



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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50-150W Single Output Industrial Power Supplies

Features

- ◆ Limited Lifetime Warranty
- ◆ UL508 approved
- ◆ SEMI F47 Compliant (high line AC)
- ◆ Universal Input (85 - 265VAC)
- ◆ Higher Efficiency Than HWS series



Key Market Segments & Applications



Specifications						
Model		HWS15A/A	HWS30A/A	HWS50A/A	HWS100A/A	HWS150A/A
Input Voltage Range	-	85 - 265VAC (47 - 63Hz) or 120 - 370VDC* (Withstands 300VAC for 5s)				
Input Current (Typ) (1)	A	0.35 / 0.2	0.65 / 0.4	0.65 / 0.35	1.3 / 0.65	1.9 / 0.95
Inrush Current (1)	A	14 / 28				
Power Factor (1)	-	Meets EN61000-3-2				
Temperature Coefficient	%/°C	-	-	0.97/0.91	0.98/0.93	0.98/0.93
Overcurrent Protection	%	>105%				
Overvoltage Protection	V	Yes				
Hold Up Time (Typ)	ms	20				
Leakage Current (max)	mA	>0.5mA (Typ 0.2mA at 100VAC, 0.4mA at 230VAC)				
Remote Sense	-	No			Yes	
Indicator	-	Green LED = ON				
Operating Temperature (with cover)	°C	-10°C to +70°C, derate linearly to 20% load from 50°C to 70°C (2)				
Storage Temperature	°C	-30 to +85°C				
Humidity (non condensing)	%RH	Operating: 30 - 90%RH, Non operating 10 - 95%RH				
Cooling	-	Convection				
Withstand Voltage	VAC	Input to Ground 2kVAC, Input to Output 3kVAC, Output to Ground 500VAC for 1 min.				
Isolation Resistance	MOhms	>100M at 25°C & 70%RH, Output to Ground 500VDC				
Vibration (non operating)	-	10 - 55Hz (1 minute sweep), 19.6m/s ² constant X, Y, Z 1 hour				
Shock	m/s ²	< 196.1 m/s ²				
Safety Agency Approvals	-	UL60950-1, CSA60950-1, EN60950-1, EN50178, UL508, CE Mark				
Line Dip	-	Complies with SEMI F47 (200VAC line only)				
Conducted & Radiated EMI	-	EN55011 / EN55022-B, FCC-B, VCCI-B				
Immunity	-	IEC61000-4-2, -3, -4, -5, -6, -8, -11; IEC61000-6-2				
Weight (Typ)	g	190	240	300	470	520
Size (WxHxD) (with cover)	Inches	1.24x3.23x3.15	1.24x3.23x3.74	1.24x3.23x4.72	1.3x3.23x6.3	1.65x3.23x6.3
	mm	31.5x82x80	31.5x82x95	31.5x82x120	33x82x160	42x82x160
MTBF - Telcordia SR-332 issue 3**	Hours	12,116,851	8,169,868	3,726,622	2,963,512	2,676,081
Warranty	-	Limited lifetime warranty (See website for terms & conditions)				

* Safety certified for AC input only ** 24V output model, 25°C ambient, full load, 230VAC input

(1) 100/200VAC

(2) HWS15A/A derates linearly to 50% load from 50 to 70°C

Output Ratings								
Model	Voltage V	Adjust Range V	Max Current A	Load Reg (mV)	Line Reg (mV)	Ripple Noise (mV)	Overvoltage V	Efficiency (typ) % (1)
HWS15A-3/A	3.3V	2.97 - 3.96	3	40	20	120	4.13-4.95	70/71
HWS30A-3/A	3.3V	2.97 - 3.96	6	40	20	120	4.13-4.95	75/77
HWS50A-3/A	3.3V	2.97 - 3.96	10	40	20	120	4.13-4.95	76/78
HWS100A-3/A	3.3V	2.97 - 3.96	20	40	20	120	4.13-4.95	82/84
HWS150A-3/A	3.3V	2.97 - 3.96	30	40	20	120	4.13-4.95	82/84
HWS15A-5/A	5V	4.0 - 6.0	3	40	20	120	6.25-7.25	77/79
HWS30A-5/A	5V	4.0 - 6.0	6	40	20	120	6.25-7.25	80/82
HWS50A-5/A	5V	4.0 - 6.0	10	40	20	120	6.25-7.25	82/84
HWS100A-5/A	5V	4.0 - 6.0	20	40	20	120	6.25-7.25	84/86
HWS150A-5/A	5V	4.0 - 6.0	30	40	20	120	6.25-7.25	85/87
HWS15A-12/A	12V	9.6 - 14.4	1.3	96	48	150	15-17.4	80/83
HWS30A-12/A	12V	9.6 - 14.4	2.5	96	48	150	15-17.4	84/86
HWS50A-12/A	12V	9.6 - 14.4	4.3	96	48	150	15-17.4	83/85
HWS100A-12/A	12V	9.6 - 14.4	8.5	96	48	150	15-17.4	86/88
HWS150A-12/A	12V	9.6 - 14.4	13	96	48	150	15-17.4	85/88
HWS15A-15/A	15V	12.0 - 18.0	1	120	60	150	18.8-21.8	81/84
HWS30A-15/A	15V	12.0 - 18.0	2	120	60	150	18.8-21.8	85/87
HWS50A-15/A	15V	12.0 - 18.0	3.5	120	60	150	18.8-21.8	83/86
HWS100A-15/A	15V	12.0 - 18.0	7	120	60	150	18.8-21.8	86/88
HWS150A-15/A	15V	12.0 - 18.0	10	120	60	150	18.8-21.8	86/89
HWS15A-24/A	24V	19.2 - 28.8	0.65	150	96	150	30-34.8	82/85
HWS30A-24/A	24V	19.2 - 28.8	1.3	150	96	150	30-34.8	86/88
HWS50A-24/A	24V	19.2 - 28.8	2.2	150	96	150	30-34.8	84/87
HWS100A-24/A	24V	19.2 - 28.8	4.5	150	96	150	30-34.8	87/89
HWS150A-24/A	24V	19.2 - 28.8	6.5	150	96	150	30-34.8	88/90
HWS15A-48/A	48V	38.4 - 52.8	0.33	240	192	200	55.2-64.8	80/80
HWS30A-48/A	48V	38.4 - 52.8	0.65	240	192	200	55.2-64.8	82/83
HWS50A-48/A	48V	38.4 - 52.8	1.1	240	192	200	55.2-64.8	84/86
HWS100A-48/A	48V	38.4 - 52.8	2.1	240	192	200	55.2-64.8	88/90
HWS150A-48/A	48V	38.4 - 52.8	3.3	240	192	200	55.2-64.8	89/91

Options	
Suffix	Description
Blank	No cover
/A	Cover
/HD	See HWS/HD datasheet for details. -40°C start up & pcb coating (Not available on HWS15A)
/ME	See HWS/ME datasheet for details. ES/EN/CSA 60601-1 medical certification (Not available on HWS15A)
/R	Remote on/off (HWS50A to HWS150A only)
Example: HWS50A-24/RA	

Other Industrial Products	
HWS300-1800	300W to 1800W
LZSA	500W to 1500W (MIL STD)
DRB, DRF, DSP & DPP	10W to 960W DIN Rail Mount
RWS-B	50W to 600W (5 year warranty)

For Additional Information, please visit
us.tdk-lambda.com/lp/products/hwsa-series.htm

