



Test Report: NPP-750-24

750W High Reliable Ultra Wide Output Range Battery
Charger & Power Supply 2-in-1

■ DESIGN VERIFY TEST

Output Function Test

Input Function Test

Protection Function Test

Control Function Test

Component Stress Test

■ SAFETY & E.M.C. TEST

Safety Test

E.M.C. Test

■ RELIABILITY TEST

ENVIRONMENT TEST

Battery Charger mode

■ DESIGN VERIFY TEST

OUTPUT FUNCTION TEST

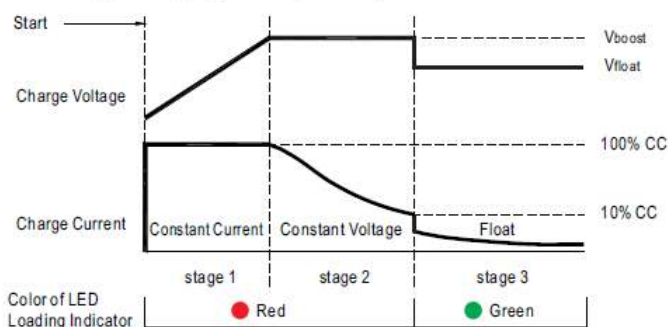
NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT
1	BOOST CHARGE VOLTAGE	28.8V± 0.48 V	I/P: 230 VAC O/P: CC=90% LOAD Ta:25°C	28.73V
2	FLOAT CHARGE VOLTAGE	27.6V± 0.24 V	I/P: 230 VAC O/P:NO LOAD Ta:25°C	27.61V
3	MAX. OUTPUT CURRENT	22.5A±0.225 A	I/P: 230 VAC O/P:C.V MODE-2V Ta:25°C	22.52A
4	MAX. POWER	756W	I/P: 230 VAC O/P:C.V =33.6V Ta:25°C	757.3W
5	OUTPUT VOLTAGE ADJUST RANGE	21 V~ 42 V	I/P : 230 VAC O/P : CC=90% LOAD Ta : 25°C	19.827V~43.52V
6	CURRENT ADJUSTABLE RANGE	11.25~22.5A	I/P : 230 VAC O/P : C.V MODE-2V Ta : 25°C	11.05A~24.17A

PROTECTION FUNCTION TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT
1	SHORT PROTECTION	SHORT EVERY OUTPUT 1 HOUR NO DAMAGE Constant current Range: 22.5A±10% PROTECTION TYPE : Constant current limiting, charger will shut down after 5 sec, re-power on to recover	I/P: 264 VAC O/P: BAT. LOAD Ta:25°C	NO DAMAGE Constant current Range: 24.16 A PROTECTION TYPE : Constant current limiting, charger will shut down after 5 sec, re-power on to recover
2	OVER VOLTAGE PROTECTION	43V~52V PROTECTION TYPE : Shut down and latch off o/p voltage, re-power on to recover	I/P: 264VAC I/P: 230VAC I/P: 90VAC O/P:MIN LOAD Ta:25°C	49.2V/ 264VAC 49.2V/ 230VAC 49.2V/ 90VAC PROTECTION TYPE : Shut down and latch off o/p voltage, re-power on to recover
3	OVER TEMPERATURE PROTECTION	Protection type : Shut down O/P voltage, recovers automatically after	I/P: 264VAC I/P: 90VAC O/P:FULL LOAD	O.T.P. Active PROTECTION TYPE : Shut down O/P voltage,

		temperature goes down		recovers automatically after temperature goes down
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CONTROL FUNCTION TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT				
1	FAN CONTROL	Depends on internal temperature	I/P: 230 VAC O/P:BAT. LOAD Ta:25°C	TEST: <u>OK</u>				
2	REMOTE CONTROL	Rc+ / Rc- OPEN(-0.5V~0.5V) : Charger OFF ; SHORT(10.8V~13.2V):Charger ON	I/P: 230 VAC O/P:BAT. LOAD Ta:25°C	OPEN/SHORT TEST: <u>OK</u> Charger OFF: <u>-0.5V~1.76V</u> Charger ON: <u>1.78V~13.2V</u> (1) Remote off Pin=2.38W (2) Remote off Vo= <u>0.16V</u>				
3	CHARGE OK	The TTL signal out, Charger OK = 4.5 ~ 5.5V; Charger failure or protection = -0.5 ~ 0.5V	I/P: 230 VAC O/P:BAT. LOAD Ta:25°C	TEST: Charger OK = <u>5.19</u> V; Charger failure or protection = <u>0.033</u> V				
4	BATTERY OK	The TTL signal out, Battery full = 4.5 ~ 5.5V Charging = -0.5 ~ 0.5V	I/P: 230 VAC O/P:BAT. LOAD Ta:25°C	TEST: Battery full = <u>5.19</u> V Charging = <u>0.034</u> V				
5	AUX POWER	OUTPUT VOLTAGE RANGE : 10.8~13.2V OUTPUT RIPPLE&NOISE: 240mVp-p	I/P: 230 VAC O/P:BAT. LOAD Ta:25°C	TEST: <u>11.83</u> V <u>49</u> mVp-p				
6	CHARGING CURVE	I/P:230Vac O/P:TESTING Ta:25°C ◎ 3 stage charging curve (Default)  <table><tr><td>Taper Current</td><td>2.25A±0.225A</td></tr><tr><td>Io</td><td>2.24A</td></tr></table>			Taper Current	2.25A±0.225A	Io	2.24A
Taper Current	2.25A±0.225A							
Io	2.24A							

7	LED INDICATOR	<table><tr><th>LED Indicator</th><th>Charger(Default)</th><th>Power Supply</th></tr><tr><td>Green</td><td>Float stage(stage 3) or full charged</td><td>Normal working</td></tr><tr><td>Red</td><td>Charging(stage 1 or 2)</td><td>——</td></tr><tr><td>NO Light</td><td>Abnormal</td><td>Abnormal</td></tr></table>	LED Indicator	Charger(Default)	Power Supply	Green	Float stage(stage 3) or full charged	Normal working	Red	Charging(stage 1 or 2)	——	NO Light	Abnormal	Abnormal	TEST : <u>OK</u>
		LED Indicator	Charger(Default)	Power Supply											
		Green	Float stage(stage 3) or full charged	Normal working											
		Red	Charging(stage 1 or 2)	——											
		NO Light	Abnormal	Abnormal											
I/P: 230V															
O/P:TESTING LOAD															
Ta:25°C															

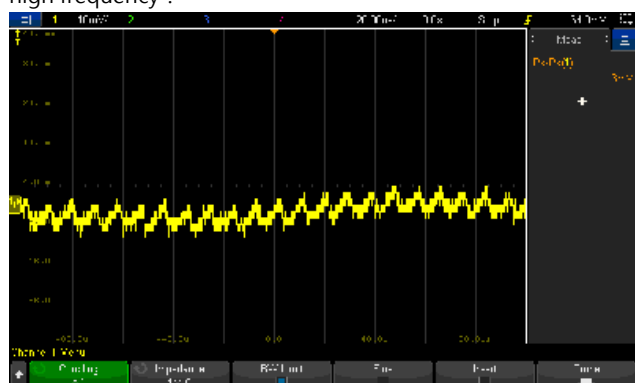
Power Supply mode

■ DESIGN VERIFY TEST

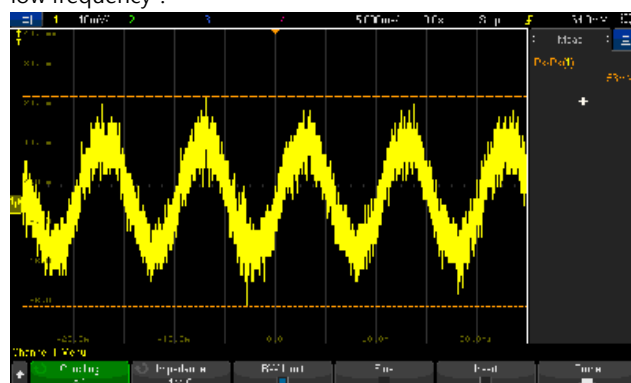
OUTPUT FUNCTION TEST

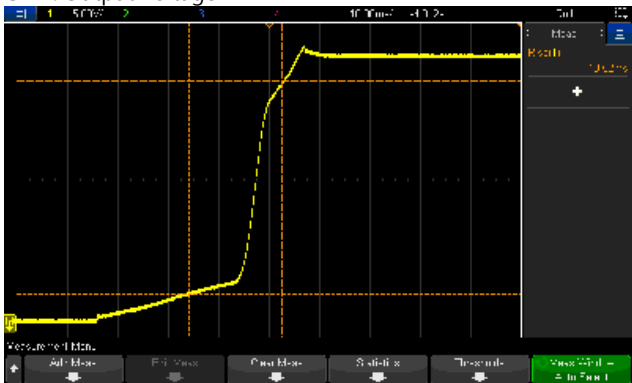
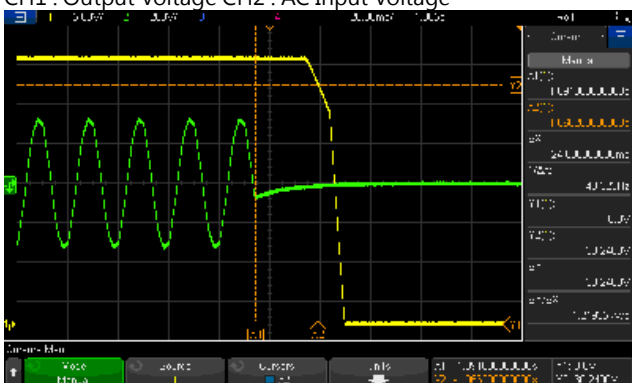
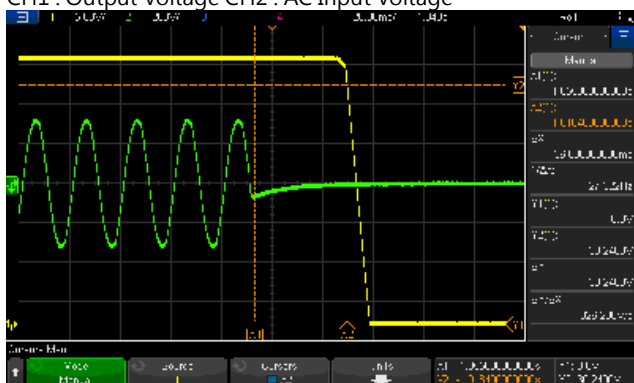
NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT
1	OUTPUT VOLTAGE ADJUST RANGE	CH1: 21V ~ 42V	I/P : 230 VAC I/P : 115 VAC O/P : MIN LOAD Ta : 25°C	19.94V~43.58V/230VAC 19.94V~43.58V/115VAC
2	OUTPUT VOLTAGE(Max) TOLERANCE	V1: -1.0% ~ +1.0 %	I/P: 90VAC /264VAC O/P:FULL/ MIN. LOAD Ta:25°C	V1: -0.12%~ 0.11%/
3	LINE REGULATION (Max)	V1: -0.5% ~ +0.5 %	I/P: 90VAC ~ 264VAC O/P:FULL LOAD Ta:25°C	V1: -0.08%~ 0.02 %
4	LOAD REGULATION(Max)	V1: -1.0% ~ +1.0 %	I/P: 230VAC O/P:FULL ~MIN LOAD Ta:25°C	V1: -0.12%~ 0.11%
5	OVER/UNDERSHOOT TEST	< +5%	I/P: 230VAC O/P:FULL LOAD Ta:25°C	3.89%
6	RIPPLE & NOISE(Max)	V1: 300 mVp-p	I/P:230VAC O/P:FULL LOAD Ta:25°C	V1: 53mVp-p

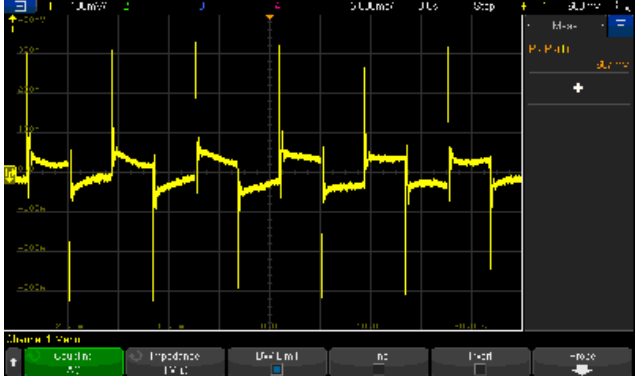
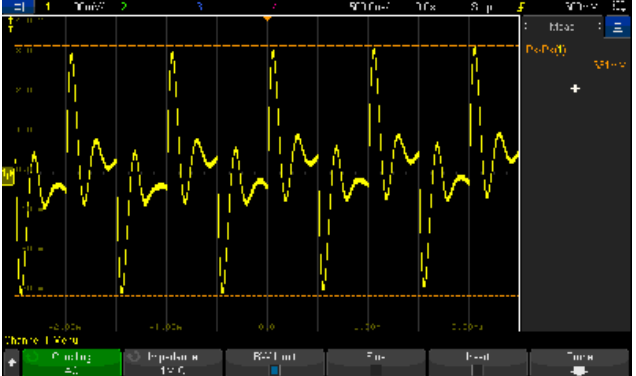
high frequency :



low frequency :

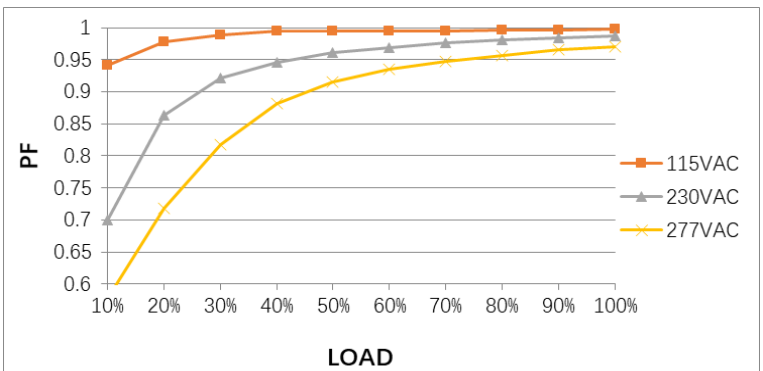
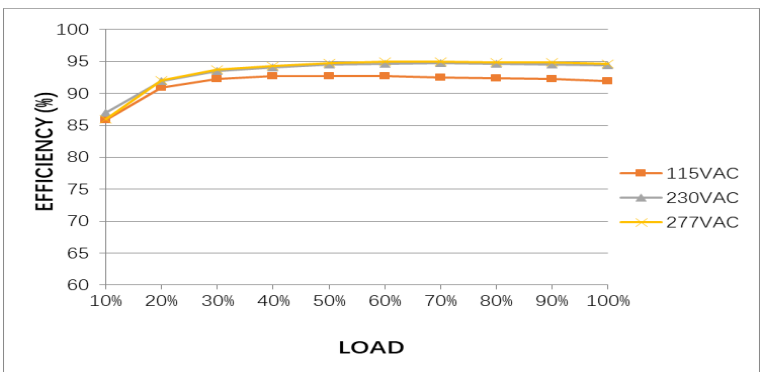


7	SET UP TIME(Max)	230VAC/1800ms	I/P : 230 VAC O/P : FULL LOAD Ta : 25°C	230VAC/ 125.2 ms
	INPUT=230VAC/50HZ @ FULL LOAD CH1 : Output Voltage CH2 : AC Input Voltage 			
8	RISE TIME (Max)	230VAC/60ms	I/P : 230 VAC O/P : FULL LOAD Ta : 25°C	230VAC/ 18.5 ms
	INPUT=230VAC/50HZ @ FULL LOAD CH1 : Output Voltage 			
9	HOLD UP TIME (Typ.)	230VAC/FULL LOAD /10ms 230VAC/75% LOAD /16ms	I/P : 230 VAC O/P : FULL LOAD Ta : 25°C	230VAC/FULL LOAD / 24.8ms 230VAC/75% LOAD /36.6 ms
	INPUT=230VAC/50HZ @ FULL LOAD CH1 : Output Voltage CH2 : AC Input Voltage 			
11	DYNAMIC LOAD	V1: 3360 mVp-p	I/P: 230VAC O/P: (1)FULL /50% LOAD 50%DUTY / 120HZ	667mVp-p 631mVp-p
	INPUT=230VAC/50HZ @ 75% LOAD CH1 : Output Voltage CH2 : AC Input Voltage 			

			(2)FULL /50% LOAD 50%DUTY / 1KHZ Ta:25°C	
	FULL /50% LOAD 50%DUTY / 120HZ 		FULL /50% LOAD 50%DUTY / 1KHZ 	
12	TRANSIENT RECOVERY TIME	V1: 3360 mVp-p	I/P: 230VAC O/P:40% LOAD CHANGE 50%DUTY/120HZ 1.25A/us	543mVp-p

INPUT FUNCTION TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT
1	INPUT VOLTAGE RANGE	90VAC~264VAC 127VDC~ 370VDC	(1) I/P:TESTING O/P:FULL LOAD (2) I/P:DC TESTING(L:+ N:-) O/P: FULL / 50% LOAD (3) I/P:DC TESTING(L:- N:+) O/P: FULL / 50% LOAD Ta:25°C	(1) 85.6 V~264V (2) 120Vdc~370Vdc/FULL LOAD 110Vdc~370Vdc/50% LOAD (3) 120Vdc~370Vdc/FULL LOAD 110Vdc~370Vdc/50% LOAD
			I/P: LOW-LINE-3V=87 V HIGH-LINE+15%=300 V O/P:FULL/MIN LOAD (PLEASE CHECK DERATING CURVE) ON: 30 Sec OFF: 30 Sec 10MIN (POWER ON/OFF NO DAMAGE)	TEST: OK
2	INPUT FREQUENCY RANGE	47HZ ~63 HZ NO DAMAGE	I/P:90 VAC ~264 VAC O/P:FULL~MIN LOAD Ta:25°C	TEST: OK
3	INPUT CURRENT (Typ.)	230V/ 4 A 115V/ 8.7A	I/P : 230 VAC I/P : 115 VAC O/P : FULL LOAD Ta : 25°C	I =3.52A/ 230VAC I =7.36A/ 115VAC
6	POWER FACTOR (Typ.)	0.95/ 230VAC 0.98/115VAC	I/P : 230 VAC I/P : 115 VAC O/P : FULL LOAD Ta : 25°C	PF=0.993/230VAC PF=0.997/115VAC

	P.F vs LOAD 			
7	EFFICIENCY(Typ.)	93%	I/P:230 VAC O/P:FULL LOAD Ta:25°C	93.8 %
8	EFFICIENCY vs LOAD 			
	INRUSH CURRENT(Typ.)	230V/50A COLD START	I/P : 230 VAC O/P : FULL LOAD Ta : 25°C	I =32.2A/ 230VAC T50=2.02ms/230V
	INPUT=230VAC/50HZ @ FULL LOAD CH1 : AC Input Voltage CH4 : Input current 			

PROTECTION FUNCTION TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT
1	OVER LOAD PROTECTION	105 %~ 115 % PROTECTION TYPE : Constant current limiting, unit will shut down after 5 sec, re-power on to recover	I/P: 264VAC I/P: 230VAC I/P: 100VAC O/P: TESTING Ta: 25°C	112.2%/ 264VAC 112.2%/ 230VAC 112.2%/100VAC PROTECTION TYPE : Constant current limiting, unit will shut down after 5 sec, re-power on to recover
2	OVER VOLTAGE PROTECTION	43V~52V PROTECTION TYPE : Shut down and latch off o/p voltage, re-power on to recover	I/P: 264VAC I/P: 230VAC I/P: 90VAC O/P: MIN LOAD Ta: 25°C	49.2V/ 264VAC 49.2V/ 230VAC 49.2V/ 90VAC PROTECTION TYPE : Shut down and latch off o/p voltage, re-power on to recover
3	OVER TEMPERATURE PROTECTION	Protection type : Shut down O/P voltage, recovers automatically after temperature goes down	I/P: 264VAC I/P: 90VAC O/P: FULL LOAD	O.T.P. Active PROTECTION TYPE : Shut down O/P voltage, recovers automatically after temperature goes down
4	SHORT PROTECTION	SHORT EVERY OUTPUT 1 HOUR NO DAMAGE Constant current Range: 20.25A~24.75A PROTECTION TYPE : Constant current limiting, charger will shut down after 5 sec, re-power on to recover	I/P: 264 VAC O/P: BAT. LOAD Ta: 25°C	NO DAMAGE Constant current Range: 24.65 A PROTECTION TYPE : Constant current limiting, charger will shut down after 5 sec, re-power on to recover

COMPONENT STRESS TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT
1	PWM Transistor (D to S) or (C to E) Peak Voltage	Q 5/Q6 Rated : 31A/ 600 V	AC ON/OFF I/P: High-Line +3V =267V VDS: O/P: (1) Full Load (2) Output Short (3) Dynamic Load Full Load/ Min. Load 90%Duty/1KHz (4) Dynamic Load Full Load/ Min. Load 90%Duty/3KHz (5) Dynamic Load Full Load/ Min. Load 90%Duty/5KHz (6) Dynamic Load 100% Load/	Q5 VDS: (1) 469V (2) 489V (3) 469V (4) 469V (5) 469V (6) 465V (7) 469V Q6 VDS: (1) 493V (2) 513V (3) 497V (4) 493V (5) 493V (6) 497V (7) 489V

			Min. Load 50%Duty/120Hz (7)0%→400% Load. Ta:25°C	
2	P.F.C Transistor (D to S) or (C to E) Peak Voltage	Q1 Rated : 31A/ 600 V	I/P: High-Line +3V =267 V AC ON/OFF O/P: (1)Full Load (2)Output Short (3) Dynamic Load Full Load/ Min. Load 90%Duty/1KHz (4) Dynamic Load Full Load/ Min. Load 90%Duty/3KHz (5) Dynamic Load Full Load/ Min. Load 90%Duty/5KHz (6) Dynamic Load 100% Load/ Min. Load 50%Duty/120Hz (7)0%→400% Load. Ta:25°C	VDS: (1) 469V (2) 457V (3) 453V (4) 453V (5) 453V (6) 453V (7) 457V
3	AUX MOS	U600 Rate: 725V	I/P: High-Line +3V =267 V AC ON/OFF O/P: (1)Full Load (2)Output Short (3) Dynamic Load Full Load/ Min. Load 90%Duty/1KHz (4) Dynamic Load Full Load/ Min. Load 90%Duty/3KHz (5) Dynamic Load Full Load/ Min. Load 90%Duty/5KHz (6) Dynamic Load 100% Load/ Min. Load 50%Duty/120Hz (7)0%→400% Load. Ta:25°C	VDS: (1) 630V (2) 638V (3) 630V (4) 638V (5) 630V (6) 630V (7) 622V
4	P.F.C DIODE	D 19 Rated : 6 A/ 650 V	I/P:High-Line +3V =267 V AC ON/OFF O/P: (1)Full Load (2)Output Short (3)Dynamic Load Full Load/ Min. Load 90%Duty/5KHz (4)Dynamic Load 100% Load/ Min. Load 50%Duty/120Hz Ta:25°C	(1) 443V (2) 460V (3) 447V (4) 451V
5	Diode Peak Voltage	Q210 Rated : 100A/120V Q214 Rated : 100A/120V	AC ON/OFF I/P:High-Line +3V =267 V Vo=Vmax O/P: (1)Full Load (2)Output Short (3)Dynamic Load Full Load/ Min. Load 90%Duty/1KHz (4)Dynamic Load Full Load/ Min. Load 90%Duty/3KHz	Q210 Vo=Vmax VDS: (1) 97.3V (2) 94.9V (3) 97.3V (4) 97.3V (5) 97.3V (6) 97.3V Q214 Vo=Vmax VDS: (1) 98.1V (2) 98.1V (3) 98.1V (4) 97.3V (5) 98.8V (6) 97.3V

			(5)Dynamic Load Full Load/ Min. Load 90%Duty/5KHz (6)Dynamic Load 100% Load/ Min. Load 50%Duty/120Hz (7)0%→400% Load. (8)NO LOAD Vo=Normal O/P: (1)Full Load (2)Before Burst Mode Ta:25°C	(7) 95.7V (8) 89.2V Vo=Normal (1) 88.4V (2) 80.4V	(7) 95.7V (8) 88.4V Vo=Normal (1) 89.8V (2) 82.6V
6	Input Capacitor Voltage	C5 Rated: 220u / 450 V 105 °C/ Series	I/P:High-Line +3V =267V O/P: (1)Full Load input on/off (2) Min load input on /Off (3)Full Load /Min load Change (4)Full load continue Ta:25°C	(1) 448V (2) 448V (3) 448V (4) 440V	
7	Control IC Voltage Test	PWM IC U3Rated 8.9V~15.5V PFC IC U2Rated 11V~26V O/P IC U801 Rated 4.5V~36V U100 Rated 6.5V~35V	AC ON/OFF I/P:High-Line +3V =267 V O/P(1)FULL LOAD (2) Output Short (3)O.L.P (4)O.V.P. (5)NO LOAD VRmin(LOW LINE) Ta:25°C	U3 (1) 13.7V (2) 12.9V (3) 13.5V (4) 13.5V (5) 13.5V U2 (1) 13.9V (2) 14.3V (3) 14.1V (4) 13.9V (5) 13.5V	U801 (1) 10.24V (2) 10.08V (3) 10.16V (4) 10.00V (5) 9.68V U100 (1) 12.33V (2) 12.33V (3) 12.17V (4) 12.25V (5) 12.25V

■ SAFETY& E.M.C. TEST

SAFETY TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT
1	WITHSTAND VOLTAGE	I/P-O/P: 3KVAC/min I/P-FG :2KVAC/min O/P-FG:0.5KVAC/min	I/P-O/P: 3.6 KVAC/min I/P-FG: 2.4 KVAC/min O/P-FG:0.6 KVAC/min Ta:25°C	I/P-O/P:3.158mA I/P-FG:2.751mA O/P-FG:3.451mA NO DAMAGE
2	ISOLATION RESISTANCE	I/P-O/P:500VDC>100MΩ I/P-FG: 500VDC>100MΩ O/P-FG:500VDC>100MΩ	I/P-O/P: 600 VDC I/P-FG: 600 VDC O/P-FG: 600 VDC Ta:25°C	I/P-O/P: 9999MΩ I/P-FG: 9999MΩ O/P-FG: 9999MΩ NO DAMAGE
3	GROUNDING CONTINUITY	FG(PE) TO CHASSIS OR TRACE < 100 mΩ	40A / 2min Ta:25°C	18mΩ

E.M.C TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT
1	HARMONIC	BS EN/EN61000-3-2 CLASS A	I/P:230VAC/50HZ O/P:FULL LOAD Ta:25°C	PASS
2	CONDUCTION	BS EN/EN 55032 (CISPR32), BS EN / EN55014-1 CLASS B	I/P: 230 VAC (50HZ) O/P:FULL/50% LOAD Ta:25°C	PASS Test by certified Lab
3	RADIATION	BS EN/EN 55032 (CISPR32), BS EN / EN55014-1 CLASS B	I/P:230VAC/50HZ O/P:FULL LOAD Ta:25°C	PASS Test by certified Lab
4	E.S.D	BS EN/EN61000-4-2 AIR : 8KV / Contact : 4KV	I/P:230VAC/50HZ O/P:FULL LOAD Ta:25°C	CRITERIA A
5	E.F.T	BS EN/EN61000-4-4 INPUT: 1KV	I/P:230VAC/50HZ O/P:FULL LOAD Ta:25°C	CRITERIA A
6	SURGE	BS EN/EN 61000-4-5 L-N :1KV L,N-PE:2KV	I/P:230VAC/50HZ O/P:FULL LOAD Ta:25°C	CRITERIA A
7	Test by certified Lab & Test Report Prepare Any contradictions of the test results, please refer to the latest EMC test report			

■ RELIABILITY TEST

ENVIRONMENT TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT
1	TEMPERATURE RISE TEST	MODEL : NPP-750-48 1. ROOM AMBIENT BURN-IN : 2 HRS I/P : 230VAC O/P : FULL LOAD Ta= 25.2 °C 2. HIGH AMBIENT BURN-IN : 2 HRS I/P : 230VAC O/P : FULL LOAD Ta= 51.3 °C		



750W High Reliable Ultra Wide Output Range
Battery Charger & Power Supply 2-in-1

NPP-750 series

			NO	Position	ROOM AMBIENT Ta= 25.2 °C	HIGH AMBIENT Ta=51.3°C
			1	T600	33.1°C	60.7°C
			2	ZNR1	27.9°C	55.3°C
			3	LF1	30.3°C	57.9°C
			4	C2	30.2°C	57.8°C
			5	LF3	33.2°C	61.0°C
			6	BD1	46.5°C	73.2°C
			7	R18	36.5°C	63.8°C
			8	RTH1	36.3°C	63.6°C
			9	RY1	35.0°C	62.2°C
			10	C8	34.7°C	62.1°C
			11	L1	34.6°C	62.3°C
			12	Q1	43.6°C	70.9°C
			13	Q210	40.1°C	67.7°C
			14	C24	34.3°C	61.7°C
			15	C41	29.4°C	57.2°C
			16	TSW1	33.4°C	61.0°C
			17	C5	34.8°C	61.4°C
			18	U600	42.0°C	71.1°C
			19	Q6	46.1°C	74.9°C
			20	U3	34.9°C	62.1°C
			21	L3	48.6°C	75.4°C
			22	U150	29.0°C	56.1°C
			23	RTH5	35.0°C	63.2°C
			24	Q215	43.5°C	70.4°C
			25	C115	30.8°C	58.6°C
			26	T1	38.6°C	66.5°C
			27	C114	30.4°C	58.6°C
			38	Q150	28.4°C	56.6°C
			29	LF100	30.2°C	58.6°C
			30	C106	24.9°C	52.7°C
			31	U804	29.4°C	56.4°C
			32	J103	36.9°C	64.9°C
			33	RG5	35.9°C	63.1°C
			34	D19	51.0°C	77.9°C
			35	U2	36.3°C	63.8°C
			36	D651	34.9°C	62.7°C
			37	R228	37.3°C	65.6°C
			38	D9	39.2°C	67.4°C
2	LOW TEMPERATURE TURN ON TEST	TURN ON AFTER 2 HOUR	I/P : 230VAC/100VAC O/P : 100 %LOAD Ta= -35°C		TEST : OK	
3	HIGH HUMIDITY HIGH TEMPERATURE HIGH VOLTAGE TURN ON TEST	AFTER 12 HOURS IN CHAMBER ON CONTROL 50 °C NO DAMAGE	I/P : 272 VAC O/P : FULL LOAD Ta= 50.1 °C HUMIDITY= 95 %R.H		TEST : OK	

4	TEMPERATURE COEFFICIENT	± 0.05%/ (0°C~50°C)	I/P : 230 VAC O/P : FULL LOAD	0.0081 %/°C(0~50°C)
5	STORAGE TEMPERATURE TEST	-40~85°C	1. Thermal shock Temperature : -45°C~ +90°C 2. Temperature change rate : 25°C / MIN 3. Dwell time low and high temperature : 30 MIN/EACH 4. Total test cycle : 10CYCLE 5. Input/Output condition : STATIC	
6	THERMAL SHOCK TEST	-30~50°C	1. Thermal shock Temperature : -35°C~ +55°C 2. Temperature change rate : 25°C / MIN 3. Dwell time low and high temperature : 30 MIN/EACH 4. Total test cycle : 16 CYCLE 5. Input/Output condition : 15cycle:230V/ FULL LOAD AC ON 3sec/AC OFF 1sec TEST 1cycle:230V/ FULL LOAD Burn In Test	
7	VIBRATION TEST	10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes	1 Carton & 1 Set (1) Waveform : Sine Wave (2) Frequency : 10~500Hz (3) Sweep Time : 10min/sweep cycle (4) Acceleration : 3G (5) Test Time : 180min in each axis (X.Y.Z) (6) Ta : 25°C	
8	CAPACITOR LIFE CYCLE	SUPPOSE C111 IS THE MOST CRITICAL COMPONENT (1) I/P : 230VAC O/P : FULL LOAD Ta= 25 °C LIFE TIME (2) I/P : 230VAC O/P : FULL LOAD Ta= 50 °C LIFE TIME (3) I/P : 230VAC O/P : 75% LOAD Ta= 50 °C LIFE TIME (4) I/P : 230VAC O/P : 50% LOAD Ta= 50 °C LIFE TIME		(1) 2499746.4HRS (2) 392776.8HRS (3) 441888.2HRS (4) 509056.97HRS
9	MTBF	Conducted by Parts Stress Analysis Prediction 294.5K hrs min. Telcordia SR-332 (Bellcore) ; 95.7K hrs min. MIL-HDBK-217F (25°C)		
10	Ongoing Reliability Test	I/P : 230VAC O/P : FULL LOAD TA=50°C Demonstration Mean Time Between Failure : 30,000 hours		

TEST RESULT	TESTER	REVIEW	APPROVAL
PASS	LIUTT		Wangdz

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