National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

Laboratory Name : NISAKI TECHNOLOGY SERVICES, 302 2/2 CITY CASA 3RD FLOOR BASAPPA ROAD SHANTHI NAGAR, BENGALURU, KARNATAKA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number TC-11404 **Page No** 1 of 11

Validity 28/02/2023 to 27/02/2025 **Last Amended on** -

S.No	Discipline / Group	Materials or Products tested	Component, parameter or characteristic tested / Specific Test Performed / Tests or type of tests performed	Test Method Specification against which tests are performed and / or the techniques / equipment used
Permanent Facility				
1	ELECTRICAL- CELLS & BATTERIES	Lead Acid storage batteries for motor vehicles with light weight and high cranking performance	Capacity 5 Hrs	IS 14257, Cl:9.3.4
2	ELECTRICAL- CELLS & BATTERIES	Lead Acid storage batteries for motor vehicles with light weight and high cranking performance	Dimension and Layout	IS 14257, Cl: 9.3.2
3	ELECTRICAL- CELLS & BATTERIES	Lead Acid storage batteries for motor vehicles with light weight and high cranking performance	Life cycle test	IS 14257 Cl:9.3.7
4	ELECTRICAL- CELLS & BATTERIES	Lead Acid storage batteries for motor vehicles with light weight and high cranking performance	Marking	IS 14257, Cl:9.3.3
5	ELECTRICAL- CELLS & BATTERIES	Lead Acid storage batteries for motor vehicles with light weight and high cranking performance	Over charge Endurance	IS 14257, Cl: 9.3.9
6	ELECTRICAL- CELLS & BATTERIES	Lead Acid storage batteries for motor vehicles with light weight and high cranking performance	Physical Examination	IS 14257, Cl:9.3.1
7	ELECTRICAL- CELLS & BATTERIES	Sealed Lead Acid (SMF) Batteries	Capacity	JIS 8702-1, Cl:5.1 & 7.1
8	ELECTRICAL- CELLS & BATTERIES	Sealed Lead Acid (SMF) Batteries	Constructions	JIS 8702 Cl:4.1
9	ELECTRICAL- CELLS & BATTERIES	Sealed Lead Acid (SMF) Batteries	Cycle Service Endurance.	JIS 8702-1 Cl: 5.3 & 7.3
10	ELECTRICAL- CELLS & BATTERIES	Sealed Lead Acid (SMF) Batteries	High Rate Discharge Characteristics	JIS 8702-1, Cl:5.2 & 7.2
11	ELECTRICAL- CELLS & BATTERIES	Sealed Lead Acid (SMF) Batteries	Marking Items	JIS 8702-1, Cl: 4.3
12	ELECTRICAL- CELLS & BATTERIES	Sealed Lead Acid (SMF) Batteries	Marking of polarity	JIS 8702-1, Cl:4.4
13	ELECTRICAL- CELLS & BATTERIES	Sealed Lead Acid (SMF) Batteries	Storage characteristics	JIS 8702-2, Cl:5.4 & 7.4
14	ELECTRICAL- CELLS & BATTERIES	Sealed Lead acid battery	Capacity @ 20 hours	JIS8702-01, Cl.7.1
15	ELECTRICAL- CELLS & BATTERIES	Secondary cells and batteries for Photovoltaic Energy systems (PVES)	Marking	IEC 61427, Cl:5.4
16	ELECTRICAL- CELLS & BATTERIES	Secondary cells and batteries for photovoltaic Energy systems (PVES)	Capacity test	IEC 61427, Cl:8.1
17	ELECTRICAL- CELLS & BATTERIES	Secondary cells and batteries for photovoltaic Energy systems (PVES)	Charge Efficiency	IEC 61427, Cl:5.2
18	ELECTRICAL- CELLS & BATTERIES	Secondary cells and batteries for photovoltaic Energy systems (PVES)	Charge Retention Test	IEC 61427, Cl:8.3

SCOPE OF ACCREDITATION

Laboratory Name : NISAKI TECHNOLOGY SERVICES, 302 2/2 CITY CASA 3RD FLOOR BASAPPA ROAD SHANTHI NAGAR, BENGALURU, KARNATAKA, INDIA

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S.No	Discipline / Group	Materials or Products tested	Component, parameter or characteristic tested / Specific Test Performed / Tests or type of tests performed	Test Method Specification against which tests are performed and / or the techniques / equipment used
19	ELECTRICAL- CELLS & BATTERIES	Secondary cells and batteries for Photovoltaic Energy systems (PVES)	Cycle Endurance test in Photovoltaic application (Extreme condition)	IEC 61427, Cl:8.4
20	ELECTRICAL- CELLS & BATTERIES	Secondary cells and batteries for Photovoltaic Energy systems (PVES)	Deep Discharge protection	IEC 61427, Cl:5.3
21	ELECTRICAL- CELLS & BATTERIES	Secondary Cells and batteries for Photovoltaic Energy systems (PVES)	Endurance in cycle test	IEC 61427, Cl:8.2
22	ELECTRICAL- CELLS & BATTERIES	Secondary cells and batteries for Solar Photovoltaic Application	Endurance Test	IS 16270, Cl:8.2
23	ELECTRICAL- CELLS & BATTERIES	Secondary cells and batteries for Solar Photovoltaic Application	Cycling Endurance test in Photovoltaic application Extreme condition	IS 61270, Cl 8.4
24	ELECTRICAL- CELLS & BATTERIES	Secondary cells and batteries for Solar Photovoltaic Application	Rated capacity test	IS 16270, Cl:8.1
25	ELECTRICAL- CELLS & BATTERIES	Secondary cells and batteries for Solar Photovoltaic Application	Sulphation test	IS 16270
26	ELECTRICAL- CELLS & BATTERIES	Secondary cells and batteries for solar Photovoltaic application	Visual Examination	IS 16270 Cl:5.4
27	ELECTRICAL- CELLS & BATTERIES	Secondary cells and batteries for Solar Photovoltaic Application	Water loss test	IS 16270, Cl:8.6
28	ELECTRICAL- CELLS & BATTERIES	Stationary Valve regulated lead acid batteries	Test of retention of charge	IS 15549 Cl.12.6
29	ELECTRICAL- CELLS & BATTERIES	Stationary valve regulated lead acid batteries	wicking test on separators	IS 15549 Cl.12.7
30	ELECTRICAL- CELLS & BATTERIES	Stationary valve regulated lead acid batteries	Wicking test on separators	IS 15549, Cl.12.7
31	ELECTRICAL- CELLS & BATTERIES	Stationary valve regulated lead acidbatteries	Test for C10 Capacity	IS 15549 Cl 12.1
32	ELECTRICAL- CELLS & BATTERIES	Stationary cell batteries, lead acid type with tubular batteries	Verification of dimension	IS 1651, Cl. 12.4
33	ELECTRICAL- CELLS & BATTERIES	Stationary cells and batteries, lead acid type with tubular positive plates	Verification of dimension	IS 1651, Cl.12.5
34	ELECTRICAL- CELLS & BATTERIES	Stationary cells batteries lead acid type with tubular positive plates	verification of constructional requirements	IS 1651 Cl.12.2
35	ELECTRICAL- CELLS & BATTERIES	Stationary cells batteries lead acid type with tubular positive plates	Test for voltage during discharge	IS1651 Cl.12.5
36	ELECTRICAL- CELLS & BATTERIES	Stationary cells batteries lead acid type with tubular positive plates	Verification of marking	IS 1651 Cl.11.4

SCOPE OF ACCREDITATION

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S.No	Discipline / Group	Materials or Products tested	Component, parameter or characteristic tested / Specific Test Performed / Tests or type of tests performed	Test Method Specification against which tests are performed and / or the techniques / equipment used
37	ELECTRICAL- CELLS & BATTERIES	Stationary lead acid batteries (with tubular positive plates	Amphere hour and watt hour effiiciency tests	IS 1651 Cl.11.8
38	ELECTRICAL- CELLS & BATTERIES	Stationary lead acid batteries (with tubular positive plates)	Ampere hour and watt hour efficiency test	IS 13369, Cl.1.8
39	ELECTRICAL- CELLS & BATTERIES	Stationary lead acid batteries (with tubular positive plates)	Endurance test	IS 1651, Cl.11.7
40	ELECTRICAL- CELLS & BATTERIES	Stationary lead acid batteries with tubular batteries	Endurance test	IS 1651, Cl.11.8
41	ELECTRICAL- CELLS & BATTERIES	Stationary lead acid batteries with tubular positive plate	Verification of marking	IS 13369, Cl.11.4
42	ELECTRICAL- CELLS & BATTERIES	Stationary lead acid batteries with tubular positive plates	Capacity	IS 13369, Cl.11.5 (C10/C5/C1)
43	ELECTRICAL- CELLS & BATTERIES	Stationary lead acid batteries with tubular positive plates	Endurance test	IS 13369 C.11.7
44	ELECTRICAL- CELLS & BATTERIES	Stationary lead acid batteries with tubular positive plates	Test for loss of capacity on storage	IS 13369, Cl.11.6
45	ELECTRICAL- CELLS & BATTERIES	Stationary lead acid batteries with tubular positive plates	Verification of constructional requirements	IS 13369 Cl 11.2
46	ELECTRICAL- CELLS & BATTERIES	Stationary lead acid batteries with tubular positive plates	verification of marking	IS 13369 Cl.11.4
47	ELECTRICAL- CELLS & BATTERIES	Stationary valve regulated lead acid batteries	Acid retention capability test on separators	IS 15549 Cl.12.7
48	ELECTRICAL- CELLS & BATTERIES	Stationary valve regulated lead acid batteries	Amphere hour eficiency watt hour efficiency test	IS 15549 Cl.12.5
49	ELECTRICAL- CELLS & BATTERIES	Stationary valve regulated lead acid batteries	Endurance life cycle test	IS 15549 Cl.12.10
50	ELECTRICAL- CELLS & BATTERIES	Stationary valve regulated lead acid batteries	Test for C1 capacity and voltage durig discharge	IS 15549 Cl.12.1
51	ELECTRICAL- CELLS & BATTERIES	Stationary valve regulated lead acid batteries	Test for C10 Capacity	IS 15549 Cl.12.1
52	ELECTRICAL- CELLS & BATTERIES	stationary valve regulated lead acid batteries	Test for oxygen recombination efficiency	IS 15549 Cl 12.9
53	ELECTRICAL- CELLS & BATTERIES	Stationary valve regulated Lead acid batteries	Visual examination	IS 15549 Cl.4.1 to 4.9 & 8.1
54	ELECTRICAL- CELLS & BATTERIES	Stationary valve regulated read acid acid battery	Checking of dimension as per manufacturing drawing	IS 15549, Cl.10.1.1.b
55	ELECTRICAL- CELLS & BATTERIES	Stationery lead acid batteries with tubular batteries	loss of capacity onstorage	IS 1651 Cl.11.7

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S.No	Discipline / Group	Materials or Products tested	Component, parameter or characteristic tested / Specific Test Performed / Tests or type of tests performed	Test Method Specification against which tests are performed and / or the techniques / equipment used
56	ELECTRICAL- POWER SUPPLIES & STABILIZERS	Photovoltaic system power conditioners	Complex load	IS/IEC/61683 Cl.4.9
57	ELECTRICAL- POWER SUPPLIES & STABILIZERS	Photovoltaic system power conditioners	Energy efficiency	IS/IEC/61683 Cl 5.3
58	ELECTRICAL- POWER SUPPLIES & STABILIZERS	Photovoltaic system power conditioners	input voltage	IS/IEC/61683
59	ELECTRICAL- POWER SUPPLIES & STABILIZERS	Photovoltaic system power conditioners	out put voltage and frequency	IS/IEC/61683 Cl.4.3
60	ELECTRICAL- POWER SUPPLIES & STABILIZERS	Photovoltaic system power conditioners	Partial output efficiency	IS/IEC/61683 Cl 5.2
61	ELECTRICAL- POWER SUPPLIES & STABILIZERS	Photovoltaic system power conditioners	rated output efficiency	IS/IEC/61683 Cl.5.1
62	ELECTRICAL- POWER SUPPLIES & STABILIZERS	Photovoltaic system power conditioners	Reactive load.	IS/IEC/61683
63	ELECTRICAL- POWER SUPPLIES & STABILIZERS	Photovoltaic system power conditioners	Reactive loads	IS/IEC/61683 Cl 4.7
64	ELECTRICAL- POWER SUPPLIES & STABILIZERS	Photovoltaic system power conditioners	Restistive plus non liner loads	IS/IEC/61683 Cl 4.8
65	ELECTRICAL- POWER SUPPLIES & STABILIZERS	Photovoltaic system power conditioners	Ripple and distortion	IS/IEC/61683 Cl.4.5
66	ELECTRICAL- POWER SUPPLIES & STABILIZERS	Photovoltaic system power conditioners	stand by loss	IS/IEC/61683
67	ELECTRICAL- POWER SUPPLIES & STABILIZERS	Photovoltaic system power conditioners for measuring efficiency	Efficiency tolerance	IS/IEC/61683 Cl. 5.4
68	ELECTRICAL- POWER SUPPLIES & STABILIZERS	Solid state inverters run from storage batteries	High voltage Test	IS 13314 Cl .7.6
69	ELECTRICAL- POWER SUPPLIES & STABILIZERS	Solid state inverters run from storage batteries	insulation resistance	IS 13314 Cl 7.7
70	ELECTRICAL- POWER SUPPLIES & STABILIZERS	Solid state inverters run from storage batteries	no load test	IS 13314
71	ELECTRICAL- POWER SUPPLIES & STABILIZERS	Solid state inverters run from storage batteries	output test	IS 13314 Cl 7.9.1-7.9.3
72	ELECTRICAL- POWER SUPPLIES & STABILIZERS	UPS	AC Input failure	IEC 62040 -3 Cl.6.2.2.7
73	ELECTRICAL- POWER SUPPLIES & STABILIZERS	UPS	AC input return	IEC 62040-3 Cl 6.2.2.8
74	ELECTRICAL- POWER SUPPLIES & STABILIZERS	UPS	Auto transfer to stored Energy mode and back to normal	IEC 62040-3

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S.No	Discipline / Group	Materials or Products tested	Component, parameter or characteristic tested / Specific Test Performed / Tests or type of tests performed	Test Method Specification against which tests are performed and / or the techniques / equipment used
75	ELECTRICAL- POWER SUPPLIES & STABILIZERS	UPS	cable and inter connection check	IEC 62040-3 Cl.6.2.2.2
76	ELECTRICAL- POWER SUPPLIES & STABILIZERS	UPS	Current division across paralleled UPS	IEC 62040 -3 Cl.6.4.2.7
77	ELECTRICAL- POWER SUPPLIES & STABILIZERS	UPS	DC component in the output	IEC 62040-3 Cl.6.4.2.6
78	ELECTRICAL- POWER SUPPLIES & STABILIZERS	UPS	Dynamic performance normal to bypass mode over load	IEC 62040-3 Cl:6.4.2.11.3
79	ELECTRICAL- POWER SUPPLIES & STABILIZERS	UPS	Dynamic performance normal to stored Energy mode	IEC 62040-3 Cl:6.4.2.11.1
80	ELECTRICAL- POWER SUPPLIES & STABILIZERS	UPS	Dynamic performance normal to stored Energy mode	IEC 62040-3 Cl:6.4.2.10.2
81	ELECTRICAL- POWER SUPPLIES & STABILIZERS	UPS	Dynamic performance step load - normal mode	IEC 62040-3 Cl 6.4.2.10.5
82	ELECTRICAL- POWER SUPPLIES & STABILIZERS	UPS	Dynamic performance step load stored Energy mode	IEC 62040-3 Cl:6.4.2.11.5
83	ELECTRICAL- POWER SUPPLIES & STABILIZERS	UPS	Dynamic performance step load- Stored Energy mode	IEC 62040-3 Cl:6.4.3.3.4
84	ELECTRICAL- POWER SUPPLIES & STABILIZERS	UPS	Dynamic performance stored energy normal mode	IEC 62040-3 Cl.6.4.3.3.2
85	ELECTRICAL- POWER SUPPLIES & STABILIZERS	UPS	Dynamic performance stored Energy to normal mode	IEC 62040-3 Cl:6.4.2.11.2
86	ELECTRICAL- POWER SUPPLIES & STABILIZERS	UPS	Efficiency	IEC 62040-3 Cl:6.4.1.9
87	ELECTRICAL- POWER SUPPLIES & STABILIZERS	UPS	Efficiency test	IEC 62040-3 Cl.6.4.1.9
88	ELECTRICAL- POWER SUPPLIES & STABILIZERS	UPS	Full load	IEC 62040-3 Cl:6.2.2.5
89	ELECTRICAL- POWER SUPPLIES & STABILIZERS	UPS	Harmonic Distortion of Input current	IEC 62040-3 Cl:6.4.1.4
90	ELECTRICAL- POWER SUPPLIES & STABILIZERS	UPS	Input frequency tolerance	IEC 62040-3 Cl:6.4.1.2
91	ELECTRICAL- POWER SUPPLIES & STABILIZERS	UPS	Input in rush current	IEC 62040-3 Cl:6.4.1.6
92	ELECTRICAL- POWER SUPPLIES & STABILIZERS	UPS	Input supply compatibility steady state input voltage tolerance test	IEC 62040-3 Cl:6.4.1.1

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S.No	Discipline / Group	Materials or Products tested	Component, parameter or characteristic tested / Specific Test Performed / Tests or type of tests performed	Test Method Specification against which tests are performed and / or the techniques / equipment used
93	ELECTRICAL- POWER SUPPLIES & STABILIZERS	UPS	light load and functional test	IEC 62040-3 Cl.6.2.2
94	ELECTRICAL- POWER SUPPLIES & STABILIZERS	UPS	No Load	IEC 62040-3 Cl: 6.2.2.4
95	ELECTRICAL- POWER SUPPLIES & STABILIZERS	UPS	Output Linear Load Output normal mode-No Load	IEC 62040-3 Cl:6.4.2.1
96	ELECTRICAL- POWER SUPPLIES & STABILIZERS	UPS	Output non- Linear Load Normal mode full Load	IEC 62040-3 Cl: 6.4.3.1
97	ELECTRICAL- POWER SUPPLIES & STABILIZERS	UPS	Output normal mode full Load	IEC 62040-3 Cl:6.4.2.2
98	ELECTRICAL- POWER SUPPLIES & STABILIZERS	UPS	Output normal mode Over Load	IEC 62040-3 Cl:6.4.2.10.1
99	ELECTRICAL- POWER SUPPLIES & STABILIZERS	UPS	Output Over Voltage test	IEC 62040-3 Cl: 6.4.2.8
100	ELECTRICAL- POWER SUPPLIES & STABILIZERS	UPS	Output stored Energy mode full Load	IEC 62040-3 Cl:6.4.2.4
101	ELECTRICAL- POWER SUPPLIES & STABILIZERS	UPS	Output stored energy mode No-Load	IEC 62040-3 Cl:6.4.2.3
102	ELECTRICAL- POWER SUPPLIES & STABILIZERS	UPS	Output stored Energy mode Over Load	IEC 62040-3 Cl:6.4.2.10.2
103	ELECTRICAL- POWER SUPPLIES & STABILIZERS	UPS	Parallel redundant UPS Fault	IEC 62040-3 Cl:6.4.2.12
104	ELECTRICAL- POWER SUPPLIES & STABILIZERS	UPS	Periodic output voltage variation test (Modulation)	IEC 62040-3 Cl:6.4.2.9

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S.No	Discipline / Group	Materials or Products tested	Component, parameter or characteristic tested / Specific Test Performed / Tests or type of tests performed	Test Method Specification against which tests are performed and / or the techniques / equipment used
Site Facility				
1	ELECTRICAL- CELLS & BATTERIES	Lead Acid storage batteries for motor vehicles with light weight and high cranking performance	Capacity 5 Hrs	IS 14257, Cl:9.3.4
2	ELECTRICAL- CELLS & BATTERIES	Lead Acid storage batteries for motor vehicles with light weight and high cranking performance	Dimension and Layout	IS 14257, Cl: 9.3.2
3	ELECTRICAL- CELLS & BATTERIES	Lead Acid storage batteries for motor vehicles with light weight and high cranking performance	Life cycle test	IS 14257 Cl:9.3.7
4	ELECTRICAL- CELLS & BATTERIES	Lead Acid storage batteries for motor vehicles with light weight and high cranking performance	Marking	IS 14257, Cl:9.3.3
5	ELECTRICAL- CELLS & BATTERIES	Lead Acid storage batteries for motor vehicles with light weight and high cranking performance	Over charge Endurance	IS 14257, Cl: 9.3.9
6	ELECTRICAL- CELLS & BATTERIES	Lead Acid storage batteries for motor vehicles with light weight and high cranking performance	Physical Examination	IS 14257, Cl:9.3.1
7	ELECTRICAL- CELLS & BATTERIES	Sealed Lead Acid (SMF) Batteries	Capacity	JIS 8702-1, Cl:5.1 & 7.1
8	ELECTRICAL- CELLS & BATTERIES	Sealed Lead Acid (SMF) Batteries	Constructions	JIS 8702 Cl:4.1
9	ELECTRICAL- CELLS & BATTERIES	Sealed Lead Acid (SMF) Batteries	Cycle Service Endurance.	JIS 8702-1 Cl: 5.3 & 7.3
10	ELECTRICAL- CELLS & BATTERIES	Sealed Lead Acid (SMF) Batteries	Marking Items	JIS 8702-1, Cl: 4.3
11	ELECTRICAL- CELLS & BATTERIES	Sealed Lead Acid (SMF) Batteries	Marking of polarity	JIS 8702-1, Cl:4.4
12	ELECTRICAL- CELLS & BATTERIES	Sealed Lead Acid (SMF) Batteries	Storage characteristics	JIS 8702-2, Cl:5.4 & 7.4
13	ELECTRICAL- CELLS & BATTERIES	Sealed Lead acid battery	Capacity @ 20 hours	JIS8702-01, Cl.7.1
14	ELECTRICAL- CELLS & BATTERIES	Secondary cells and batteries for Photovoltaic Energy systems (PVES)	Marking	IEC 61427, Cl:5.4
15	ELECTRICAL- CELLS & BATTERIES	Secondary cells and batteries for photovoltaic Energy systems (PVES)	Capacity test	IEC 61427, Cl:8.1
16	ELECTRICAL- CELLS & BATTERIES	Secondary cells and batteries for photovoltaic Energy systems (PVES)	Charge Efficiency	IEC 61427, Cl:5.2
17	ELECTRICAL- CELLS & BATTERIES	Secondary cells and batteries for photovoltaic Energy systems (PVES)	Charge Retention Test	IEC 61427, Cl:8.3
18	ELECTRICAL- CELLS & BATTERIES	Secondary cells and batteries for Photovoltaic Energy systems (PVES)	Cycle Endurance test in Photovoltaic application (Extreme condition)	IEC 61427, Cl:8.4

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Laboratory Name : NISAKI TECHNOLOGY SERVICES, 302 2/2 CITY CASA 3RD FLOOR BASAPPA ROAD SHANTHI NAGAR, BENGALURU, KARNATAKA, INDIA

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19	ELECTRICAL- CELLS & BATTERIES	Secondary cells and batteries for Photovoltaic Energy systems (PVES)	Deep Discharge protection	IEC 61427, Cl:5.3
20	ELECTRICAL- CELLS & BATTERIES	Secondary Cells and batteries for Photovoltaic Energy systems (PVES)	Endurance in cycle test	IEC 61427, Cl:8.2
21	ELECTRICAL- CELLS & BATTERIES	Secondary cells and batteries for Solar Photovoltaic Application	Endurance Test	IS 16270, Cl:8.2
22	ELECTRICAL- CELLS & BATTERIES	Secondary cells and batteries for Solar Photovoltaic Application	Cycling Endurance test in Photovoltaic application Extreme condition	IS 61270, Cl 8.4
23	ELECTRICAL- CELLS & BATTERIES	Secondary cells and batteries for Solar Photovoltaic Application	Rated capacity test	IS 16270, Cl:8.1
24	ELECTRICAL- CELLS & BATTERIES	Secondary cells and batteries for Solar Photovoltaic Application	Sulphation test	IS 16270
25	ELECTRICAL- CELLS & BATTERIES	Secondary cells and batteries for solar Photovoltaic application	Visual Examination	IS 16270 Cl:5.4
26	ELECTRICAL- CELLS & BATTERIES	Secondary cells and batteries for Solar Photovoltaic Application	Water loss test	IS 16270, Cl:8.6
27	ELECTRICAL- CELLS & BATTERIES	Stationary Valve regulated lead acid batteries	Test of retention of charge	IS 15549 Cl.12.6
28	ELECTRICAL- CELLS & BATTERIES	Stationary valve regulated lead acid batteries	wicking test on separators	IS 15549 Cl.12.7
29	ELECTRICAL- CELLS & BATTERIES	Stationary valve regulated lead acid batteries	Wicking test on separators	IS 15549, Cl.12.7
30	ELECTRICAL- CELLS & BATTERIES	Stationary valve regulated lead acidbatteries	Test for C10 Capacity	IS 15549 Cl 12.1
31	ELECTRICAL- CELLS & BATTERIES	Stationary cells and batteries, lead acid type with tubular positive plates	Verification of dimension	IS 1651, Cl.12.5
32	ELECTRICAL- CELLS & BATTERIES	Stationary cells batteries lead acid type with tubular positive plates	verification of constructional requirements	IS 1651 Cl.12.2
33	ELECTRICAL- CELLS & BATTERIES	Stationary cells batteries lead acid type with tubular positive plates	Test for voltage during discharge	IS1651 Cl.12.5
34	ELECTRICAL- CELLS & BATTERIES	Stationary cells batteries lead acid type with tubular positive plates	Verification of marking	IS 1651 Cl.11.4
35	ELECTRICAL- CELLS & BATTERIES	Stationary lead acid batteries with tubular positive plate	Verification of marking	IS 13369, Cl.11.4
36	ELECTRICAL- CELLS & BATTERIES	Stationary lead acid batteries with tubular positive plates	Capacity	IS 13369, Cl.11.5 (C10/C5/C1)

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S.No	Discipline / Group	Materials or Products tested	Component, parameter or characteristic tested / Specific Test Performed / Tests or type of tests performed	Test Method Specification against which tests are performed and / or the techniques / equipment used
37	ELECTRICAL- CELLS & BATTERIES	Stationary lead acid batteries with tubular positive plates	Verification of constructional requirements	IS 13369 Cl 11.2
38	ELECTRICAL- CELLS & BATTERIES	Stationary lead acid batteries with tubular positive plates	verification of marking	IS 13369 Cl.11.4
39	ELECTRICAL- CELLS & BATTERIES	Stationary valve regulated lead acid batteries	Test for C1 capacity and voltage durig discharge	IS 15549 Cl.12.1
40	ELECTRICAL- CELLS & BATTERIES	Stationary valve regulated Lead acid batteries	Visual examination	IS 15549 Cl.4.1 to 4.9 & 8.1
41	ELECTRICAL- CELLS & BATTERIES	Stationary valve regulated read acid acid battery	Checking of dimension as per manufacturing drawing	IS 15549, Cl.10.1.1.b
42	ELECTRICAL- POWER SUPPLIES & STABILIZERS	Photovoltaic system power conditioners	Complex load	IS/IEC/61683 Cl.4.9
43	ELECTRICAL- POWER SUPPLIES & STABILIZERS	Photovoltaic system power conditioners	Energy efficiency	IS/IEC/61683 Cl 5.3
44	ELECTRICAL- POWER SUPPLIES & STABILIZERS	Photovoltaic system power conditioners	input voltage	IS/IEC/61683
45	ELECTRICAL- POWER SUPPLIES & STABILIZERS	Photovoltaic system power conditioners	out put voltage and frequency	IS/IEC/61683 Cl.4.3
46	ELECTRICAL- POWER SUPPLIES & STABILIZERS	Photovoltaic system power conditioners	Partial output efficiency	IS/IEC/61683 Cl 5.2
47	ELECTRICAL- POWER SUPPLIES & STABILIZERS	Photovoltaic system power conditioners	rated output efficiency	IS/IEC/61683 Cl.5.1
48	ELECTRICAL- POWER SUPPLIES & STABILIZERS	Photovoltaic system power conditioners	Reactive load.	IS/IEC/61683
49	ELECTRICAL- POWER SUPPLIES & STABILIZERS	Photovoltaic system power conditioners	Reactive loads	IS/IEC/61683 Cl 4.7
50	ELECTRICAL- POWER SUPPLIES & STABILIZERS	Photovoltaic system power conditioners	Restistive plus non liner loads	IS/IEC/61683 Cl 4.8
51	ELECTRICAL- POWER SUPPLIES & STABILIZERS	Photovoltaic system power conditioners	Ripple and distortion	IS/IEC/61683 Cl.4.5
52	ELECTRICAL- POWER SUPPLIES & STABILIZERS	Photovoltaic system power conditioners	stand by loss	IS/IEC/61683
53	ELECTRICAL- POWER SUPPLIES & STABILIZERS	Photovoltaic system power conditioners for measuring efficiency	Efficiency tolerance	IS/IEC/61683 Cl. 5.4
54	ELECTRICAL- POWER SUPPLIES & STABILIZERS	Solid state inverters run from storage batteries	High voltage Test	IS 13314 Cl .7.6
55	ELECTRICAL- POWER SUPPLIES & STABILIZERS	Solid state inverters run from storage batteries	insulation resistance	IS 13314 Cl 7.7

SCOPE OF ACCREDITATION

Laboratory Name : NISAKI TECHNOLOGY SERVICES, 302 2/2 CITY CASA 3RD FLOOR BASAPPA ROAD SHANTHI NAGAR, BENGALURU, KARNATAKA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number TC-11404 **Page No** 10 of 11

Validity 28/02/2023 to 27/02/2025 **Last Amended on** -

S.No	Discipline / Group	Materials or Products tested	Component, parameter or characteristic tested / Specific Test Performed / Tests or type of tests performed	Test Method Specification against which tests are performed and / or the techniques / equipment used
56	ELECTRICAL- POWER SUPPLIES & STABILIZERS	Solid state inverters run from storage batteries	no load test	IS 13314
57	ELECTRICAL- POWER SUPPLIES & STABILIZERS	Solid state inverters run from storage batteries	output test	IS 13314 Cl 7.9.1-7.9.3
58	ELECTRICAL- POWER SUPPLIES & STABILIZERS	UPS	3 phase voltage nbalance	IEC 62040-3 Cl.6.4.2.5
59	ELECTRICAL- POWER SUPPLIES & STABILIZERS	UPS	AC Input failure	IEC 62040 -3 Cl.6.2.2.7
60	ELECTRICAL- POWER SUPPLIES & STABILIZERS	UPS	AC input return	IEC 62040-3 Cl 6.2.2.8
61	ELECTRICAL- POWER SUPPLIES & STABILIZERS	UPS	Auto transfer to stored energy mode and back to normal	IEC 62040-3
62	ELECTRICAL- POWER SUPPLIES & STABILIZERS	UPS	cable and inter connection check	IEC 62040-3 Cl.6.2.2.2
63	ELECTRICAL- POWER SUPPLIES & STABILIZERS	UPS	Current division across paralleled UPS	IEC 62040 -3 Cl.6.4.2.7
64	ELECTRICAL- POWER SUPPLIES & STABILIZERS	UPS	DC component in the output	IEC 62040-3 Cl.6.4.2.6
65	ELECTRICAL- POWER SUPPLIES & STABILIZERS	UPS	Dynamic performance normal to bypass mode over load	IEC 62040-3 Cl:6.4.2.11.3
66	ELECTRICAL- POWER SUPPLIES & STABILIZERS	UPS	Dynamic performance normal to stored Energy mode	IEC 62040-3 Cl:6.4.2.11.1
67	ELECTRICAL- POWER SUPPLIES & STABILIZERS	UPS	Dynamic performance normal to stored Energy mode	IEC 62040-3 Cl:6.4.2.10.2
68	ELECTRICAL- POWER SUPPLIES & STABILIZERS	UPS	Dynamic performance step load - normal mode	IEC 62040-3 Cl 6.4.2.10.5
69	ELECTRICAL- POWER SUPPLIES & STABILIZERS	UPS	Dynamic performance step load stored Energy mode	IEC 62040-3 Cl:6.4.2.11.5
70	ELECTRICAL- POWER SUPPLIES & STABILIZERS	UPS	Dynamic performance step load- Stored Energy mode	IEC 62040-3 Cl:6.4.3.3.4
71	ELECTRICAL- POWER SUPPLIES & STABILIZERS	UPS	Dynamic performance stored energy normal mode	IEC 62040-3 Cl.6.4.3.3.2
72	ELECTRICAL- POWER SUPPLIES & STABILIZERS	UPS	Dynamic performance stored Energy to normal mode	IEC 62040-3 Cl:6.4.2.11.2
73	ELECTRICAL- POWER SUPPLIES & STABILIZERS	UPS	Efficiency	IEC 62040-3 Cl:6.4.1.9
74	ELECTRICAL- POWER SUPPLIES & STABILIZERS	UPS	Efficiency test	IEC 62040-3 Cl.6.4.1.9

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Certificate Number TC-11404 **Page No** 11 of 11

Validity 28/02/2023 to 27/02/2025 **Last Amended on** -

S.No	Discipline / Group	Materials or Products tested	Component, parameter or characteristic tested / Specific Test Performed / Tests or type of tests performed	Test Method Specification against which tests are performed and / or the techniques / equipment used
75	ELECTRICAL- POWER SUPPLIES & STABILIZERS	UPS	Full load	IEC 62040-3 Cl:6.2.2.5
76	ELECTRICAL- POWER SUPPLIES & STABILIZERS	UPS	Harmonic Distortion of Input current	IEC 62040-3 Cl:6.4.1.4
77	ELECTRICAL- POWER SUPPLIES & STABILIZERS	UPS	Input frequency tolerance	IEC 62040-3 Cl:6.4.1.2
78	ELECTRICAL- POWER SUPPLIES & STABILIZERS	UPS	Input in rush current	IEC 62040-3 Cl:6.4.1.6
79	ELECTRICAL- POWER SUPPLIES & STABILIZERS	UPS	Input supply compatibility steady state input voltage tolerance test	IEC 62040-3 Cl:6.4.1.1
80	ELECTRICAL- POWER SUPPLIES & STABILIZERS	UPS	light load and functional test	IEC 62040-3 Cl.6.2.2
81	ELECTRICAL- POWER SUPPLIES & STABILIZERS	UPS	No Load	IEC 62040-3 Cl: 6.2.2.4
82	ELECTRICAL- POWER SUPPLIES & STABILIZERS	UPS	Output Linear Load Output normal mode-No Load	IEC 62040-3 Cl:6.4.2.1
83	ELECTRICAL- POWER SUPPLIES & STABILIZERS	UPS	Output non- Linear Load Normal mode full Load	IEC 62040-3 Cl: 6.4.3.1
84	ELECTRICAL- POWER SUPPLIES & STABILIZERS	UPS	Output normal mode full Load	IEC 62040-3 Cl:6.4.2.2
85	ELECTRICAL- POWER SUPPLIES & STABILIZERS	UPS	Output normal mode Over Load	IEC 62040-3 Cl:6.4.2.10.1
86	ELECTRICAL- POWER SUPPLIES & STABILIZERS	UPS	Output Over Voltage test	IEC 62040-3 Cl: 6.4.2.8
87	ELECTRICAL- POWER SUPPLIES & STABILIZERS	UPS	Output stored Energy mode full Load	IEC 62040-3 Cl:6.4.2.4
88	ELECTRICAL- POWER SUPPLIES & STABILIZERS	UPS	Output stored energy mode No-Load	IEC 62040-3 Cl:6.4.2.3
89	ELECTRICAL- POWER SUPPLIES & STABILIZERS	UPS	Output stored Energy mode Over Load	IEC 62040-3 Cl:6.4.2.10.2
90	ELECTRICAL- POWER SUPPLIES & STABILIZERS	UPS	Parallel redundant UPS Fault	IEC 62040-3 Cl:6.4.2.12
91	ELECTRICAL- POWER SUPPLIES & STABILIZERS	UPS	Periodic output voltage variation test (Modulation)	IEC 62040-3 Cl:6.4.2.9