

## 600-1000W Single Output Low Profile Power Supplies

### Features

- ◆ Low Cost
- ◆ Low Profile
- ◆ Active Power Factor Correction
- ◆ Universal Input (85 - 265VAC)
- ◆ Input Transient Protected IEC61000-4
- ◆ Low Acoustical noise
- ◆ Medical Certifications (SWS1000L)
- ◆ Global safety Approvals
- ◆ Variable speed fan



### Key Market Segments & Applications



### Specifications

| Model                              |       | SWS600L                                                                                                                                     | SWS1000L                |
|------------------------------------|-------|---------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|
| Input Voltage range                | -     | 85 - 265VAC (47 - 63Hz) or 120 - 350VDC*                                                                                                    |                         |
| Inrush Current (115 / 230VAC)      | A     | 20 / 40                                                                                                                                     |                         |
| Power Factor                       | -     | Meets EN61000-3-2 Class A                                                                                                                   |                         |
| Input Current (100/200VAC)         | A     | 7.1 / 3.6 (3.3V: 5 / 2.5)                                                                                                                   | 12 / 6                  |
| Temperature Coefficient            | -     | <0.02%/°C                                                                                                                                   |                         |
| Overcurrent Protection             | -     | >105%, Constant current style                                                                                                               |                         |
| Overvoltage Protection             | V     | 125% -145%                                                                                                                                  |                         |
| Overtemperature Protection         | -     | Yes, cycle AC or Remote On/Off to reset                                                                                                     |                         |
| Hold Up Time (Typ)                 | ms    | 20ms at 115/230VAC                                                                                                                          |                         |
| Leakage Current (max)              | mA    | <0.75mA                                                                                                                                     | 100µA at 115VAC 60Hz(2) |
| Remote Sense                       | -     | Yes                                                                                                                                         |                         |
| Parallel Connection                | -     | Yes                                                                                                                                         |                         |
| Remote On/Off (CNT)                | -     | Yes                                                                                                                                         |                         |
| Voltage Programming (1)            | -     | Yes                                                                                                                                         |                         |
| DC Good & Fan Fail Signal          | -     | Yes, open collector output                                                                                                                  |                         |
| Auxiliary Output                   | -     | 12V 0.1A                                                                                                                                    |                         |
| LED Indicator                      | -     | Green LED = On                                                                                                                              |                         |
| Operating Temperature              | °C    | -40°C start up. -20 to 74°C, derating linearly to 50% load above 50°C                                                                       |                         |
| Storage Temperature                | °C    | -40 to +85°C                                                                                                                                |                         |
| Humidity (non condensing)          | -     | 20 - 90% RH operating, 10 - 95%RH non operating                                                                                             |                         |
| Cooling                            | -     | Variable speed internal fan                                                                                                                 |                         |
| Withstand Voltage(One minute)      | -     | Input to Ground 2kVAC, Input to Output 3kVAC, Input to Ground 2kVAC, Input to Output 4kVAC**, Output to Ground 500VAC, Output to CNT 100VAC |                         |
| Isolation Resistance               | -     | >50M at 25C & 70%RH, Output to Ground 500VDC                                                                                                |                         |
| Vibration (non operating)          | -     | MIL-STD-810F 514.5 Cat. 4,10                                                                                                                |                         |
| Shock                              | -     | MIL-STD-810F 516.5 Procedure I, VI                                                                                                          |                         |
| Immunity                           | -     | EN61000-4-2, -3, -4, -5, -6, -8, -11                                                                                                        |                         |
| Safety Agency Certification        | -     | UL/CSA/EN 60950-1, UL/CSA/IEC/EN 60601-1 & ANSI/AAMI ES60601-1, (1000W only), IEC61010-1 (600W only), EN50178, CE Mark                      |                         |
| Conducted & Radiated EMI           | -     | EN55011 / EN55022-B, FCC Class B                                                                                                            |                         |
| Weight (Typ)                       | g     | 1600                                                                                                                                        | 2300                    |
| Size (WxHxD)                       | in    | 2.4 x 4.72 x 7.48"                                                                                                                          | 2.4 x 5.91 x 9.45"      |
| MTBF - Telcordia SR-332 issue 3*** | hours | 1,444,923                                                                                                                                   | 1,348,293               |
| Warranty                           | yrs   | Three Years                                                                                                                                 |                         |

(1) 1-6V program voltage input to adjust output 20-120% (typical) of nominal. See instruction manual for details & models with this feature.

(2) Worst case: <300µA at 264VAC, 63Hz (Normal Condition); <500µA (Single Fault Condition).

\*Safety certified for AC input only

\*\*2 x MOPPs (3rd edition 60601)

\*\*\* 24V output model, 25°C ambient, full load, 230VAC input

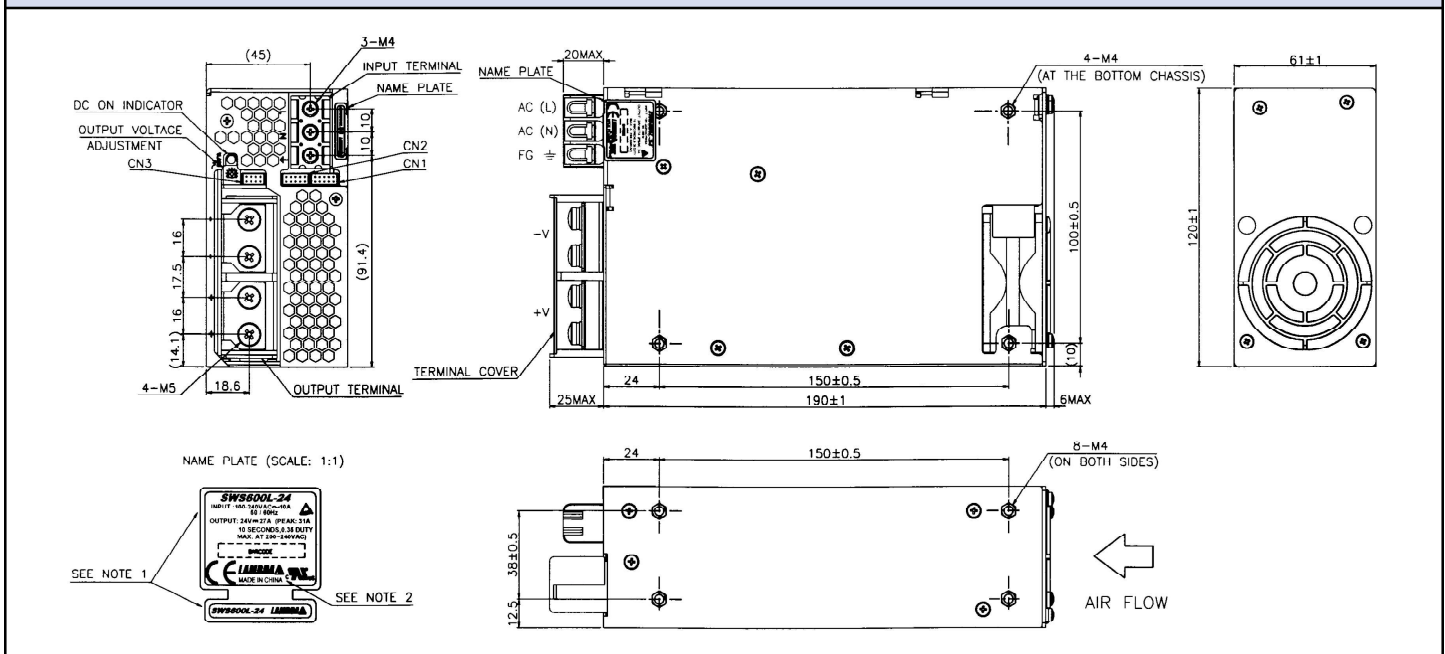
## Model Selector

| Model       | Voltage | Adjust Range | Max Current (A)          | Max Power (W) | Load Reg (mV) | Line Reg (mV) | Ripple Noise (mV) | Efficiency (typ) % <sup>(3)</sup> |
|-------------|---------|--------------|--------------------------|---------------|---------------|---------------|-------------------|-----------------------------------|
| SWS600L-3   | 3.3V    | 2.64 - 3.96V | 120A                     | 396W          | 30            | 20            | 120               | 70 / 72                           |
| SWS1000L-3  | 3.3V    | 2.64 - 3.96V | 200A                     | 660W          | 30            | 20            | 120               | 74 / 76                           |
| SWS600L-5   | 5V      | 4 - 6V       | 120A                     | 600W          | 30            | 20            | 120               | 75 / 77                           |
| SWS1000L-5  | 5V      | 4 - 6V       | 200A                     | 1000W         | 30            | 20            | 120               | 79 / 81                           |
| SWS600L-12  | 12V     | 9.6 - 14.4V  | 53A                      | 636W          | 72            | 48            | 150               | 79 / 82                           |
| SWS1000L-12 | 12V     | 9.6 - 14.4V  | 88A                      | 1056W         | 72            | 48            | 150               | 82 / 84                           |
| SWS600L-15  | 15V     | 12 - 19.5V   | 43A                      | 645W          | 90            | 60            | 150               | 79 / 82                           |
| SWS1000L-15 | 15V     | 12 - 19.5V   | 70A                      | 1050W         | 90            | 60            | 150               | 82 / 84                           |
| SWS600L-24  | 24V     | 19.2 - 28.8V | 27A (31A) <sup>(4)</sup> | 648W(744W)    | 144           | 96            | 150               | 81 / 84                           |
| SWS1000L-24 | 24V     | 19.2 - 28.8V | 44A (51A) <sup>(4)</sup> | 1056W(1224W)  | 144           | 96            | 150               | 84 / 86                           |
| SWS600L-36  | 36V     | 28.8 - 43.2V | 18A                      | 648W          | 216           | 144           | 200               | 82 / 84                           |
| SWS1000L-36 | 36V     | 28.8 - 43.2V | 29A                      | 1044W         | 216           | 144           | 200               | 84 / 86                           |
| SWS600L-48  | 48V     | 38.4 - 56V   | 13A (15A) <sup>(4)</sup> | 624W(720W)    | 288           | 192           | 200               | 82 / 84                           |
| SWS1000L-48 | 48V     | 38.4 - 56V   | 22A (25A) <sup>(4)</sup> | 1056W(1200W)  | 288           | 192           | 200               | 84 / 86                           |
| SWS600L-60  | 60V     | 48 - 66V     | 10A                      | 600W          | 360           | 240           | 200               | 82 / 84                           |
| SWS1000L-60 | 60V     | 48 - 66V     | 17A                      | 1020W         | 360           | 240           | 200               | 84 / 86                           |

Notes: (3) 115 / 230VAC

(4) Peak current and power possible at 170-265VAC input, 10s max, 35% duty cycle

## SWS600L Outline Drawing



## Other Industrial Products

|               |                                            |
|---------------|--------------------------------------------|
| SWS           | 50 - 300W Single Output                    |
| HWS           | 15 - 1800W Single output, high reliability |
| ZWS           | 5 - 240W pcb style single, output          |
| DLP, DPP, DSP | 10 - 480W DIN Rail mount                   |
| LS            | 25 - 200W Single output, low cost          |

For Additional Information, please visit  
[us.tdk-lambda.com/lp/products/sws-series.htm](http://us.tdk-lambda.com/lp/products/sws-series.htm)

