



## ■ Features :

- ·2:1 wide input range
- Protections: Short circuit / Overload / Over voltage
- ·1500VAC I/O isolation
- \*Built-in EMI filter, low ripple noise
- ·100% full load burn-in test
- \*Fixed switching frequency at 83KHz
- ·Low cost
- ·High reliability
- ·2 years warranty



| SPECIFIC        | ATION                                                                                                                                                | 2 years warranty                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |          |          |            |           |           |            |           |           |  |
|-----------------|------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|----------|------------|-----------|-----------|------------|-----------|-----------|--|
| MODEL           |                                                                                                                                                      | SD-50A-5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | SD-50B-5 | SD-50C-5 | SD-50A-12  | SD-50B-12 | SD-50C-12 | SD-50A-24  | SD-50B-24 | SD-50C-24 |  |
| OUTPUT          | DC VOLTAGE                                                                                                                                           | 5V                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |          |          | 12V        |           |           | 24V        |           |           |  |
|                 | RATED CURRENT                                                                                                                                        | 10A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |          |          | 4.2A       |           |           | 2.1A       |           |           |  |
|                 | CURRENT RANGE                                                                                                                                        | 0 ~ 10A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |          |          | 0 ~ 4.2A   |           |           | 0 ~ 2.1A   |           |           |  |
|                 | RATED POWER                                                                                                                                          | 50W                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |          |          | 50.4W      |           |           | 50.4W      |           |           |  |
|                 | RIPPLE & NOISE (max.) Note.2                                                                                                                         | 100mVp-p                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |          |          | 120mVp-p   |           |           | 150mVp-p   |           |           |  |
|                 | VOLTAGE ADJ. RANGE                                                                                                                                   | 4.5 ~ 5.5VDC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |          |          | 11 ~ 16VDC |           |           | 23 ~ 30VDC |           |           |  |
|                 | VOLTAGE TOLERANCE Note.3                                                                                                                             | ±2.0%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |          |          | ±1.0%      |           |           | ±1.0%      |           |           |  |
|                 | LINE REGULATION                                                                                                                                      | ±0.5%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |          |          | ±0.3%      |           |           | ±0.2%      |           |           |  |
|                 | LOAD REGULATION                                                                                                                                      | ±0.5%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |          |          | ±0.3%      |           |           | ±0.2%      |           |           |  |
|                 | SETUP, RISE, HOLD UP TIME                                                                                                                            | 2.5s, 50ms, at full load                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |          |          |            |           |           |            |           |           |  |
| INPUT           | VOLTAGE RANGE                                                                                                                                        | A:9.2 ~ 18VDC B:19 ~ 36VDC C:36 ~ 72VDC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |          |          |            |           |           |            |           |           |  |
|                 | EFFICIENCY (Typ.)                                                                                                                                    | 70%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 73%      | 76%      | 72%        | 75%       | 78%       | 74%        | 80%       | 83%       |  |
|                 | DC CURRENT                                                                                                                                           | 7A/12V                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 3A/24V   | 1.5A/48V | 7A/12V     | 3A/24V    | 1.5A/48V  | 7A/12V     | 3A/24V    | 1.5A/48V  |  |
| PROTECTION      |                                                                                                                                                      | 105 ~ 150% rated output power                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |          |          |            |           |           |            |           |           |  |
|                 | OVERLOAD                                                                                                                                             | Protection type: Hiccup mode, recovers automatically after fault condition is removed                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |          |          |            |           |           |            |           |           |  |
|                 | OVER VOLTAGE                                                                                                                                         | 5.75 ~ 6.75V/10% load 16.8 ~ 20V/10% load 31.5 ~ 37.5V/10% load                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |          |          |            |           |           |            |           |           |  |
|                 | OVER VOLTAGE                                                                                                                                         | Protection type: Hiccup mode, recovers automatically after fault condition is removed                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |          |          |            |           |           |            |           |           |  |
| ENVIRONMENT     | WORKING TEMP.                                                                                                                                        | -10 ~ +60°C (Refer to "Derating Curve")                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |          |          |            |           |           |            |           |           |  |
|                 | WORKING HUMIDITY                                                                                                                                     | 20 ~ 90% RH non-condensing                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |          |          |            |           |           |            |           |           |  |
|                 | STORAGE TEMP., HUMIDITY                                                                                                                              | -20 ~ +85°C, 10 ~ 95% RH                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |          |          |            |           |           |            |           |           |  |
|                 | TEMP. COEFFICIENT                                                                                                                                    | ±0.03%/°C (0 ~ 50°C)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |          |          |            |           |           |            |           |           |  |
|                 | VIBRATION                                                                                                                                            | 10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |          |          |            |           |           |            |           |           |  |
|                 | SAFETY STANDARDS                                                                                                                                     | Design refer to LVD, EAC TP TC 004, AS/NZS 62368.1 approved                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |          |          |            |           |           |            |           |           |  |
| SAFETY &        | WITHSTAND VOLTAGE                                                                                                                                    | I/P-O/P:1,5KVAC I/P-FG:2KVAC O/P-FG:0,5KVAC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |          |          |            |           |           |            |           |           |  |
| EMC<br>(Note 4) | ISOLATION RESISTANCE                                                                                                                                 | I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C/ 70% RH                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |          |          |            |           |           |            |           |           |  |
|                 | EMC EMISSION                                                                                                                                         | Compliance to EN55032 (CISPR32) Class B, EAC TP TC 020                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |          |          |            |           |           |            |           |           |  |
|                 | EMC IMMUNITY                                                                                                                                         | Compliance to EN61000-4-2,3,4,6,8, EN55024, heavy industry level, criteria A, EAC TP TC 020                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |          |          |            |           |           |            |           |           |  |
| OTHERS          | MTBF                                                                                                                                                 | 365.6K hrs min.(SD-50A) 357.5K hrs min.(SD-50B) 368.5K Hrs min.(SD-50C) MIL-HDBK-217F (25℃)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |          |          |            |           |           |            |           |           |  |
|                 | DIMENSION                                                                                                                                            | 159*97*38mm (L*W*H)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |          |          |            |           |           |            |           |           |  |
|                 | PACKING                                                                                                                                              | 0.48Kg; 24pcs/12.7Kg/0.75CUFT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |          |          |            |           |           |            |           |           |  |
| NOTE            | Ripple & noise are measure     Tolerance : includes set up     The power supply is consid     a 360mm*360mm metal pla     perform these EMC tests, p | All parameters NOT specially mentioned are measured at 12,24,48VDC input, rated load and 25°C of ambient temperature.  Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.  Tolerance: includes set up tolerance, line regulation and load regulation.  The power supply is considered a component which will be installed into a final equipment. All the EMC tests are been executed by mounting the unit on a 360mm*360mm metal plate with 1mm of thickness. 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)  The ambient temperature derating of 3.5°C/1000m with fanless models and of 5°C/1000m with fan models for operating altitude higher than 2000m(6500ft) |          |          |            |           |           |            |           |           |  |



