



SMART SERIES  
POWER SUPPLY

SMART 600W



# SMART 600W

## DATASHEET



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SMART 600W

5 YEAR  
Warranty

All - Flat  
Black Cables

Continuous  
Power

Ultra Quiet  
120mm Fan

80  
PLUS

intel  
C6/C7 States  
Ready



## ❖ Features

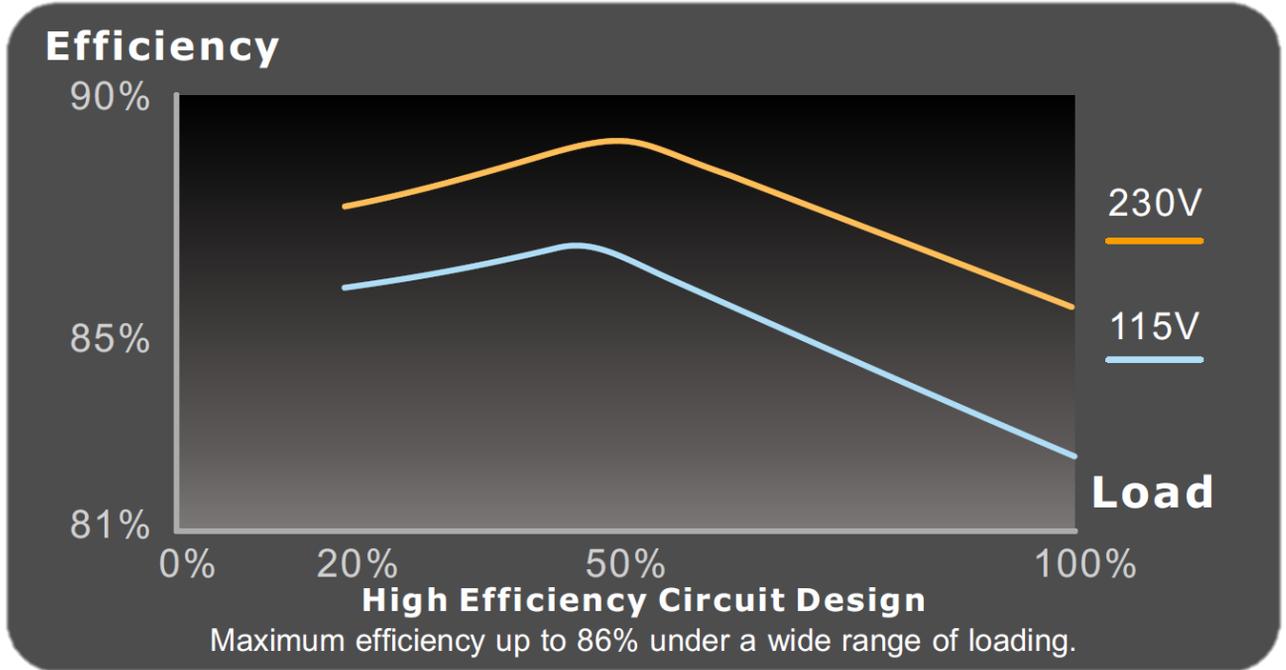
- DC-DC design for more precise electrical output.
- Low-profile black flat cables.
- Guaranteed to deliver 600W continuous output @ 40°C operating environment.
- 80 PLUS® certified up to 80% efficiency.
- Ultra-quiet 120mm cooling fan delivers excellent airflow at an exceptionally low noise level.
- 5 year warranty.
- High amperage single +12V rail design.
- Intel C6/C7 states ready
- Dimensions: 150mm(W)×86mm(H)×140mm(D).
- Safety approvals: FCC/ICES/CB/cTUVus certifications.



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## ❖ ECO Design



### 80 PLUS® Certified Efficiency

High efficiency circuit design.

### Supports Energy Star 5.0\* energy standard

Smart series is suitable for use in Energy Star-compatible computers.

### Supports Intel Deep Power Down C6 Status

Helps your PC system operate more power efficiently.

### Corresponds to the EU directives on WEEE and RoHS

Thermaltake considers its full impact on the environment during manufacturing and maintains green facilities to ensure Smart series meets WEEE & RoHS requirements.

❖ **Total Output Connector**

|                      |   |   |  |  |  |
|----------------------|---|---|--|--|--|
| Connector<br>Wattage | <br>Main Power Connector (20+4Pin) | <br>ATX 12V (4+4Pin) | <br>SATA (5Pin) | <br>PCI-E (6+2Pin) | <br>Peripheral (4Pin) |
|                      | 600W  | 1   | 1  | 4  | 2  |

| Wattage | Connector Type      | Connector Quantity & Cable Length  |
|---------|---------------------|--|
| 600W    | Main Power (24pin)  | 1 x 24pin Main connector (600mm)   |
|         | ATX 12V (4+4pin)    | 1 x ATX 12V 4+4pin connector (650mm)   |
|         | PCI-E (6+2pin)      | 2 x PCI-E 6+2pin connectors (500mm + 150mm)                                      |
|         | SATA                | 4 x SATA connectors (500mm + 150mm + 150mm + 150mm)                              |
|         | Peripheral & Floppy | 4 x Peripheral connectors + 1 x Floppy connector (500mm + 150mm + 150mm + 150mm) |



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## ❖ Output Specification

|                    |   |     |        |      |       |
|--------------------|---|-----|--------|------|-------|
| AC Input           | Input Voltage: 100 - 240V~<br>Input Current: 12A - 5A<br>Frequency: 50Hz / 60Hz |     |        |      |       |
| DC Output          | +3.3V   | +5V | +12V   | -12V | +5VSB |
| Max Output Current | 16A   | 16A | 50.00A | 0.3A | 3A    |
| Max Output Power   | 105W  |     | 600W   | 3.6W | 15W   |
| Total Power        | 600W  |     |        |      |       |

| GENERAL INFO          |                                |
|-----------------------|--------------------------------|
| P/N                   | PS-SPD-0600NPCWxx-1            |
| Model                 | SPD-600AH2NLW-D                |
| Max. Output Capacity  | 600W                           |
| Color                 | Black                          |
| Dimension (W/H/D)     | 150mm(W) x 86mm(H) x 140mm(D)  |
| PFC                   | Active PFC                     |
| Power Good Signal     | 100-150 msec                   |
| Hold-Up Time          | > 12msec at full load          |
| ENVIRONMENTAL         |                                |
| Operating Temperature | 5°C to + 40°C                  |
| Operating Humidity    | 20% to 85%, non-condensing     |
| Storage Temperature   | -40°C to + 55°C                |
| Storage Humidity      | 10% to 95%, non-condensing     |
| Cooling System        | 12cm sleeve fan                |
| MISCELLANEOUS         |                                |
| Efficiency            | Meet 80 PLUS® at 115Vac input. |
| MTBF                  | 100,000 hrs minimum            |
| Safety Approval       | FCC/ICES/CB/cTUVus             |
| PCI-E CONNECTOR       |                                |
| PCI-E 6+2pin          | 2                              |



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❖ **Total Protection**

| Voltage Source           | Over Voltage Protection                      |
|--------------------------|--|
|                          | Protection Point                             |
| +3.3V                    | 3.76~4.3V                                    |
| +5V                      | 5.75~7.0V                                    |
| +12V                     | 13.4~15.6V                                   |
| Over Power Protection    | Protection at 120%~150% over peak load.      |
| Short Circuit Protection | Activated when any DC rails short circuited. |