

## 1800W 3ph Industrial Power Supplies

### Features

- ◆ Limited Lifetime Warranty
- ◆ 208VAC Three Phase Input
- ◆ High Efficiency
- ◆ SEMI F47 Compliant
- ◆ Compact Size



### Key Market Segments & Applications



### Specifications

| Model                     |     | HWS1800                                                                                  |
|---------------------------|-----|------------------------------------------------------------------------------------------|
| Input Voltage Range       | -   | 208VAC, Three phase 170 - 265VAC (47 - 63Hz)                                             |
| Input Current (Typical)   | A   | 3.3V: 4.5A, 5V to 15V: 6A, 24 to 60V: 7A                                                 |
| Inrush Current (200VAC)   | A   | 40A                                                                                      |
| Power Factor              | -   | Typically 0.94                                                                           |
| Temperature Coefficient   | -   | <0.02%/°C                                                                                |
| Overcurrent Protection    | -   | >105% of maximum / peak current rating                                                   |
| Overvoltage Protection    | V   | See table on page 2. Cycle input to reset or use remote on/off function                  |
| Hold Up Time (Typ)        | ms  | 3.3V to 15V: 20ms, 24 to 60V: 18ms at 200VAC                                             |
| Leakage Current (max)     | mA  | <2.6mA at 240VAC 60Hz                                                                    |
| Remote Sense              | -   | Yes                                                                                      |
| Indicator                 | -   | Green LED = ON                                                                           |
| Remote on/off             | -   | Yes                                                                                      |
| Parallel operation        | -   | Single wire connection                                                                   |
| DC Good                   | -   | Yes                                                                                      |
| Remote Adjust (PV)        | -   | External voltage adjusts output voltage. See Instruction Manual                          |
| Operating Temperature     | °C  | -10°C to +71°C, see output derating curves, -20°C start up                               |
| Storage Temperature       | °C  | -30 to +85°C                                                                             |
| Humidity (non condensing) | -   | Operating: 10 - 90%RH, Non operating 10 - 95%RH                                          |
| Cooling                   | -   | Internal fan                                                                             |
| Withstand Voltage         | -   | I/P to Grnd 2kVAC, I/P to O/P 3kVAC, O/P to Grnd 500VAC (1), O/P to CNT 100VAC for 1 min |
| Isolation Resistance      | -   | >100M at 25C & 70%RH, Output to Ground 500VDC                                            |
| Vibration (non operating) | -   | 10 - 55Hz (1 minute sweep), 19.6m/s <sup>2</sup> constant X, Y, Z 1 hour                 |
| Shock                     | -   | < 196.1 m/s <sup>2</sup>                                                                 |
| Safety Agency Approvals   | -   | IEC/EN/UL/CSA 60950-1 and 62368-1, EN50178, CE Mark                                      |
| Line Dip                  | -   | Complies with SEMI F47                                                                   |
| Conducted & Radiated EMI  | -   | EN55011 / EN55022-A, FCC-A, VCCI-A                                                       |
| Immunity                  | -   | IEC61000-4-2, -3, -4, -5, -6, -8                                                         |
| Weight (Typ)              | g   | 3800                                                                                     |
| Size (WxHxD)              | in  | 4.98 x 3.23 x 11"                                                                        |
| Warranty                  | yrs | Limited lifetime warranty (See Lambda's terms & conditions)                              |

#### Notes:

(1) HWS1800T-60V: 651VAC

**Figure 1: Dimensions of the HW51000T-24**

The figure illustrates the dimensions of the HW51000T-24 power supply unit in three views: top, front, and side.

**Top View Dimensions:**

- Overall width: 126±1 mm
- Overall height: 200±0.5 mm
- Distance from top edge to output terminal: 62±1 mm
- Distance from top edge to input terminal: 56±0 mm
- Distance from top edge to nameplate: 20 mm
- Distance from top edge to output terminal: 11.2 mm
- Distance from top edge to input terminal: 11.2 mm
- Distance from top edge to nameplate: 11.2 mm
- Distance from top edge to output terminal: 11.2 mm
- Distance from top edge to input terminal: 11.2 mm
- Distance from top edge to nameplate: 11.2 mm

**Front View Dimensions:**

- Overall width: 126±1 mm
- Overall height: 200±0.5 mm
- Distance from top edge to output terminal: 62±1 mm
- Distance from top edge to input terminal: 56±0 mm
- Distance from top edge to nameplate: 20 mm
- Distance from top edge to output terminal: 11.2 mm
- Distance from top edge to input terminal: 11.2 mm
- Distance from top edge to nameplate: 11.2 mm
- Distance from top edge to output terminal: 11.2 mm
- Distance from top edge to input terminal: 11.2 mm
- Distance from top edge to nameplate: 11.2 mm

**Side View Dimensions:**

- Overall width: 126±1 mm
- Overall height: 200±0.5 mm
- Distance from top edge to output terminal: 62±1 mm
- Distance from top edge to input terminal: 56±0 mm
- Distance from top edge to nameplate: 20 mm
- Distance from top edge to output terminal: 11.2 mm
- Distance from top edge to input terminal: 11.2 mm
- Distance from top edge to nameplate: 11.2 mm
- Distance from top edge to output terminal: 11.2 mm
- Distance from top edge to input terminal: 11.2 mm
- Distance from top edge to nameplate: 11.2 mm

**Detail of Nameplate (Bottom Left):**

The nameplate is a rectangular label with the following text:

- HW51000T-24
- INPUT: 20-240VAC 50/60Hz
- OUTPUT: 24V 10A
- 75W
- 100% Duty
- 100% Efficiency

**Detail of Output Terminal (Bottom Right):**

The output terminal is a rectangular terminal block with the following dimensions:

- Overall width: 126±1 mm
- Overall height: 200±0.5 mm
- Distance from top edge to output terminal: 62±1 mm
- Distance from top edge to input terminal: 56±0 mm
- Distance from top edge to nameplate: 20 mm
- Distance from top edge to output terminal: 11.2 mm
- Distance from top edge to input terminal: 11.2 mm
- Distance from top edge to nameplate: 11.2 mm
- Distance from top edge to output terminal: 11.2 mm
- Distance from top edge to input terminal: 11.2 mm
- Distance from top edge to nameplate: 11.2 mm

|             | Voltage | Adjust      | Max   | Peak  | Max   | Peak  | Load | Line  | Ripple |             | Efficiency |
|-------------|---------|-------------|-------|-------|-------|-------|------|-------|--------|-------------|------------|
| Model       | V       | Range       | Curr. | Curr. | Power | Power | Reg  | Reg   | Noise  | Overvoltage | (typ)      |
|             |         | V           | A     | A(2)  | W     | W2    | mV   | mV(3) | mV     | V           | %          |
| HWS1800T-3  | 3.3     | 2.64 - 3.96 | 300   | -     | 990   | -     | 60   | 36    | 120    | 4.12 - 4.62 | 75         |
| HWS1800T-5  | 5       | 4 - 6       | 300   | -     | 1500  | -     | 60   | 36    | 120    | 6.25 - 7.0  | 81         |
| HWS1800T-6  | 6       | 4.8 - 7.2   | 250   | 300   | 1500  | 1800  | 60   | 40    | 150    | 7.5 - 8.4   | 82         |
| HWS1800T-7  | 7.5     | 6 - 9       | 200   | 240   | 1500  | 1800  | 60   | 40    | 150    | 9.37 - 10.5 | 84         |
| HWS1800T-12 | 12      | 9.6 - 14.4  | 125   | 150   | 1500  | 1800  | 72   | 48    | 200    | 15 - 17.4   | 84         |
| HWS1800T-15 | 15      | 12 - 18     | 100   | 120   | 1500  | 1800  | 90   | 60    | 200    | 18.7 - 21.8 | 84         |
| HWS1800T-24 | 24      | 19.2 - 28.8 | 75    | 105   | 1800  | 2520  | 144  | 96    | 250    | 30 - 34.8   | 88         |
| HWS1800T-36 | 36      | 28.8 - 43.2 | 50    | 70    | 1800  | 2520  | 216  | 144   | 250    | 45 - 49.7   | 88         |
| HWS1800T-48 | 48      | 38.4 - 52.8 | 37.5  | 52.5  | 1800  | 2520  | 288  | 192   | 300    | 55.2 - 60   | 90         |
| HWS1800T-60 | 60      | 48 - 66     | 30    | 42    | 1800  | 2520  | 360  | 240   | 400    | 69 - 75     | 90         |

(3) 180 - 265VAC

The graph, titled "OUTPUT DERATING CURVE", plots Load (W) on the y-axis (0 to 2000) against ambient temperature  $T_a$  (°C) on the x-axis (-10 to 80). Four curves are shown for different input voltages: 3V (dashed line), 5V (dash-dot line), 6V-15V (dotted line), and 24V-60V (solid line). The 3V and 5V curves are constant at 1500W until 40°C, then derate. The 6V-15V curve is constant at 1000W until 40°C, then derates. The 24V-60V curve is constant at 1000W until 40°C, then derates more steeply, reaching 0W at 70°C.

| $T_a$ (°C) | 3V (W) | 5V (W) | 6V-15V (W) | 24V-60V (W) |
|------------|--------|--------|------------|-------------|
| -10        | 1500   | 1500   | 1000       | 1000        |
| 0          | 1500   | 1500   | 1000       | 1000        |
| 10         | 1500   | 1500   | 1000       | 1000        |
| 20         | 1500   | 1500   | 1000       | 1000        |
| 30         | 1500   | 1500   | 1000       | 1000        |
| 40         | 1500   | 1500   | 1000       | 1000        |
| 50         | 1600   | 1400   | 1100       | 800         |
| 60         | 1300   | 1100   | 800        | 400         |
| 70         | 900    | 700    | 500        | 0           |

|                |                                          |
|----------------|------------------------------------------|
| HWS            | 15W to 1500W single output, single phase |
| LZSA           | 500W to 1500W single output              |
| SWS            | 50W to 1000W, low cost                   |
| DPP, DLP & DSP | 10W to 960W DIN Rail mount               |



## Данный компонент на территории Российской Федерации

**Вы можете приобрести в компании MosChip.**

Для оперативного оформления запроса Вам необходимо перейти по данной ссылке:

<http://moschip.ru/get-element>

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

### Офис по работе с юридическими лицами:

105318, г.Москва, ул.Щербаковская д.3, офис 1107, 1118, ДЦ «Щербаковский»

Телефон: +7 495 668-12-70 (многоканальный)

Факс: +7 495 668-12-70 (доб.304)

E-mail: [info@moschip.ru](mailto:info@moschip.ru)

Skype отдела продаж:

moschip.ru

moschip.ru\_4

moschip.ru\_6

moschip.ru\_9