



## Features:

- 90-132VAC input only
- Fully encapsulated with IP67 level (Note.5)
- Protections:Short circuit/Over load/Over voltage/Over temperature
- Cooling by free air convection
- Pass LPS
- 100% full load burn-in test
- Suitable for LED lighting and moving sign applications
- High reliability/Low cost
- 2 years warranty

## **SPECIFICATION**

## □ LPS IP67 F© (€(LVD)

| MODEL           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | LPL-18-12                                                                                            | LPL-18-24   | LPL-18-36    |
|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|-------------|--------------|
| ОИТРИТ          | DC VOLTAGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 12V                                                                                                  | 24V         | 36V          |
|                 | RATED CURRENT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 1.5A                                                                                                 | 0.75A       | 0.5A         |
|                 | CURRENT RANGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 0 ~ 1.5A                                                                                             | 0 ~ 0.75A   | 0 ~ 0.5A     |
|                 | RATED POWER                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 18W                                                                                                  | 18W         | 18W          |
|                 | RIPPLE & NOISE (max.) Note.2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 120mVp-p                                                                                             | 150mVp-p    | 200mVp-p     |
|                 | VOLTAGE TOLERANCE Note.3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | ±3.0%                                                                                                |             |              |
|                 | LINE REGULATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | ±1.0%                                                                                                |             |              |
|                 | LOAD REGULATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | ±2.0%                                                                                                |             |              |
|                 | SETUP, RISE TIME                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 1500ms, 30ms / 115VAC                                                                                |             |              |
|                 | HOLD UP TIME (Typ.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 20ms/115VAC at full load                                                                             |             |              |
| INPUT           | VOLTAGE RANGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 90 ~ 132VAC 127 ~ 186VDC                                                                             |             |              |
|                 | FREQUENCY RANGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 47 ~ 63Hz                                                                                            |             |              |
|                 | EFFICIENCY(Typ.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 80%                                                                                                  | 83%         | 84%          |
|                 | AC CURRENT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 0.5A/115VAC                                                                                          |             |              |
|                 | INRUSH CURRENT(max.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Cold start 40A/115VAC                                                                                |             |              |
|                 | LEAKAGE CURRENT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 0.25mA / 115VAC                                                                                      |             |              |
| PROTECTION      | OVER CURRENT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Above 105% rated output power                                                                        |             |              |
|                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Protection type: Hiccup mode, recovers automatically after fault condition is removed                |             |              |
|                 | OVER VOLTAGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 13.8~ 16.2V                                                                                          | 27.6~ 32.4V | 41.4 ~ 48.6V |
|                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Protection type : Shut off o/p voltage, clamping by zener diode                                      |             |              |
|                 | OVER TEMPERATURE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Tj 140℃ typically (U1) detect on main control IC                                                     |             |              |
|                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Protection type :Shut down, recovers automatically after temperature goes down                       |             |              |
| ENVIRONMENT     | WORKING TEMP.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | -30 ~ 70°C (Refer to output load derating curve)                                                     |             |              |
|                 | WORKING HUMIDITY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 20 ~ 90% RH non-condensing                                                                           |             |              |
|                 | STORAGE TEMP., HUMIDITY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | -40 ~ +80°C, 10 ~ 95% RH                                                                             |             |              |
|                 | TEMP. COEFFICIENT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | ±0.03%/°C (0~50°C)                                                                                   |             |              |
|                 | VIBRATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes                              |             |              |
| SAFETY &<br>EMC | SAFETY STANDARDS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | IP67 approved; design refer to UL1310 Class 2,TUV EN60950-1, EN61347-2-13, CAN/CSA C22.2 No. 223-M91 |             |              |
|                 | WITHSTAND VOLTAGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | I/P-O/P:3KVAC                                                                                        |             |              |
|                 | ISOLATION RESISTANCE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | I/P-O/P:>100M Ohms / 500VDC / 25°C / 70% RH                                                          |             |              |
|                 | EMI CONDUCTION & RADIATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Compliance to EN55022 (CISPR22) Class B, FCC Part 15                                                 |             |              |
|                 | HARMONIC CURRENT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Compliance to EN61000-3-2 Class A,EN61000-3-3                                                        |             |              |
|                 | EMS IMMUNITY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Compliance to EN61000-4-2,3,4,5,6,8,11; ENV50204, EN55024, light industry level, criteria A          |             |              |
| OTHERS          | MTBF                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 1207.4Khrs min. MIL-HDBK-217F(25°C)                                                                  |             |              |
|                 | DIMENSION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 140*30*22(L*W*H)                                                                                     |             |              |
|                 | PACKING                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 0.175Kg; 70pcs/13.3Kgs/0.71CUFT                                                                      |             |              |
| NOTE            | <ol> <li>All parameters NOT specially mentioned are measured at 115VAC input, rated load and 25°C of ambient temperature.</li> <li>Ripple &amp; noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf &amp; 47uf parallel capacitor.</li> <li>Tolerance : includes set up tolerance, line regulation and load regulation.</li> <li>The power supply is considered as a component that will be operated in combination with final equipment. Since EMC performance will be affected by the complete installation, the final equipment manufacturers must re-qualify EMC Directive on the complete installation again.</li> <li>Suitable for indoor use or outdoor use without direct sunlight exposure.</li> </ol> |                                                                                                      |             |              |



