

**Universal input 85 - 264V AC (ZWS5- ZWS50 models)**  
**Power levels from 5 to 150 watts**  
**Wide range of output voltages (3.3 - 48V)**  
**Harmonic Current per EN61000-3-2**  
**Floating output, fully isolated**  
**EMC to EN55011-B**  
**EN60950, UL1950, AS3260 No. CS7067N Cert**  
**Convection cooled**  
**OVP and overload protection.**  
**Open Frame or vented case packaging options**

Suitable for a wide range of industrial, automation and telecom applications.

◆ 24 Month Warranty

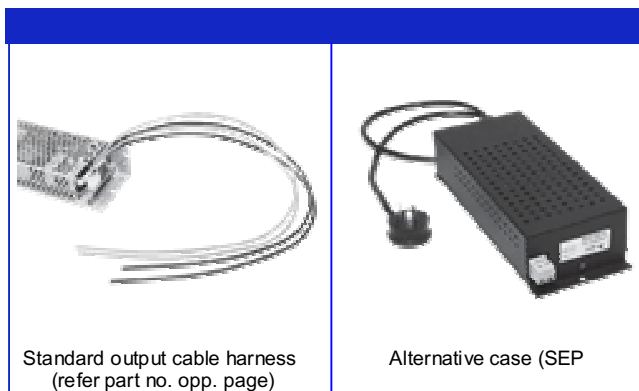
**SPECIFICATIONS** All specifications are typical at nominal input, full load and at 25°C unless otherwise stated.

ELECTRICAL		
<b>AC Input</b>	ZWS5 - ZWS50:	85 - 264V AC
	ZWS75 - ZWS150:	110 / 230V AC
<b>DC Input</b>	ZWS5 - ZWS50:	110 - 330V DC
	ZWS75 - ZWS150:	220 - 330V DC
<b>Frequency</b>	ZWS5 - ZWS50:	47 - 440Hz
	ZWS75 - ZWS150:	47 - 63Hz
<b>Fusing / Protection</b>		
<b>Isolation</b>	3KV AC input - output 2KV AC input - chassis 500V AC output - frame	
<b>Efficiency</b>	Model dependant (65 - 80%)	
<b>Inrush current</b>		
<b>Output Power</b>	Refer model table (5 - 150W)	
<b>Output Voltages</b>	Refer model table (3.3 - 48V)	
<b>Voltage adj. range</b>	Typically $\pm 10\%$ of nominal.	
<b>Temp Co-Efficient</b>	$\pm 0.02\%$ per °C	
<b>Current Limit</b>	ZWS5 - ZWS30:	Short circuit fold back protect (typ. 30 sec.)
	ZWS75 - ZWS150:	Set to approx 110% of rated output with auto recovery.
<b>Line Regulation</b>	Typically $\pm 0.4\%$ over input range	
<b>Load Regulation</b>	Typically $\pm 0.6\%$ from no load to full load	
<b>Ripple</b>		
<b>Output Noise</b>	Typically 1% of nominal V out	
<b>Hold up time</b>	Typically 20ms at rated power and input	
<b>Start up time</b>	Typically 3 seconds	
<b>OVP</b>	ZWS5 - ZWS30:	Zener Shutdown
	ZWS75 - ZWS150:	OVP will shutdown unit, manual reset by AC line recycle.
<b>Minimum Load</b>	Units will operate with zero load	

PHYSICAL	
<b>Connections</b>	Plug in connector / cable harness
<b>Weight</b>	Refer model table (65 - 510gm (PCB))
<b>Mounting</b>	(data)
<b>Cooling</b>	Convection cooled

ENVIRONMENTAL	
<b>Operating temperature</b>	-10 - 50° C at full load. Derate from 50° C to 60° C
<b>Humidity</b>	
<b>Altitude</b>	
<b>Vibration</b>	2G constant operating
<b>Shock</b>	<20G

STANDARDS	
<b>Safety</b>	Approved to IEC950, EN60950, UL1950, AS3260
<b>EMI / RFI</b>	EN55011 - B, EN55022 - B
<b>Harmonics</b>	ZWS75 - ZWS150: EN61000-3-2



# 5 - 150 Watt AC/DC Open frame single output switchmode DC Power Supplies



## STANDARD PREFERRED MODEL TABLE

MODELS	Volts	Amps	Watts
ZWS5 - 3 - JA	3.3V	1.0A	3W
ZWS5 - 5 - JA	5V	1.0A	5W
ZWS5 - 12 - JA	12V	0.42A	5W
ZWS5 - 15 - JA	15V	0.34A	5W
ZWS5 - 24 - JA	24V	0.22A	5W
ZWS10 - 3 - JA	3.3V	2.0A	6.6W
ZWS10 - 5 - JA	5V	2.0A	10W
ZWS10 - 12 - JA	12V	0.85A	10W
ZWS10 - 15 - JA	15V	0.7A	10W
ZWS10 - 24 - JA	24V	0.45A	10W
ZWS15 - 3 - JA	3.3V	3.0A	10W
ZWS15 - 5 - JA	5V	3.0A	15W
ZWS15 - 12 - JA	12V	1.25A	15W
ZWS15 - 15 - JA	15V	1.0A	15W
ZWS15 - 24 - JA	24V	0.65A	15W
ZWS30 - 3 - JA	3.3V	6.0A	20W
ZWS30 - 5 - JA	5V	6.0A	30W
ZWS30 - 12 - JA	12V	2.5A	30W
ZWS30 - 15 - JA	15V	2.0A	30W
ZWS30 - 24 - JA	24V	1.3A	30W
ZWS30 - 36 - JA	36V	0.9A	30W
ZWS30 - 48 - JA	48V	0.7A	30W
ZWS50 - 3 - JA	3.3V	10.0A	33W
ZWS50 - 5 - JA	5V	10.0A	50W
ZWS50 - 12 - JA	12V	4.3A	50W
ZWS50 - 15 - JA	15V	3.5A	50W
ZWS50 - 24 - JA	24V	2.1A	50W
ZWS50 - 36 - JA	36V	1.4A	50W
ZWS50 - 48 - JA	48V	1.1A	50W

MODELS	Volts	Amps	Watts
ZWS75PF - 3 - JA	3.3V	15.0A	50W
ZWS75PF - 5 - JA	5V	15.0A	75W
ZWS75PF - 12 - JA	12V	6.3A	75W
ZWS75PF - 15 - JA	15V	5.0A	75W
ZWS75PF - 24 - JA	24V	3.2A	75W
ZWS75PF - 28 - JA	28V	2.7A	75W
ZWS75PF - 36 - JA	36V	2.1A	75W
ZWS75PF - 48 - JA	48V	1.6A	75W
ZWS100PF - 3 - JA	3.3V	20.0A	66W
ZWS100PF - 5 - JA	5V	20.0A	100W
ZWS100PF - 12 - JA	12V	8.5A	100W
ZWS100PF - 15 - JA	15V	6.7A	100W
ZWS100PF - 24 - JA	24V	4.3A	100W
ZWS100PF - 28 - JA	28V	3.6A	100W
ZWS100PF - 36 - JA	36V	2.8A	100W
ZWS100PF - 48 - JA	48V	2.1A	100W
ZWS150PF - 3 - JA	3.3V	30.0A	100W
ZWS150PF - 5 - JA	5V	30.0A	150W
ZWS150PF - 12 - JA	12V	12.5A	150W
ZWS150PF - 15 - JA	15V	10.0A	150W
ZWS150PF - 24 - JA	24V	6.3A	150W
ZWS150PF - 28 - JA	28V	5.4A	150W
ZWS150PF - 36 - JA	36V	4.2A	150W
ZWS150PF - 48 - JA	48V	3.2A	150W
ZWS120PPF - 24 - A	24V	5A / 10A	120W
ZWS120PPF - 28 - A	28V	4.3A / 8.6A	120W
ZWS120PPF - 36 - A	36V	3.4A / 6.7A	120W

J = JST type connector  
A = Vented case  
Peak A output set at approx. 120% for 30 sec. maximum

For PCB only version, remove suffix 'A' from the part number

- ◆ Not suitable for parallel operation
- ◆ Suitable for series operation

## CABLE HARNESS PART NUMBERS

H-IN-5L: Input 5 - 150W models  
H-OU-8L: Output 5 - 15W models  
H-OU-9L: Output 30 - 50W models  
H-OU-18L: Output 75W models  
H-OU-9L: Output 120W models  
H-OU-10L: Output 100W models  
H-OU-11L: Output 150W models  
H-OU-12L: Output 150W models

## MOUNTING DETAILS / DIMENSIONS

Please contact us for a specific drawing of your preferred power supply

### Dimensions:

Open Frame	L	W	H	Weight
ZWS5	98	45	21mm	65gm
ZWS10	105	50	21mm	75gm
ZWS15	125	50	21mm	95gm
ZWS30	133	55	26mm	200gm
ZWS50	195	55	26mm	250gm
ZWS75	222	55	35mm	320gm
ZWS100	222	62	35mm	360gm
ZWS120	208	80	40mm	380gm
ZWS150	222	75	40mm	510gm

Vented Case	L	W	H	Weight
ZWS5-A	118	52	32mm	180gm
ZWS10-A	125	57	32mm	200gm
ZWS15-A	145	57	32mm	300gm
ZWS30-A	163	65	36mm	370gm
ZWS50-A	225	65	36mm	500gm
ZWS75-A	252	65	42mm	900gm
ZWS100-A	253	72	45mm	900gm
ZWS120-A	236	90	47mm	1200gm
ZWS150-A	252	85	47mm	1400gm