

SPECIFICATIONS

DA006-01-01/ME-D

ITEMS		MODEL	HWS1500 -24/ME	HWS1500 -36/ME	HWS1500 -48/ME			
1	Nominal Output Voltage	V	24	36	48			
2	Maximum Output Current	at 100VAC	A	65	42	32		
		at 200VAC	A	70	46.5	32		
3	Peak output Current (*13)	at 200VAC	A	105	70	-		
4	Maximum Output Power	at 100VAC	W	1560	1512	1536		
		at 200VAC	W	1680	1674	1536		
5	Peak Output Power (*13)	at 200VAC	W	2520	2520	-		
6	Efficiency (Typ) (*1)	at 100VAC	%	84	84	86		
		at 200VAC	%	88	88	90		
7	Input Voltage Range (*2)	-	85 - 265VAC (47 - 63Hz)					
8	Input Current (100/200VAC)(Typ) (*1)	A	19.0/10.0					
9	Inrush Current (Typ) (*3)	-	20A at 100VAC, 40A at 200VAC					
10	PFHC	-	Built to meet IEC61000-3-2					
11	Voltage Fluctuations / Flicker Emissions	-	Built to meet IEC61000-3-3					
12	Power Factor (100/230VAC)(Typ) (*1)	-	0.98/0.94					
13	Output Voltage Range	V	19.2 - 28.8	28.8 - 43.2	38.4 - 52.8			
14	Maximum Ripple & Noise (*4)	0 - +70°C	mV	200	200	200		
		-10 - 0°C	mV	240	240	400		
15	Maximum Line Regulation (*5)	mV	96	144	192			
16	Maximum Load Regulation (*6)	mV	144	150	288			
17	Temperature Coefficient	-	Less than 0.02%/°C					
18	Over Current Protection (*7)	-	105% -					
19	Over Voltage Protection (*8)	V	30.0 - 34.8	45.0 - 49.7	55.2 - 64.8			
20	Hold-up Time (Typ) (*9)	-	20ms					
21	Leakage Current (*10)	-	Less than 0.5mA. 0.2mA(Typ) at 100VAC / 0.4mA(Typ) at 230VAC					
22	Remote Sensing	-	Possible					
23	Remote ON/OFF control	-	Possible					
24	Parallel Operation	-	Possible					
25	Series Operation	-	Possible					
26	Operating Temperature (*11)	-	-10 - +70 (-10 - +50°C:100%, +60°C:75%,+70°C:50%), start up -20 - 70°C					
27	Operating Humidity	-	10 - 90%RH (No Condensing)					
28	Storage Temperature	-	-30 - +85°C					
29	Storage Humidity	-	10 - 95%RH (No Condensing)					
30	Cooling	-	Forced Air By Blower Fan					
31	Withstand Voltage	-	Input - FG : 2kVAC (20mA), Input - Output : 3kVAC (20mA) Output-FG : 500VAC (300mA), Output-CNT:100VAC (100mA) for 1min.					
32	Isolation Resistance	-	More than 100Mohm Output - FG ... 500VDC More than 10Mohm Output - CNT ... 100VDC at 25°C and 70%RH					
33	Vibration	-	At no operating, 10 - 55Hz (Sweep for 1min.) 19.6m/s ² Constant, X,Y,Z 1h each.					
34	Shock (In package)	-	Less than 196.1m/s ²					
35	Safety (*12)	-	Approved by UL60601-1, EN60601-1, CSA-C22.2 No.601.1-M90(C-UL)					
36	Line DIP	-	Built to meet SEMI-F47 (200VAC Line only)					
37	Conducted Emission	-	Built to meet EN55011/EN55022-A, FCC-ClassA, VCCI-ClassA.					
38	Radiated Emission	-	Built to meet EN55011/EN55022-A, FCC-ClassA, VCCI-ClassA.					
39	Immunity	-	Built to meet IEC61000-4-2(Level 2,3), -3(Level 3), -4(Level 3), -5(Level 3,4), -6(Level 3), -8(Level 4), -11					
40	Weight (Typ)	g	3800					
41	Size (W x H x D)	mm	126.5 x 82 x 280 (Refer to Outline Drawing)					

*Read instruction manual carefully, before using the power supply unit.

=NOTES=

- *1. At Ta=25°C and maximum output power.
- *2. For cases where conformance to various safety specs (UL, CSA, EN) are required, input voltage range will be 100 - 240VAC(50/60Hz).
- *3. First in-rush current. Not applicable to the first 0.2ms in-rush current flowing into the power supply noise filter.
- *4. Measure with JEITA RC-9131A probe, Bandwidth of scope :100MHz.
(at 100uF electric capacitor and 0.47uF film capacitor on the test fixture board.)
- *5. 85 - 265VAC , constant load.
- *6. No load-Full load, constant input voltage.
- *7. Constant current limit with automatic recovery. Over current condition for more than 5 seconds will cause the output to shutdown.
Output current exceeding maximum rated output current for more than 10seconds continuously will result to output shutdown.
- *8. OVP circuit will shut down output, manual reset (Power cycle) or ON/OFF CNT signal reset.
- *9. At 100/200VAC, nominal output voltage and maximum output current.
- *10. Measured by the each measuring method of UL,EN and CSA(at 60Hz).
When using it as a patient care equipment, all outer surfaces of the equipment shall be constructed of nonconductive material.
See clause 19.5DV.2 of UL60601-1.
- *11. Ratings - Derating at standard mounting.
- Load (%) is percent of maximum output power or maximum output current, whichever is greater.
- As for other mountings, refer to derating curve (DA006-01-02_).
- *12. As for UL60601-1, EN60601-1 and CSA-C22.2 No.601.1-M90(C-UL) basic insulation.
- *13. Peak output current is less than 10 seconds, and duty 35% max.