Single Output Industrial Power Supplies

Features

- Limited Lifetime Warranty
- UL508 approved
- SEMI F47 Compliant (high line AC)
- Universal Input (85 - 265VAC)
- High Efficiency
- Wide Range AC Input

Key Market Segments & Applications

Industrial Test COMM LED Broadcast

RoHS

Specifications

Model		HWS15	HWS30	HWS50	HWS100	HWS150
Input Voltage range	-	85 - 265VAC (47 - 63Hz) or 120 - 370VDC				
Input Current (Typ) (1)	A	0.4 / 0.2	0.8 / 0.4	0.7 / 0.35	1.3 / 0.65	1.9 / 0.95
Inrush Current (1)	A	14 / 28				
Power Factor	-	Meets EN61000-3-2				
Temperature Coefficient	-	<0.02%/°C				
Overcurrent Protection	-	>104%				
Overvoltage Protection	V	Yes (See page 2)				
Hold Up Time (Typ)	ms	20				
Leakage Current (max)	mA	<0.5mA (Typ 0.3mA at 100VAC, 0.5mA at 230VAC)				
Remote Sense	-	No			Yes	
Indicator	-	Green LED = ON				
Operating Temperature (no 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)	-	Operating: 30 - 90%RH, Non operating 10 - 95%RH				
Cooling	-	Convection				
Withstand Voltage	-	Input to Ground 2kVAC, Input to Output 3kVAC, Output to Ground 500VAC for 1 min.				
Isolation Resistance	-	>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	-	< 196.1m/s^2				
Safety Agency Certifications	-	UL60950-1, CSA60950-1, EN60950-1, EN50178, UL508, CE Mark(3)				
Line Dip	-	Complies with SEMI F47 (200VAC line only)				
Conducted & Radiated EMI	-	EN55011 / EN55022-B, FCC-B, VCCI-B				
Recommended EMI Filter	-	RSEL-2001W			RSEL-2002W	RSEL-2003W
Immunity	-	IEC61000-4-2 (Level 3,2), -3, -4, -5, -6 (Level 3), -8, -11 (Level 4)				
Weight (Typ)	g	180	220	280	450	500
Size (WxHxD)	in	1.04x3.23x3.15	1.04x3.23x3.74	1.04x3.23x4.72	1.1x3.23x6.3	1.46x3.23x6.3
Size (WxHxD) /A version		1.24x3.23x3.15	1.24x3.23x3.74	1.24x3.23x4.72	1.3x3.23x6.3	1.65x3.23x6.3
Warranty	-	Limited lifetime warranty (See Lambda's terms & conditions)				

(1) 100/200VAC
(2) -40°C Start up, see options table
(3) UL60601-1, EN60601-1, see options table

Output Ratings

Model	Voltage	Adjust Range	Max Curr. A	Load Reg mV	Line Reg mV	Ripple Noise mV	Over voltage V	Eff. typ % (1)
HWS15-3/A	3.3V	2.97 - 3.96	3	40	20	120	4.13-4.95	68/71
HWS30-3/A	3.3V	2.97 - 3.96	6	40	20	120	4.13-4.95	70/73
HWS50-3/A	3.3V	2.97 - 3.96	10	40	20	120	4.13-4.95	76/78
HWS100-3/A	3.3V	2.97 - 3.96	20	40	20	120	4.13-4.95	78/81
HWS150-3/A	3.3V	2.97 - 3.96	30	40	20	120	4.13-4.95	78/81
HWS15-5/A	5V	4.0 - 6.0	3	40	20	120	6.25-7.25	77/79
HWS30-5/A	5V	4.0 - 6.0	6	40	20	120	6.25-7.25	77/80
HWS50-5/A	5V	4.0 - 6.0	10	40	20	120	6.25-7.25	82/84
HWS100-5/A	5V	4.0 - 6.0	20	40	20	120	6.25-7.25	83/86
HWS150-5/A	5V	4.0 - 6.0	30	40	20	120	6.25-7.25	83/86
HWS15-12/A	12V	9.6 - 14.4	1.3	96	48	150	15-17.4	80/81
HWS30-12/A	12V	9.6 - 14.4	2.5	96	48	150	15-17.4	81/83
HWS50-12/A	12V	9.6 - 14.4	4.3	96	48	150	15-17.4	81/83
HWS100-12/A	12V	9.6 - 14.4	8.5	96	48	150	15-17.4	83/86
HWS150-12/A	12V	9.6 - 14.4	13	96	48	150	15-17.4	83/86
HWS15-15/A	15V	12.0 - 18.0	1	120	60	150	18.8-21.8	80/81
HWS30-15/A	15V	12.0 - 18.0	2	120	60	150	18.8-21.8	81/83
HWS50-15/A	15V	12.0 - 18.0	3.5	120	60	150	18.8-21.8	81/83
HWS100-15/A	15V	12.0 - 18.0	7	120	60	150	18.8-21.8	83/86
HWS150-15/A	15V	12.0 - 18.0	10	120	60	150	18.8-21.8	83/86
HWS15-24/A	24V	19.2 - 28.8	0.65	192	96	200	30-34.8	82/83
HWS30-24/A	24V	19.2 - 28.8	1.3	192	96	200	30-34.8	83/86
HWS50-24/A	24V	19.2 - 28.8	2.2	192	96	150	30-34.8	82/84
HWS100-24/A	24V	19.2 - 28.8	4.5	192	96	150	30-34.8	84/87
HWS150-24/A	24V	19.2 - 28.8	6.5	192	96	150	30-34.8	85/88
HWS15-48/A	48V	38.4 - 52.8	0.33	384	192	200	55.2-64.8	80/80
HWS30-48/A	48V	38.4 - 52.8	0.65	384	192	200	55.2-64.8	82/83
HWS50-48/A	48V	38.4 - 52.8	1.1	384	192	200	55.2-64.8	83/85
HWS100-48/A	48V	38.4 - 52.8	2.1	384	192	200	55.2-64.8	84/87
HWS150-48/A	48V	38.4 - 52.8	3.3	384	192	200	55.2-64.8	85/88

Options

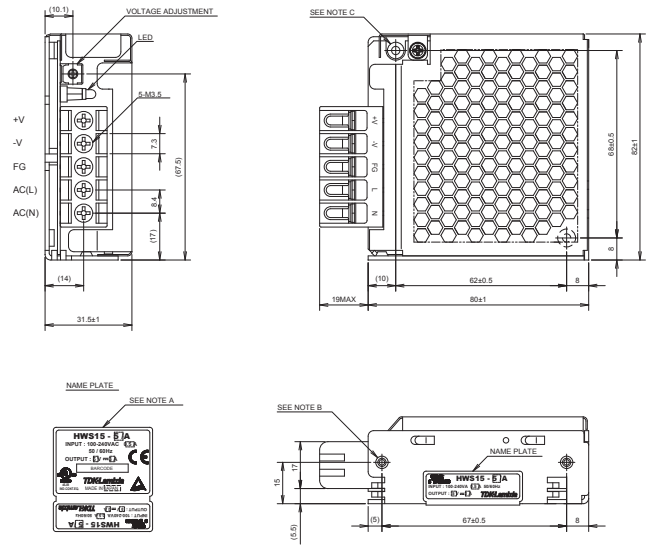
Suffix	Description
Blank	Screw terminals, no cover
/A	Screw terminals, cover
/R	Remote on/off (50-150W only)
/HD	See HWS50-1500/HD Datasheet for details. -40 to +71(74)°C operation, conformally coated PCBs
/ME	See HWS30-1500/ME Datasheet for details. UL60601-1, EN60601-1 medical approvals

Example: HWS50-24/RA

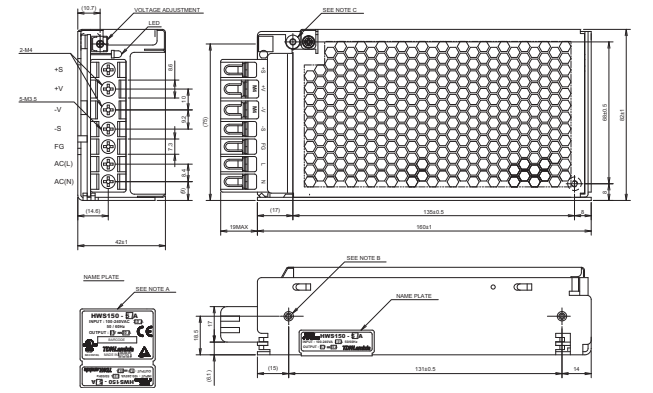
Other Industrial Products

HWS300-1800	300 to 1800W
LZSA	500W to 1500W Single output
DPP, DLP & DSP	10W to 480W DIN Rail Mount

HWS15 Outline Drawing



HWS150 Outline Drawing



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