



ساخت ایران بخیریم، ایران ساخته خواهد شد.

Features:

- + WIDE DC input / 36-80VDC
- Can use as 2 Stage battery Charger
- + Optional **150%** peak load capacity for 30 sec
- Protection: Short circuit / Overload / Over Voltage
- Protection by internal fuse
- Thermo On/Off control Fan, Charging Fan
- + Optional Relay contact signal output for DC OK
- + Optional Remote ON-Off control
- + Optional **active current sharing up to (1+1)**
- Cooling by free air convection(400W)
- 100% full load burn-in test
- 2 years warranty**

Applications:

- Security systems
- Emergency Lighting system
- Alarm system
- UPS system
- Central monitoring system
- Access systems



1K0-48D series is a 1000W DC/DC Converter with constant current limiting feature in output, allowing the input range between 36VDC and 80VDC. In addition to primary output, This Converter can use as battery charger for UPS application, with the smaller rated current, that need online power application for security access system required.

1K0-48D delivers an efficiency up to 80%; It can operate with air convection under -20°C through +60°C. This series is designed with thorough alarm features, can adding DC OK signaling; Moreover, the relay contact is provided to facilitate users system designs.

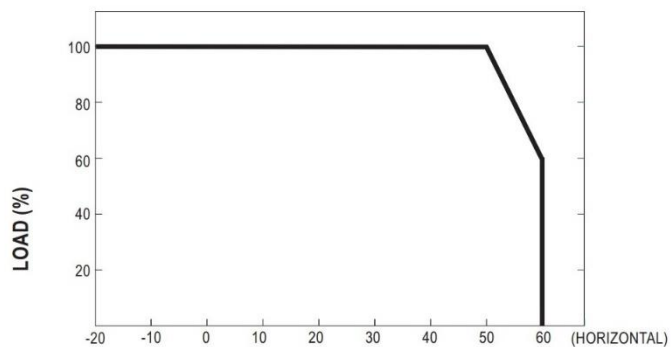
Main MODEL:

- 12VDC: **1K0-48D12**
- 24VDC: **1K0-48D24**
- 48VDC: **1K0-48D48**
- 110VDC: **1K0-48D110**

SPECIFICATION:

| MODEL | | 1K0-48D12 | 1K0-48D24 | 1K0-48D48 | 1K0-48D110 |
|----------------------|--------------------------|--|----------------|----------------|--------------|
| OUTPUT | OUTPUT NUMBER | CH1 | CH1 | CH1 | CH1 |
| | DC VOLTAGE | 12.0V | 24.0V | 48.0V | 110.0V |
| | RATED CURRENT | 60A | 40A | 21A | 10.0A |
| | CURRENT RANGE | 0~60.0A | 0~40.0A | 0~20.0A | 0~10.0A |
| | RATED POWER | 720W | 960W | 960W | 1100W |
| | RIPPLE & NOISE(Note2) | 150mVp-p | 150mVp-p | 150mVp-p | 150mVp-p |
| | VOLTAGE ADJ. RANGE | CH1: 10~13.5V | CH1: 22~27.5V | CH1: 47~59V | CH1: 90~125V |
| | VOLTAGE TOLERANCE(Note2) | ±1.0% | ±1.0% | ±1.0% | ±1.0% |
| | LINE REGULATION | ±0.5% | ±0.5% | ±0.5% | ±0.5% |
| | LOAD REGULATION | ±0.5% | ±0.5% | ±0.5% | ±0.5% |
| | SETUP, RISE TIME Note.4 | 1500ms/48VDC/ 2000ms at full Load | | | |
| | HOLD UP TIME | 40ms/48VDC at full Load | | | |
| INPUT | VOLTAGE RANGE | 36-72VDC | | | |
| | EFFICIENCY (Typ.) | 82% | 84% | 85% | 85% |
| | DC CURRENT (Typ.) | 30A/48VDC | | | |
| PROTECTION | OVERLOAD | 105~125% rated output power Protection type: Constant current Limiting, recovers automatically after fault condition is removed | | | |
| | OVER VOLTAGE | 13.85~16.23VDC | 28.98~32.66VDC | 57.49~60.67VDC | 131~145VDC |
| | OVER TEMP CONTROL | 70°C ± 5°C (TSW1) DETECT ON MAIN HEATSINK Protection type: Shut down o/p voltage, re-power on to recover | | | |
| ALARM FUNCTION | DC OK Note.5 | OPTIONAL Relay contact output, ON: DC Okay; OFF: DC Fail; Max Rating: 30V-1A | | | |
| | Remote On/Off control | OPTIONAL Normal working CN3 is open, PSU is off if CN3 is short | | | |
| ENVIRONMENT | WORKING TEMP. | -20~+65°C REFER TO DERATING CURVE | | | |
| | WORKING HUMIDITY | 20~90% RH non-condensing | | | |
| | STORAGE TEMP., HUMIDITY | -20~+80°C, 10~90% RH | | | |
| | TEMP. COEFFICIENT | ±0.03% /°C (0~45°C) on CH1 Output | | | |
| SAFETY & EMC (NOTE4) | VIBRATION | 10~500Hz 2G 10min./ 1cycle, 60min each along X, Y, Z | | | |
| | SAFETY STANDARD | UL60950-1, TUV EN60950-1, EAC TP TC 004 approved | | | |
| | WITHSTAND VOLTAGE | I/P-O/P: 3KVAC I/P-FG: 2.0KVAC O/P-FG: 0.5KVAC | | | |
| | ISOLATION RESISTANCE | I/P-O/P, I/P-FG, O/P-FG: 100MΩ / 500VDC / 25°C / 70%RH | | | |
| OTHERS | EMC EMISSION | Compliance EN55032 (CISPR32) Class B, EN61000-3-2, -3, EAC TP TC 020 | | | |
| | EMC IMMUNITY | Compliance EN61000-4-2,3,4,5,6,8,11, EN55024, light industry level, criteria A | | | |
| | MTBF | 257K hrs. min. MIL-HDBK-217F (25°C) | | | |
| | DIMENSION | 295*130*75mm | | | |
| NOTE | PACKING | 2.3Kg; 6pcs/14 Kg | | | |
| | | 1. All parameters NOT specially mentioned are measured at 48VDC input, rated load and 25°C of ambient temp 2. Ripple & noise are measured at 20MHz of bandwidth by using 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor 3. Tolerance: includes set up tolerance. Line regulation and load regulation. 4. Length of set up time is measured at first cold start. Tuning ON/OFF the power supply may lead to increase of the set-up time., 5. Please refer to suggested application 6. The power supply is considered a component which will be installed into final equipment. The final equipment must be re-confirmed that it still meets EMC directives. For guidance on how to perform these EMC tests, please refer to EMI testing of components power supplier The ambient temp derating of 3.5°C/1000m with fan less model and 5°C/1000m with fan model for operating altitude higher than 2000m. | | | |

■ Derating Curve



■ Output Derating VS Input Voltage

