

180W to 300W Industrial ATX Power Supplies

Features

- ◆ 90 - 150W convection cooled ratings
- ◆ 1U high
- ◆ Power factor corrected
- ◆ Peak power ratings
- ◆ No minimum loading required



Key Market Segments & Applications



Specifications				
Model		ZWX180	ZWX240	ZWX300
Input Voltage	V	85-265VAC (47-63Hz)		
Input Current (1)(2)	A	1.9 / 1.0	2.6 / 1.3	3.2 / 1.6
Inrush Current (2)	A	14 / 28 Cold start 25°C ambient		
Power Factor	-	Meets EN61000-3-2		
Leakage Current	mA	< 0.75mA		
Temperature Coefficient	°C	<0.02%/°C		
Overcurrent Protection (3)	-	>1.05% of forced air current rating (5s delay and manual reset on V1, 2 & 3)		
Overvoltage Protection (4)	V	+3.3V: 3.76 - 4.3V, +5V: 5.74 - 7V, +12V: 13.4 - 15.6V		
Hold Up Time (Typ) (1)	ms	20ms at 100VAC		
Efficiency (1)(2)	%	81 / 84%		
Remote On/Off PS_ON	-	High: Unit off, Low: Unit On (enabled). Meets SFX 12V		
DC Good PWR_OK	-	High: Power supply is good. Meets SFX12V		
Remote Sense	-	+3.3V Only		
Output Voltage Setpoint Accuracy	-	±5% (all outputs)		
Output Voltage Adjustment	-	None		
Line Regulation	mV	3.3V: 20mV, 5V: 48mV, +12V: 48mV, -12V: 20mV, +5Vsb: 20mV		
Load Regulation	mV	3.3V: 100mV, 5V: 300mV, +12V: 300mV, -12V: 100mV, +5Vsb: 100mV		
Ripple & Noise	mV	3.3V: 120mV, 5V: 150mV, +12V: 150mV, -12V: 120mV, +5Vsb: 120mV		
Operating Temperature	-	-10°C to +70°C, derate linearly to 20% load from 50°C to 70°C		
Storage Temperature	°C	-30 to +85°C		
Humidity (non condensing)	-	Operating: 30 - 90%RH, Non operating: 10 - 95% RH		
Cooling	-	Convection or forced air cooled (30CFM, 0.85m3/min)		
Withstand Voltage	-	I/P to Grnd 2kVAC (20mA), I/P to O/P 3kVAC (20mA), O/P to Grnd 500VAC (100mA) for 1 min.		
Isolation Resistance	-	>100M at 25C & 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 (non operating)	-	< 392m/s ²		
Safety Agency Approvals	-	UL60950-1, CSA60950-1, EN60950-1, EN50178 (OV II), CE Mark		
Conducted & Radiated EMI	-	EN55011/EN55022-B, FCC Class B, VCCI-B		
Immunity	-	EN61000-4-2, -3, -4, -5, -6, -8, -11		
Weight (Typ)	g	500	650	800
Size (WxHxD)	in	3.7 x 1.42 x 8.27	4.17 x 1.42 x 8.86	4.65 x 1.42 x 9.84
Warranty	yrs	Three Years		

- (1) With output loading of:
 ZWX180: V1=6.5A, V2=6.5A, V3=7.7A, V4=0.2A, V5=1A
 ZWX240: V1=8.9A, V2=7.7A, V3=10.2A, V4=0.3A, V5=2A
 ZWX300: V1=12A, V2=7A, V3-1=5A, V3-2=9.4A, V4=0.2A, V5=1A
- (2) 100/200VAC
- (3) Avoid prolonged operation in overload
- (4) <5s operation at peak load

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Model Selector

Model		Output Voltage	Max Curr. (Convection)	Max Power (Convection)	Max Curr. (Forced Air)	Max Power (Forced Air)	Peak Curr.(4) (Forced Air)	Peak Power(4) (Forced Air)
ZWX180	V1	+3.3V	6A(5)	90W	8.4A(5)	153W	12A(5)	180W
	V2	+5V	5A(5)	90W	7A(5)	153W	10A(5)	180W
	V3	+12V	6A	90W	9A	153W	13A	180W
	V4	-12V	0.2A	90W	0.3A	153W	-	180W
	V5	+5V (sb)	1.4A	90W	2A	153W	-	180W
ZWX240	V1	+3.3V	7A	120W	9.8A	204W	14A	240W
	V2	+5V	6A	120W	8.4A	204W	12A	240W
	V3	+12V	8A	120W	11.2A	204W	16A	240W
	V4	-12V	0.2A	120W	0.3A	204W	-	240W
	V5	+5V (sb)	1.4A	120W	2A	204W	-	240W
ZWX300	V1	+3.3V	10A	150W	14A	255W	20A	300W
	V2	+5V	6A	150W	8.4A	255W	12A	300W
	V3-1	+12V	4A(6)	150W	5.6A	255W	8A(7)	300W
	V3-2	+12V	8A(6)	150W	11.2A	255W	16A(7)	300W
	V4	-12V	0.2A	150W	0.4A	255W	-	300W
	V5	+5V (sb)	1.4A	150W	2A	255W	-	300W

(5) Maximum combined power of V1 & V2: 32W convection, 54W forced air, 63W peak

(6) V3-1 & V3-2 combined current limited to 10.9A (131W)

(7) V3-1 & V3-2 combined current limited to 22A (264W)

Cable Harness

Connector	Harness	ZWX180	ZWX240	ZWX300
CN1	HA-2-IN	Y	Y	Y
CN21	ZWX-HA-04	Y	Y	Y
CN21(S-ATA)	ZWX-HA-02	Y	Y	Y
CN31/CN41	ZWX-HA-01	Y	Y	Y
CN51	ZWX-HA-03	-	-	Y

Options

Suffix	Description
Blank	Open Frame
/L1	L bracket - input on the left side (rear mounting side facing away)
/L2	L bracket - input on the right side (rear mounting side facing away)
/A1	L bracket & cover - input on the left side (rear mounting side facing away)
/A2	L bracket & cover - input on the right side (rear mounting side facing away)

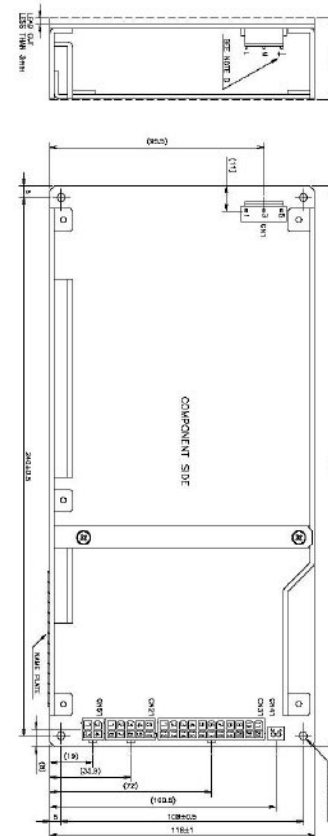
Other Industrial Products

ZWS, ZWSPAF	5-480W Single Output, 115/230VAC input
NV	175W to 300W 4-5 Outputs

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



Outline Drawing (ZWX300)



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