



## 50W Triple Output Switching Power Supply

## NET-50 series



### ■ Features :

- Universal AC input / Full range
- Protections: Short circuit / Overload / Over voltage
- Cooling by free air convection
- 100% full load burn-in test
- 2 years warranty



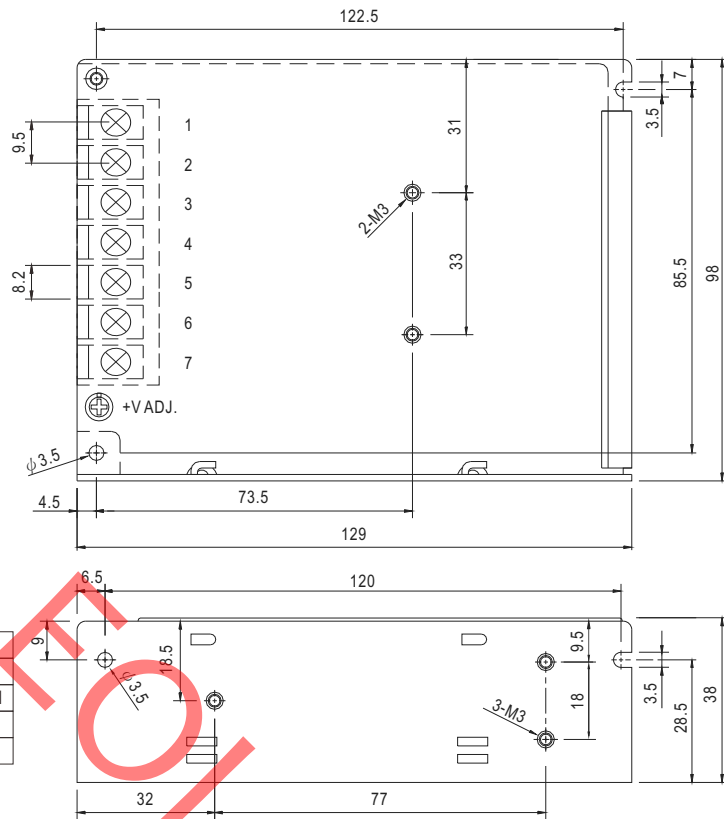
### SPECIFICATION

| MODEL                 |                         | NET-50A                                                                                        |            |            | NET-50B                          |            |            | NET-50C          |          |            | NET-50D          |            |            |
|-----------------------|-------------------------|------------------------------------------------------------------------------------------------|------------|------------|----------------------------------|------------|------------|------------------|----------|------------|------------------|------------|------------|
| OUTPUT                | OUTPUT NUMBER           | CH1                                                                                            | CH2        | CH3        | CH1                              | CH2        | CH3        | CH1              | CH2      | CH3        | CH1              | CH2        | CH3        |
|                       | DC VOLTAGE              | 5V                                                                                             | 12V        | -5V        | 5V                               | 12V        | -12V       | 5V               | 15V      | -15V       | 5V               | 24V        | 12V        |
|                       | RATED CURRENT           | 4A                                                                                             | 2A         | 0.5A       | 4A                               | 2A         | 0.5A       | 4A               | 1.5A     | 0.5A       | 3A               | 1A         | 1A         |
|                       | CURRENT RANGE           | Note.6 0.6 ~ 5A                                                                                | 0.2 ~ 2.5A | 0.1 ~ 0.7A | 0.6 ~ 5A                         | 0.2 ~ 2.5A | 0.1 ~ 0.7A | 0.6 ~ 5A         | 0.1 ~ 2A | 0.1 ~ 0.7A | 0.6 ~ 5A         | 0.1 ~ 1.5A | 0.1 ~ 1.5A |
|                       | RATED POWER             | 46.5W                                                                                          |            |            | 50W                              |            |            | 50W              |          |            | 51W              |            |            |
|                       | RIPPLE & NOISE (max.)   | Note.2 80mVp-p                                                                                 | 120mVp-p   | 120mVp-p   | 80mVp-p                          | 120mVp-p   | 120mVp-p   | 80mVp-p          | 150mVp-p | 150mVp-p   | 80mVp-p          | 200mVp-p   | 120mVp-p   |
|                       | VOLTAGE ADJ. RANGE      | CH1: 4.75 ~ 5.5V                                                                               |            |            | CH1: 4.75 ~ 5.5V                 |            |            | CH1: 4.75 ~ 5.5V |          |            | CH1: 4.75 ~ 5.5V |            |            |
|                       | VOLTAGE TOLERANCE       | Note.3 ±2.0%                                                                                   | ±6.0%      | ±5.0%      | ±2.0%                            | ±6.0%      | ±5.0%      | ±2.0%            | ±8.0%    | ±5.0%      | ±2.0%            | ±8.0%      | ±6.0%      |
|                       | LINE REGULATION         | Note.4 ±0.5%                                                                                   | ±1.0%      | ±1.0%      | ±0.5%                            | ±1.0%      | ±1.0%      | ±0.5%            | ±1.0%    | ±1.0%      | ±0.5%            | ±1.0%      | ±1.0%      |
|                       | LOAD REGULATION         | Note.5 ±1.5%                                                                                   | ±3.0%      | ±1.0%      | ±1.5%                            | ±3.0%      | ±1.0%      | ±1.5%            | ±3.0%    | ±1.0%      | ±1.5%            | ±3.0%      | ±3.0%      |
| INPUT                 | SETUP, RISE TIME        | 500ms, 30ms/230VAC                                                                             |            |            | 1200ms, 30ms/115VAC at full load |            |            |                  |          |            |                  |            |            |
|                       | HOLD UP TIME (Typ.)     | 50ms/230VAC                                                                                    |            |            | 10ms/115VAC at full load         |            |            |                  |          |            |                  |            |            |
|                       | VOLTAGE RANGE           | 85 ~ 264VAC                                                                                    |            |            | 120 ~ 370VDC                     |            |            |                  |          |            |                  |            |            |
|                       | FREQUENCY RANGE         | 47 ~ 63Hz                                                                                      |            |            |                                  |            |            |                  |          |            |                  |            |            |
|                       | EFFICIENCY (Typ.)       | 76%                                                                                            |            |            | 78%                              |            |            | 78%              |          |            | 80%              |            |            |
|                       | AC CURRENT (Typ.)       | 1.1A/115VAC                                                                                    |            |            | 0.65A/230VAC                     |            |            |                  |          |            |                  |            |            |
| PROTECTION            | INRUSH CURRENT (Typ.)   | COLD START 45A                                                                                 |            |            |                                  |            |            |                  |          |            |                  |            |            |
|                       | LEAKAGE CURRENT         | <2mA / 240VAC                                                                                  |            |            |                                  |            |            |                  |          |            |                  |            |            |
|                       | OVERLOAD                | 110 ~ 150% rated output power                                                                  |            |            |                                  |            |            |                  |          |            |                  |            |            |
| ENVIRONMENT           | OVER VOLTAGE            | CH1: 5.75 ~ 6.75V                                                                              |            |            |                                  |            |            |                  |          |            |                  |            |            |
|                       | WORKING TEMP.           | -20 ~ +60°C (Refer to "Derating Curve")                                                        |            |            |                                  |            |            |                  |          |            |                  |            |            |
|                       | WORKING HUMIDITY        | 20 ~ 90% RH non-condensing                                                                     |            |            |                                  |            |            |                  |          |            |                  |            |            |
| SAFETY & EMC (Note 7) | STORAGE TEMP., HUMIDITY | -40 ~ +85°C, 10 ~ 95% RH                                                                       |            |            |                                  |            |            |                  |          |            |                  |            |            |
|                       | TEMP. COEFFICIENT       | ±0.03%/°C (0 ~ 45°C)                                                                           |            |            |                                  |            |            |                  |          |            |                  |            |            |
|                       | VIBRATION               | 10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes                        |            |            |                                  |            |            |                  |          |            |                  |            |            |
| OTHERS                | SAFETY STANDARDS        | UL60950-1, CB(IEC60950-1) approved                                                             |            |            |                                  |            |            |                  |          |            |                  |            |            |
|                       | WITHSTAND VOLTAGE       | I/P-O/P:3KVAC I/P-FG:2KVAC O/P-FG:0.5KVAC                                                      |            |            |                                  |            |            |                  |          |            |                  |            |            |
|                       | ISOLATION RESISTANCE    | I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C/ 70% RH                                      |            |            |                                  |            |            |                  |          |            |                  |            |            |
|                       | EMC EMISSION            | Compliance to EN55022 (CISPR22) Class B, EN61000-3-2,-3                                        |            |            |                                  |            |            |                  |          |            |                  |            |            |
| NOTE                  | EMC IMMUNITY            | Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024, EN61000-6-1, light industry level, criteria A |            |            |                                  |            |            |                  |          |            |                  |            |            |
|                       | MTBF                    | 348.4K hrs min. MIL-HDBK-217F (25°C)                                                           |            |            |                                  |            |            |                  |          |            |                  |            |            |
|                       | DIMENSION               | 129*98*38mm (L*W*H)                                                                            |            |            |                                  |            |            |                  |          |            |                  |            |            |
| PACKING               |                         | 0.44Kg; 30pcs/14.2Kg/0.72CUFT                                                                  |            |            |                                  |            |            |                  |          |            |                  |            |            |
|                       |                         |                                                                                                |            |            |                                  |            |            |                  |          |            |                  |            |            |

1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.
2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uF & 47uF parallel capacitor.
3. Tolerance : includes set up tolerance, line regulation and load regulation.
4. Line regulation is measured from low line to high line at rated load.
5. Load regulation is measured from 20% to 100% rated load, and other output at 60% rated load.
6. Each output can work within current range. But total output power can't exceed rated output power.
7. The power supply is considered a component which will be installed into a 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 component power supplies." (as available on <http://www.meanwell.com>)

### Mechanical Specification

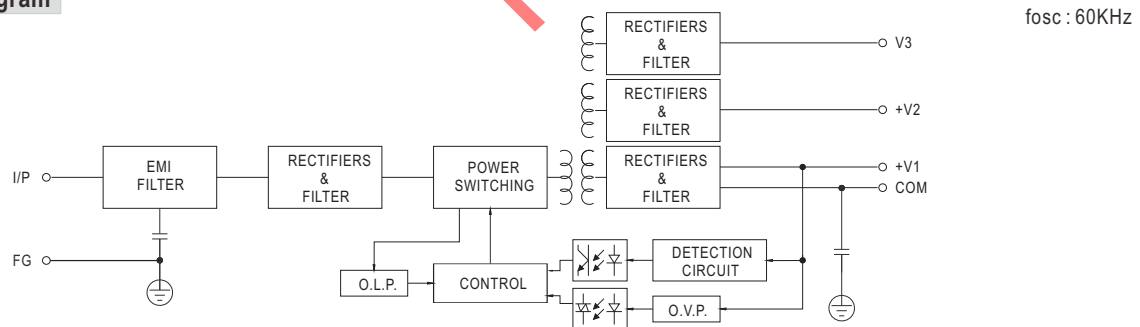
Case No. 903 Unit:mm



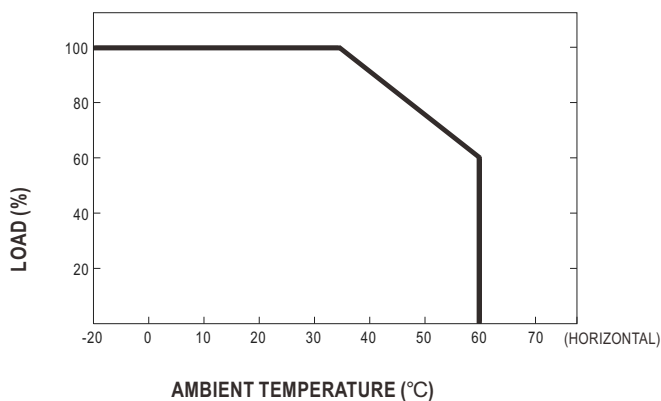
Terminal Pin No. Assignment

| Pin No. | Assignment   | Pin No. | Assignment    |
|---------|--------------|---------|---------------|
| 1       | AC/L         | 5       | DC OUTPUT +V2 |
| 2       | AC/N         | 6       | DC OUTPUT COM |
| 3       | FG           | 7       | DC OUTPUT +V1 |
| 4       | DC OUTPUT V3 |         |               |

### Block Diagram



### Derating Curve



### Output Derating VS Input Voltage

