
	W h			

Prepared by: Monish Date : 27/x/15

Approved by: Paer Land

Test Report No.	Total No. of pages	Page NOUPGAC
25/15/BT/NISE	2	2

National Institute of Solar Energy
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Village&Post-Gwalpahari, Dist.-Gurgaon, (Haryana), Pin - 122003
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, F'O-Baddi,

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

Submitted by : M/s A.H. ENTERPRISES, Village BhatoliKalan, FO-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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Test Report No.	Total No. of pages	Page No.
26/15/BT/NISE	2	
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Sample ID No. 26/15/BT

 ${\tt Manufactured\ by\ :\ M/s\ A.H.\ ENTERPRISES,\ Village\ BhatoliKalan,\ PO-Baddi,}$

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

Submitted by : M/s A.H. ENTERPRISES, Village BhatoliKalan, PO-Baddi,

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

Test Description	Manufacture's Claim	Observations	Remarks
(1) Brand/Model	Altima/6ALS 75	Altima/6ALS 75	cut off
(ii) Type	Lead Acid		voltage
(iii) S.No.	D15G-05-018	D15G-05-018	10.8 V
(iv) Year	2015		
(v) Rating		2 0,1 3	
(a) Voltage	12 V	12 V	
	75 A h		
		01.00711	
(vi) Dimension (mm)	504x218x266	500x222x250	
(vii) Weight before			
testing (kg)		33.7.11	
(A) Capacity on discharging		83 74 A h	Average
at (C 10) constant current		03.747411	Charging
continuously up to cut off			Voltage
,			=13.38V
		78 52 A b	13.30
		78.32An	Average
			discharging
-		02 770/ 0 04 242	voltage =12.02V
		95.77% & 84.24%	- 12.02V
	Description (1) Brand: Model (ii) Type (iii) S.No. (iv) Year (v) Rating (a) Voltage (b) Capacity at C10 discharge rate (vi) Dimension (mm) (vii) Weight before testing (kg) Charging Efficiency: (A) Capacity on discharging	Claim (I) Brand: Model (ii) Type (iii) S.No. (iv) Year (v) Rating (a) Voltage (b) Capacity at C10 discharge rate (vi) Dimension (mm) (vii) Weight before testing (kg) Charging Efficiency: (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 &	Description (I) Brand: Model (ii) Type (iii) S.No. (iv) Year (v) Rating (a) Voltage (b) Capacity at C10 discharge rate (vi) Dimension (mm) (vii) Weight before testing (kg) Charging Efficiency: (A) Capacity after recharging 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 &

Prepared by Manual
Date . 27/4/15

Approved by:

Date:

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Test Report No.	Total No. of pages	Page NERGAS
26/15/BT/NISE	2	2

National Institute of Solar Energy
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Ph. 0124-2579251 (CSC), Fax: 0124-2579207

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.)

This is a report on measurements of Capacity rating & Charge efficiency carried out on the battery (sample no. 27/15/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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Test Report No.	Total No. of pages	Page No
27/15/BT/NISE	2	

Sample ID No. 27/15/BT

 ${\tt Manufactured\ by\ :\ M/s\ A.H.\ ENTERPRISES,\ Village\ BhatoliKalan,\ FO-Baddi,}$

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

: M/s A.H. ENTERPRISES, Village BhatoliKalan, PO-Baddi, Submitted by

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

S.No	Test	Manufacture's	Observations	Remarks
	Description	Claim		C.C.
1	(1) Brand/Model	Altima/6ALS 100	Altima/6ALS 100	cut off
	(ii) Type	Lead Acid	Lead Acid	voltage
	(iii) S.No.	D15G-05-019	D15G-05-019	10.8 V
	(iv) Year	2015	2015	
	(v) Rating			
	(a) Voltage	12 V	12 V	
	(b) Capacity at C10	100 A h	106.3 A h	
	discharge rate			
	(vi) Dimension (mm)	504x218x266	500x222x250	
	(vii) Weight before	44 K g	39.39Kg	
	testing (kg)			
2	Charging Efficiency:			
	(A) Capacity on discharging		104.7Ah	Average
	at (C 10) constant current			Charging
	continuously up to cut off			Voltage
	voltage.			-13.40V
	(B)Capacity after recharging		94.49 A h	
	the battery by 104.7Ah and			Average
	then again discharging up to			discharging
	cut off voltage.			voltage
	(C)Efficiency-Ah &		90.25% & 81.16%	=12.05V
	Wh		70.2376 & 61.1076	

Prepared by: Manida

Date: 27/4/15

Approved by: 2907 28/4/15

Test Report No.	Total No. of pages	Page Mapo
27/15/BT/NISE	2	2

National Institute of Solar Energy

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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-Baildi,

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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Test Report No.	Total No. of pages	Page No.
28/15/BT/NISE	2	

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Manufactured by : M/s A.H. ENTERPRISES, Village BhatoliKalan, PO-Bhildi,

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	(1) Brand/Model (ii) Type (iii) S.No. (iv) Year (v) Rating	Altima/6ALS 120 Lead Acid D15G-27-022 2015	Altima/6ALS 120 Lead Acid D15G-27-022 2015	cut eff voltage 10.8 V
	(a) Voltage (b) Capacity at C10 discharge rate	12 V 120 A h	12 V 125.1Ah	
	<pre>(vi) Dimension (mm) (vii) Weight before testing (kg)</pre>	517x273x266 52Kg	495x190x405 53.38Kg	
2	Charging Efficiency: (A) Capacity on discharging at (C 10) constant current continuously up to cut off		126.9Ah	Average Charging Voltage
	voltage. (B)Capacity after recharging the battery by 126.9Ah and then again discharging up to		119.4Ah	= 13 64V Average discorrging
	cut off voltage. (C)Efficiency-Ah & Wh	,	94.09% & 82.78%	voltage = 12 V

Prepared by: Manual Date : 24/11/15

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Test Report No.	Total No. of pages	Page No.
28/15/BT/NISE	2	2

Date: 24 11.15

National Institute of Solar Energy

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Village&Post-Gwalpahari, Dist.-Gurgaon, (Haryana), Pin = 122103

2015-2016

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TEST REPORT ON BATTERY

Sample ID No. 29/15/BT

Manufactured by : M/s A.H. ENTERPRISES, Village BhatoliKalan, PO-Baildi,

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

Submitted by : M/s A.H. ENTERPRISES, Village BhatoliKalan, PO-Baildi,

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

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Test Report No.	Total No. of pages	Page No.
29/15/BT/NISE	2	

Sample ID No. 29/15/BT

Manufactured by : M/s A.H. ENTERPRISES, Village BhatoliKalan, FO-Baddi,

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

Submitted by

: M/s A.H. ENTERPRISES, Village BhatoliKalan, FO-Baddi,

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

S.No	Test Description	Manufacture's Claim	Observations	Remarks
1	(1) Brand/Model	Altima/6ALS 150	Altima/6ALS 150	cu off
	(ii) Type	Lead Acid	Lead Acid	voltage
	(iii) S.No.	D15G-05-024	D15G-05-024	16 5 V
	(iv) Year	2015	2015	
	(v) Rating			
	(a) Voltage	12 V	12 V	
	(b) Capacity at C10	150 A h	174Ah	
	discharge rate			
	(vi) Dimension (mm)	474x180x385	500x190x405	
	(vii) Weight before	67 K g	59.28Kg	
	testing (kg)	-3.116	37.20105	
2	Charging Efficiency:			
	(A) Capacity on discharging		168.3Ah	Amerage
	at (C 10) constant current		100.3AII	
	continuously up to cut off			Charging
	voltage.			Voltage
	(B)Capacity after recharging			=17.91V
			156.6Ah	
	the battery by 168.3Ah and			& werage
	then again discharging up to			discharging
	cut off voltage.			voltage
	(C)Efficiency-Ah & Wh		93.05% & 87.14%	" 12.09V

Prepared by: Manush Date 24/11/15

Approved by: Pjentumay

Test Report No.	Total No. of pres	Page No
29/15/BT/NISE	2	2