



**SMART SERIES  
POWER SUPPLY**

**SMART BX1 550W**



**SMART BX1 550W**

**DATASHEET**



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POWER SUPPLY**

**SMART BX1 550W**



## ❖ Features

- ATX 12V V2.3 enables most reliable and robust power delivery.
- Guaranteed to deliver 550W continuous output @ 40°C operating environment.
- High-Quality components and single +12V rails design enable non-stop usage with stable and reliable performance.
- 80 PLUS® Bronze certified up to 88% efficiency.
- High quality Japanese main capacitor.
- <80mV @ +12V, <40mV @ +3.3V & +5V low ripple noise design.
- Ultra-quiet 120mm cooling fan delivers excellent airflow at an exceptionally low noise level.
- SMART BX1 series is prepared for the new Intel processors Kaby Lake to achieve maximum energy savings.
- Heavy-duty protection circuitry of Over Voltage, Over Power and Short-Circuit protections.
- Dimension: 150mm(W)x86mm(H)x140mm(D).
- High reliability: MTBF>100,000 hours.
- Safety / EMI Approvals: CE/CB/TUV/ UL/ FCC/ BSMI.

## ❖ Highlight Features



### High Quality Japanese Main Capacitor

Improves the durability and offers the highest stability and reliability.



### High Amperage Single +12V Rail

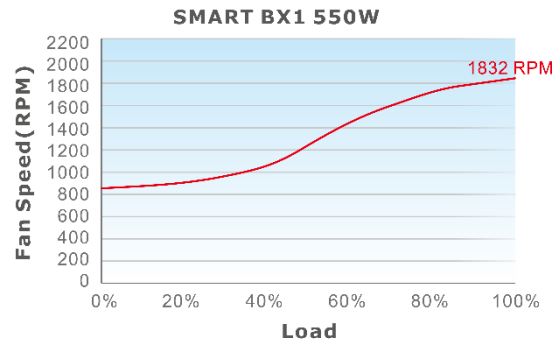
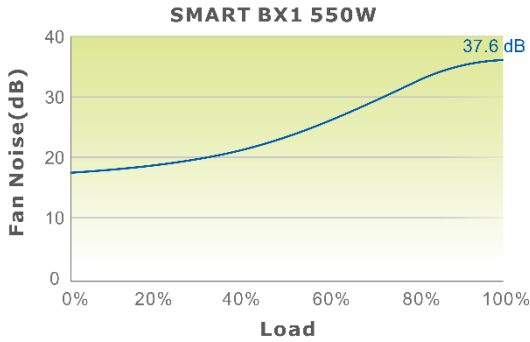
Powerful single +12V rail for the best compatibility.

## ❖ Packing





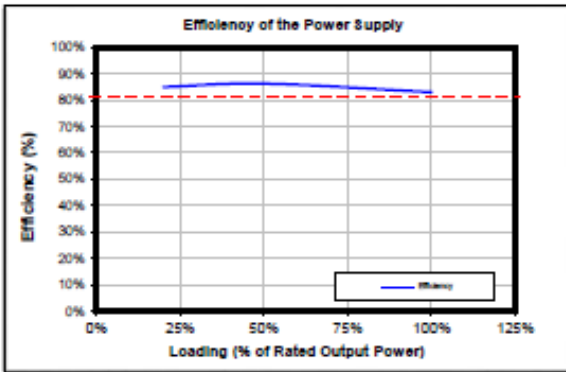
❖ **Fan Curve**



**Ultra Quiet Hydraulic Bearing Fan**

Ultra quiet 120mm cooling fan delivers excellent airflow.

❖ **ECO Design**



**80 PLUS® Bronze Certified Efficiency**

Deliver top end efficiency under real world load conditions.

**Supports Energy Star 5.0\* energy standard**

SMART BX1 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 BX1 series meets WEEE & RoHS requirements.

## ❖ Output Specification

AC Input	Input Voltage: 100V - 240Vac Input Current: 10A max. Frequency: 50Hz - 60Hz				
DC Output	+3.3V	+5V	+12V	-12V	+5VSB
Max Output Current	21A	16A	38A	0.5A	2.5A
Max Output Power	105W		456W	6.0W	12.5W
Total Power	550W				

## ❖ Total Output Connector

Connector						
Wattage	Main Power Connector (20+4Pin)	ATX 12V (4+4Pin)	SATA (4Pin)	PCI-E (6+2Pin)	Peripheral (4Pin)	FDD Adapter
550W	1	1	6	2	4	1

Wattage	Connector Type	Connector Quantity & Cable Length
550W	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	3 x SATA connectors (500mm + 150mm + 150mm) 3 x SATA connectors (500mm + 150mm + 150mm)
	Peripheral & FDD	4 x Peripheral connectors + 1 x FDD connector (500mm + 150mm + 150mm + 150mm + 150mm)



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# SMART BX1 550W

GENERAL INFO	
P/N	PS-SPD-0550NNFABx-1
Model	SPD-550AH2NKB
Type	ATX 12V v2.3 and EPS v2.92
Max. Output Capacity	550W
Peak Output Capacity	660W
Color	Black
Dimension (W/H/D)	150mm(W) x 86mm(H) x 140mm(D)
PFC	Active PFC
Power Good Signal	100-500 msec
Hold-Up Time	> 16msec at 70% of full load
AC INPUT	
Input Current	10A max.
Input Frequency Range	50Hz - 60Hz
Input Voltage	100V – 240V~
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 Hydraulic bearing fan
MISCELLANEOUS	
Efficiency	Meet 80 PLUS® Bronze at 115Vac input.
MTBF	100,000 hrs minimum
Safety Approval	CE/CB/TUV/ UL/ FCC/ BSMI
PCI-E CONNECTOR	
PCI-E 6+2pin	2



❖ **Total Protection**

Voltage Source	Over Voltage Protection
	Protection Point
+3.3V	3.76V~4.3V
+5V	5.74V~7.0V
+12V	13.4V~15.6V
Over Power Protection	Protection at 110%~170% over peak load.
Short Circuit Protection	Activated when any DC rails short circuited.