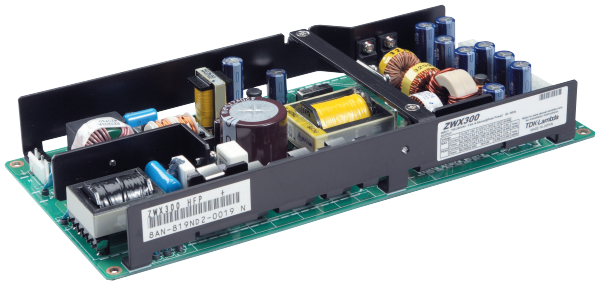
180W to 300W Industrial ATX Power Supplies

Features

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



Key Market Segments & Applications

Industrial COMM

RoHS

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

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)