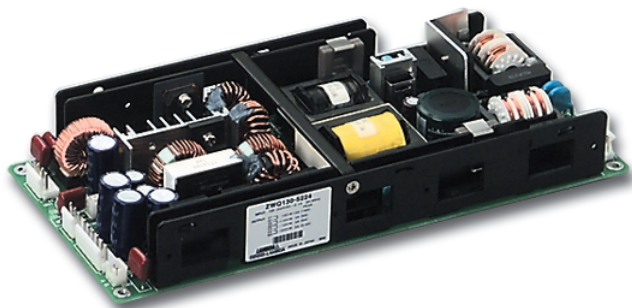


80W to 170W Quad Output Power Supplies



- ◆ Universal Input (85 - 265VAC)
- ◆ Power Factor Corrected
- ◆ Floating Adjustable Fourth Output
- ◆ Low Profile <1U High

RoHS

Key Market Segments & Applications

Factory Automation
 Test & Measurement
 Light Industrial Equipment

Features and Benefits

| Feature | Benefit |
|-------------------------------------|--|
| ◆ Low Profile | ◆ Fits in 1U Enclosures |
| ◆ Adjustable Main and Fourth Output | ◆ System Optimization |
| ◆ Power Factor Corrected | ◆ Supports Global Use |
| ◆ Floating Fourth Output | ◆ Can Use as Positive or Negative Output |

Specifications

| Models | | ZWQ80 | ZWQ80 | ZWQ80 | ZWQ80 | ZWQ130 | ZWQ130 | ZWQ130 | ZWQ130 |
|-------------------------------|-----|---|-------|-------|-------|---|--------|--------|--------|
| | | -5222 | -5223 | -5224 | -5225 | -5222 | -5223 | -5224 | -5225 |
| Items | | 85-265VAC (47-63Hz), 120-370VDC | | | | | | | |
| Input Voltage | - | | | | | | | | |
| Input Current (1) | A | 1.6 / 0.8 | | | | 2.6 / 1.3 | | | |
| Inrush Current (1) | A | 14/28 | | | | | | | |
| Power Factor | - | Meets EN61000-3-2 | | | | | | | |
| Temperature Coefficient | - | <0.02%/°C | | | | | | | |
| Max Output Power (convection) | W | 80 | | | | 130 | | | |
| Max Output Power (forced air) | W | 104 | 88.7 | 104 | 104 | 170 | 149.6 | 170 | 170 |
| Overpower Protection (2) | W | >109 | >93 | >109 | >109 | >173 | >152 | >173 | >173 |
| Minimum Load | A | V1: 0.9A Conv, 1.4A Forced Air | | | | V1: 1.5A Conv, 2.1A Forced Air | | | |
| Output Voltage Accuracy | % | ±5% for outputs V2 and V3 | | | | | | | |
| Efficiency (Typ) | % | 72 | | | | | | | |
| Hold Up Time (1) | ms | 20 | | | | | | | |
| Leakage Current | - | 0.75mA max, 0.2mA (Typ) at 100VAC / 0.44mA(Typ) at 230VAC | | | | | | | |
| Remote On / Off | - | See installation manual (Not available with /A cover option) | | | | | | | |
| Oper Temp (convection cooled) | - | -10°C to 60°C, derate linearly to 50% load from 40°C to 60°C. (3) | | | | | | | |
| Oper Temp (forced air cooled) | - | -10°C to 70°C, derate linearly to 50% load from 50°C to 70°C. (>30cfm airflow)(3) | | | | | | | |
| Storage Temperature | - | -30° to +85°C | | | | | | | |
| Humidity (non condensing) | - | Operating: 30 - 90% RH; Non-operating 10-95% RH | | | | | | | |
| Withstand Voltage | - | I/P~Grnd 2kVAC (20mA), I/P~O/P 3kVAC (20mA), O/P~Grnd 500VAC (100mA) 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 | - | < 196.1 m/s ² | | | | | | | |
| Safety Agency Approvals | - | UL60950-1, CSA60950-1, EN60950-1, CE Mark, EN50178 | | | | | | | |
| Conducted & Radiated EMI | - | EN55011, EN55022-B, FCC Class B, VCCI-B | | | | | | | |
| Immunity | - | EN61000-4-2,-3,-4,-5,-6,-8,-11 | | | | | | | |
| Weight (Typ) | g | 550 | | | | 730 | | | |
| Size (W x H x D) | mm | 93.5 x 35 x 210 (refer to outline drawing) | | | | 106 x 35 x 225 (refer to outline drawing) | | | |
| Warranty | yrs | One Year | | | | | | | |

(1) 100/200VAC

(2) Avoid prolong operation in overload

(3) /A version - additional derating, see installation manual

Model Selector

| Model | Output | Voltage (V) | Voltage Adjust Range (V) | Convect. (A) | Peak or Forced Air (A)(4) | Max Load Reg (mV) | Max Line Reg (mV) | Ripple Noise (mV) | OVP (V)(5) |
|-------------|--------|-------------|--------------------------|--------------|---------------------------|-------------------|-------------------|-------------------|------------|
| ZWQ80-5222 | V1 | 5 | 5.0-5.25 | 8.0 | 10.0 | 100 | 20 | 120 | 5.7-7.0 |
| | V2 | +12/15* | +12/+15 | 2.0 | 2.5 | 300 | 48 | 150 | 16.5-22.5 |
| | V3 | -12/15* | -12/-15 | 2.0 | 2.5 | 300 | 48 | 150 | 16.5-22.5 |
| | V4 | 12 | 11.4-12.6 | 3.0 | 4.0 | 300 | 48 | 150 | 13.8-16.2 |
| ZWQ80-5223 | V1 | 5 | 5.0-5.25 | 8.0 | 10.0 | 100 | 20 | 120 | 5.7-7.0 |
| | V2 | +12/15* | +12/+15 | 2.0 | 2.5 | 300 | 48 | 150 | 16.5-22.5 |
| | V3 | -12/15* | -12/-15 | 2.0 | 2.5 | 300 | 48 | 150 | 16.5-22.5 |
| | V4 | 3.3 | 2.0-3.63 | 7.0 | 9.0 | 100 | 20 | 120 | 3.79-4.95 |
| ZWQ80-5224 | V1 | 5 | 5.0-5.25 | 8.0 | 10.0 | 100 | 20 | 120 | 5.7-7.0 |
| | V2 | +12/15* | +12/+15 | 2.0 | 2.5 | 300 | 48 | 150 | 16.5-22.5 |
| | V3 | -12/15* | -12/-15 | 2.0 | 2.5 | 300 | 48 | 150 | 16.5-22.5 |
| | V4 | 24 | 22.8-25.2 | 1.5 | 2.0 | 400 | 96 | 200 | 27.6-32.4 |
| ZWQ80-5225 | V1 | 5 | 5.0-5.25 | 8.0 | 10.0 | 100 | 20 | 120 | 5.7-7.0 |
| | V2 | +12/15* | +12/+15 | 2.0 | 2.5 | 300 | 48 | 150 | 16.5-22.5 |
| | V3 | -12/15* | -12/-15 | 2.0 | 2.5 | 300 | 48 | 150 | 16.5-22.5 |
| | V4 | 5 | 2.0-5.25 | 7.0 | 9.0 | 100 | 20 | 120 | 5.7-7.0 |
| ZWQ130-5222 | V1 | 5 | 5.0-5.25 | 15.0 | 19.0 | 100 | 20 | 120 | 5.7-7.0 |
| | V2 | +12/15* | +12/+15 | 4.0 | 5.0 | 300 | 48 | 150 | 16.5-22.5 |
| | V3 | -12/15* | -12/-15 | 4.0 | 5.0 | 300 | 48 | 150 | 16.5-22.5 |
| | V4 | 12 | 11.4-12.6 | 4.0 | 5.0 | 300 | 48 | 150 | 11.4-12.6 |
| ZWQ130-5223 | V1 | 5 | 5.0-5.25 | 15.0 | 19.0 | 100 | 20 | 120 | 5.7-7.0 |
| | V2 | +12/15* | +12/+15 | 4.0 | 5.0 | 300 | 48 | 150 | 16.5-22.5 |
| | V3 | -12/15* | -12/-15 | 4.0 | 5.0 | 300 | 48 | 150 | 16.5-22.5 |
| | V4 | 3.3 | 2.0-3.63 | 10.0 | 12.0 | 100 | 20 | 120 | 3.79-4.95 |
| ZWQ130-5224 | V1 | 5 | 5.0-5.25 | 15.0 | 19.0 | 100 | 20 | 120 | 5.7-7.0 |
| | V2 | +12/15* | +12/+15 | 4.0 | 5.0 | 300 | 48 | 150 | 16.5-22.5 |
| | V3 | -12/15* | -12/-15 | 4.0 | 5.0 | 300 | 48 | 150 | 16.5-22.5 |
| | V4 | 24 | 22.8-25.2 | 2.0 | 2.5 | 400 | 96 | 200 | 27.6-32.4 |
| ZWQ130-5225 | V1 | 5 | 5.0-5.25 | 15.0 | 19.0 | 100 | 20 | 120 | 5.7-7.0 |
| | V2 | +12/15* | +12/+15 | 4.0 | 5.0 | 300 | 48 | 150 | 16.5-22.5 |
| | V3 | -12/15* | -12/-15 | 4.0 | 5.0 | 300 | 48 | 150 | 16.5-22.5 |
| | V4 | 5 | 2.0-5.25 | 10.0 | 12.0 | 100 | 20 | 120 | 5.7-7.0 |

* User selectable via connector or PCB. Outputs are floating from V1 & V4. Can be connected in series for 24/30V.

Other Lambda Industrial Products

| | |
|---------|---|
| ZWS/ZWD | 5W to 480W Single and dual output |
| SC | 30W to 120W Single, dual, & triple output |
| NV | 175 to 700W Single and multiple output |
| HWS | 15 to 1500W Single output |

- 4 The peak current draw must not exceed a 10 sec. duration with a duty cycle of 35%.
 5 An overvoltage condition on any output will shut down all outputs, the power supply must be re-set by cycling the AC input.

Options

| Suffix | Description |
|--------|-----------------------|
| blank | No cover or L Bracket |
| /L | L Bracket |
| /A | Cover and L Bracket |

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