



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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## 200-800W Programmable Power Supplies

### Features

- ◆ 2U high
- ◆ Built-in USB, RS-232 & RS-485 Interface
- ◆ Optional LAN, GPIB & Isolated Analog Programming
- ◆ Bench or Rack Mount
- ◆ Constant Current or Voltage Modes
- ◆ Five Year Warranty

### Key Market Segments & Applications



Model Selector								
Model	Voltage Adjust Range	Current Adjust Range	Max Power (W)	Ripple 5Hz-1MHz (mV)	Noise 20MHz BW (mV)	Ripple 5Hz-1MHz (mA)	Efficiency % (100-200VAC)	Front Panel Output Jacks (Option)
Z10-20-U	0 - 10	0 - 20	200	5	50	50	80 / 82	Yes
Z10-40-U	0 - 10	0 - 40	400	5	50	50	80 / 82	Yes
Z10-60-U	0 - 10	0 - 60	600	6.25	75	75	80 / 82	Yes
Z10-72-U	0 - 10	0 - 72	720	6.25	75	75	80 / 82	Yes
Z20-10-U	0 - 20	0 - 10	200	5	50	30	82 / 84	Yes
Z20-20-U	0 - 20	0 - 20	400	5	50	30	81 / 83	Yes
Z20-30-U	0 - 20	0 - 30	600	6.25	75	45	82 / 84	Yes
Z20-40-U	0 - 20	0 - 40	800	6.25	75	45	82 / 84	Yes
Z36-6-U	0 - 36	0 - 6	216	5	50	15	83 / 85	Yes
Z36-12-U	0 - 36	0 - 12	432	5	50	15	83 / 85	Yes
Z36-18-U	0 - 36	0 - 18	648	6.25	75	22	84 / 85	Yes
Z36-24-U	0 - 36	0 - 24	864	6.25	75	22	84 / 85	Yes
Z60-3.5-U	0 - 60	0 - 3.5	210	5	50	8	83 / 85	Yes
Z60-7-U	0 - 60	0 - 7	420	5	50	8	83 / 85	Yes
Z60-10-U	0 - 60	0 - 10	600	6.25	75	12	83 / 85	Yes
Z60-14-U	0 - 60	0 - 14	840	6.25	75	12	83 / 85	Yes
Z100-2-U	0 - 100	0 - 2	200	8	80	3	83 / 85	No
Z100-4-U	0 - 100	0 - 4	400	8	80	3	84 / 86	No
Z100-6-U	0 - 100	0 - 6	600	10	100	4.5	84 / 86	No
Z100-8-U	0 - 100	0 - 8	800	10	100	4.5	84 / 86	No

Options	
	Option Code
Front panel terminals (60V or 24A max)*	-L
Front panel insulated output sockets (100V or 24A max)*	-L2
<b>Only one of the options below can be included:</b>	
GPIB Interface*	-IEEE
Voltage Programming Isolated Analog Interface*	-IS510
Current Programming Isolated Analog Interface*	-IS420
LAN Interface	-LAN

Part Number Example
Z10-20-LAN-L-U

\*Requires wide body (105mm) case style

Accessories	
	Part Number
19" Rack Housing (Accepts four 105mm width units or six 70mm width units)	Z-NL100
Blanking Panel for 19" Rack (70mm)	Z-BP
Blanking Panel for 19" Rack (105mm)	Z-WBP
Dual/Triple Housing (Accepts two 105mm case units or three 70mm case units)	Z-NL200
Serial Link Cable (One is included with each power supply)	Z-RJ45
Communication Cable RS485	Z-485-9
Communication Cable RS232	Z-232-9
North American Line Cord (One included with -U suffix)	Z-U

Specifications (See website for detailed specifications)		Z10	Z20	Z36	Z60	Z100
Load Regulation	CV	2mV + 0.01% of rated voltage over 0 - 100% load change				
Line Regulation	CV	2mV + 0.01% of rated voltage over a 85 - 132 or 170 - 265VAC line change				
Recovery Time (1)	CV	1ms				
Temperature Coefficient	CV	30ppm/°C following 30 minute warm up				
Temperature Stability	CV	0.02% of rated voltage over 8 hours following 30 minute warm up time				
Warm up Drift (2)	CV	<0.05% of rated voltage + 2mV of rated output voltage				
Up programming response time (10-90% or 90-10% of Vmax)	CV	15ms	30ms	30ms	50ms	50ms
Down programming resp time (CV) (10-90% or 90-10% of Vmax)	Full load	10ms	30ms	30ms	50ms	50ms
Down programming resp time (CV) (90-10% of Vmax)	Zero load	190ms	200ms	250ms	310ms	900ms
Load Regulation	CC	5mA + 0.01% of rated current over 0 - 100% Vout change				
Load Regulation thermal drift	CC	< 0.05% of rated current over 30 minutes after load change				
Line Regulation	CC	2mA + 0.01% of rated current over a 85 - 132 or 170 - 265VAC line change				
Temperature Coefficient	CC	100ppm/°C of rated current after 30 minute warm up time				
Temperature Stability	CC	0.05% of rated current over 8 hours following 30 minute warm up time				
Warm up Drift (2)	CC	<±0.1% of rated current				
Vout & Iout programming & readback resolution	Digitally	< 0.012% of rated voltage/current				
Vout & Iout programming & readback accuracy	Digitally	< 0.05% of rated voltage, < 0.1% of rated current				
Voltage & Current Programming	Analog	By either Voltage (0-5V or 0-10V) or Resistance (0-5k or 0-10k)				
Voltage & Current Monitoring	Analog	0-5V or 0-10V Voltage (user selectable), ±1% accuracy				
Overvoltage Shutdown (user programmable)	V	0.5 - 12	1 - 24	2 - 40	5 - 66	5 - 110
Overtemperature Protection	-	User selectable - latched or non-latching				
Display - Voltage	-	4 digits. Accuracy 0.5% of rated voltage or current ±1 count				
Remote On/Off	-	By applied voltage or dry contact relay (user selectable logic)				
Output Good	-	Open Collector, Low on fail				
Remote Sense Compensation (per wire)	V	1	1	2	3	5
Communication Interface	-	RS232, RS485 & USB standard, IEEE488 (GPIB) & LAN optional				
Series Operation	-	Up to two identical units (with external diodes)				
Parallel Operation	-	Up to six units in master-slave configuration				
Input Voltage / Frequency (3)	-	85-265VAC, 47-63Hz				
Inrush Current	-	< 25A				
Hold Up Time (Typical)	ms	16ms				
Power Factor Correction	-	Complies with EN61000-3-2 Class A (0.99 typ)				
Operating Temperature	°C	0 - 50°C				
Storage Temperature	°C	-20 to +85°C				
Humidity (non condensing)	%RH	Operating: 10 - 90%RH, Storage 10 - 95%RH				
Cooling	-	Internal temperature controlled fan				
Withstand Voltage	-	I/P to GND 2kVAC, I/P to O/P 3kVAC, O/P to GND 1380VDC 1 min				
Insulation Resistance	-	>100M at 25°C & 70%RH				
Vibration (non operating)	-	IEC60068-2-64				
Shock	-	<20G, half sine, 11ms. IEC60068-2-27				
Safety Agency Certifications	-	UL61010-1, EN61010-1, IEC61010 (Designed to meet UL/EN60950-1)				
Immunity	-	IEC61326 (Designed to meet EN55022 / EN55024)				
Conducted & Radiated EMI	-	EN55022-B, FCC part 15-B, VCCI-B				
Size (H x W x D) (Excluding handles and busbars)	mm	Standard body 83 x 70 x 350mm; Wide Body 83 x 105 x 350mm				
Weight	kg	Standard body 1.9kg; Wide Body 2.4kg				
Warranty	yrs	Five Years				

Notes:

- (1) Recovery to within 0.5% of rated voltage after a load change of 10-90% (Output current 10-100% of Imax)
- (2) Over 30 minute warm up time after power on
- (3) Derate for 85-100 VAC; Z10-72-U (66A), Z20-40-U (36A), Z36-24-U (20A), Z60-14-U (12.5A), Z100-8-U (7.5A)

For Additional Information, please visit [us.tdk-lambda.com/lp/products/zplus-series.htm](http://us.tdk-lambda.com/lp/products/zplus-series.htm)

