BIFENIX

BFG GOLD ATX3.1

1000W/ 850W/ 750W

BFG GOLD

650W-550W

80 PLUS GOLD

FLUID DYNAMIC BEARING FAN (FDB)

EFFICIENCY UP TO 90%

100% JAPANESE CAPACITOR

FULL BRIDGE

LLC CIRCUIT

DC TO DC

ATX 3.1 READY

PCIe 5.1 READY

1000/850/750W ONLY

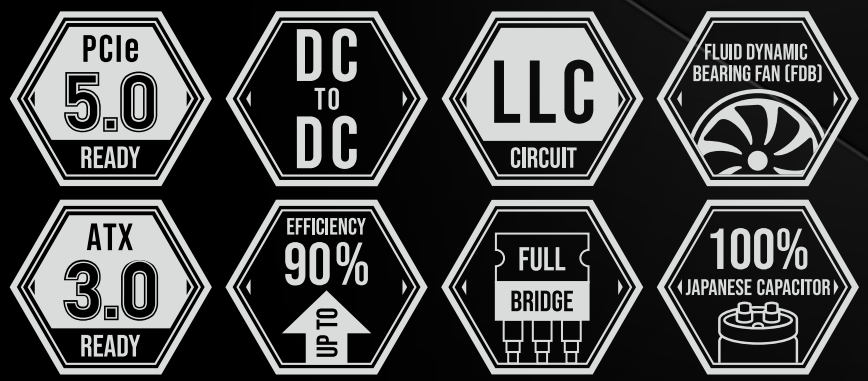
General Information

BFG GOLD ATX3.1/ BFG GOLD

The brand new **BitFenix Gold 750W** and **850W** and **1000W** ATX3.1 and PCIe Gen 5 certified power supplies bring smooth and stable power output in a compact form factor along with a slew of safety, efficiency and convenience features. Certified with an 80+ gold standard and with an efficiency level of over 90% under typical loading, these new PSUs are not only high-quality but also extremely efficient. Thanks to purposefully design circuitry, the output power is extremely smooth extending your PC's lifetime. The custom tuned low noise fan keeps your power supply whisper quiet throughout your gaming session. A BitFenix Gold 550W/650W version is also available with same feature except for the ATX3.1 and PCIe Gen 5 support.

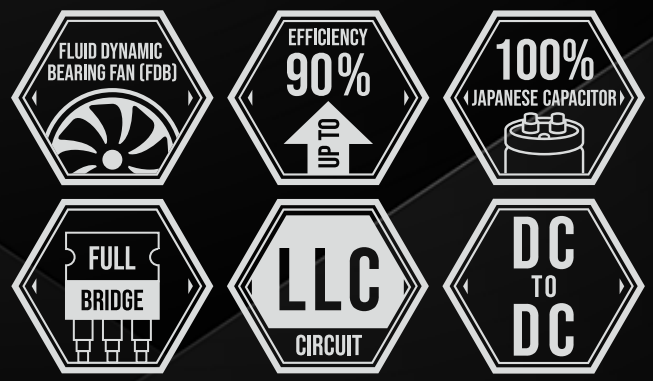
80 PLUS GOLD

Model Name:
BGA1000W ,BGA850W, BGA750W
Max Wattage:
1000W, 850W, 750W
Type: ATX 3.1/ EPS12V 2.92
PFC: Active PFC
Efficiency: 80Plus Gold Certified



80 PLUS GOLD

Model Name:
BGA650W, BGA550W
Max Wattage:
650W,550W
Type: ATX12V 2.4/ EPS12V 2.92
PFC: Active PFC
Efficiency: 80Plus Gold Certified



Features

PCIe Gen 5.1 Support for NV 40+ Series GPUs. (BGA1000W ,BGA850W, BGA750W)

Please use the correct cable according to the requirements of the graphics card wattage, and must be correctly installed on the graphics card interface.

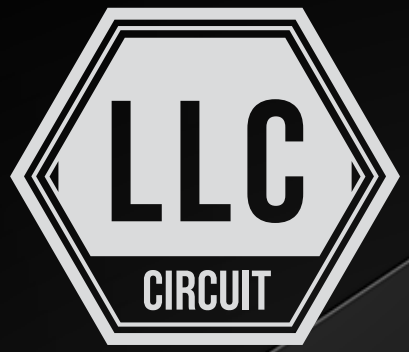
ATX 3.1 Support. (BGA1000W, BGA850W, BGA750W)

Full-bridge Resonant Converter Design Offer Highly Efficient and Low Noise Output Cost Effectively.

Due to the unique design, the Full-Bridge Resonant Converters can optimally utilize even 100V input to efficiently output high power levels at very low voltage and current ripple. They can operate extremely efficiently in high load scenarios. This leads to a budget friendly, efficient, high power PSUs with high reliability and component life at the cost of slightly lower efficiency at low load levels.

Features

Guaranteed Continuous Power Delivery with 24h/7d Operation.



LLC Resonant Topology Lowers Power Losses and Boosts Efficiency During AC-DC Voltage Switching.

PF value up to 0.96
>=0.96 at 115Vac/60 & 230Vac 50Hz (Full load)

Up To 90% Efficiency @ Typical Loading.

Advance Voltage Switching Circuit from +12V to Minor-rail to Provide the Best Stability and Output Quality.

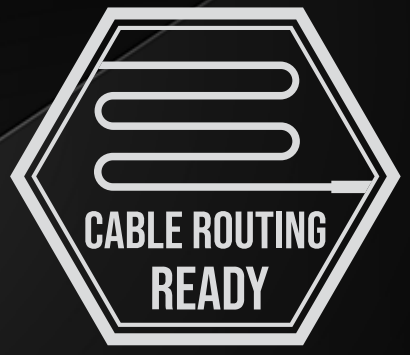
Supports Industrial Servers/ Workstations with Dual CPU 4+4Pin.

High Power +12V Output Allows for any High-end Graphic Cards under all Power Requirements.

Features

120mm Fluid Dynamic Bearing Fan Optimized for Silence and Long Service Life.

Smart Fan Control Curve.



18AWG Long Output Cables: 650mm for CPU & PCI-E 2.0.

Ensure Tight DC Voltage Regulation and Extended Component Life.

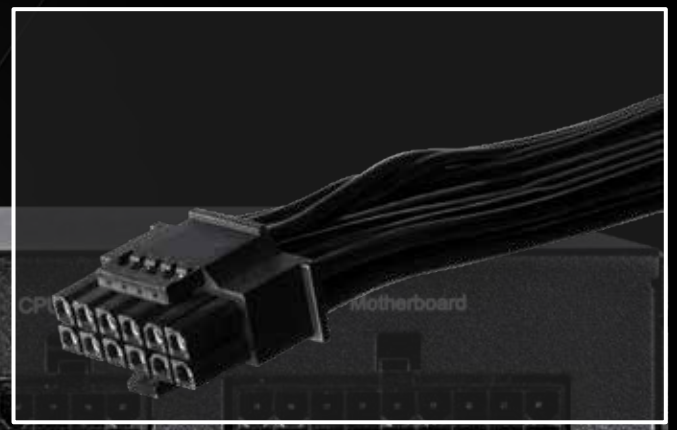
Over-Current Protection (OCP)
Under Voltage Protection (UVP)
Short Circuit Protection (SCP)
No Load Operation (NLO)

Over Voltage Protection (OVP)
Over Power Protection (OPP)
Over Temperature Protection (OTP)
Surge & Inrush Protection (SIP)

6+2 Pin PCI-E 2.0 Connectors for Multi-GPU Support.

Complies with the Latest European Environmental Regulations.

ATX 3.0 Ready / PCI-E 5.0 Ready
(**12V-2x6 cable**)



PCIe 5.1 READY

The PCIe Gen 5 12+4Pin Modular Cable

The PCIe Gen 5 12+4Pin modular cable allows the power supply to support PCIe Gen 5 advanced graphics cards.
This cable conforms with the UL specifications for 16AWG - UL 1007 cable standard offering excellent conductivity and heat resistance. The terminals of the connectors are made of a high-quality copper alloy, which can carry a current of up to 9.2A per pin with minimum resistance resulting in excellent conductivity.
Our connectors are adopting the 4 Spring design as suggested by Intel. According to Intel, the advantage of the 4 SRPING design is that it is more reliable, durable, and it can provide a more secure connection compared to the traditional design.

GeForce RTX 4080

AMD Radeon™ RX 7900 XT

GEN 5 Test

ATX 3.0 Ready / PCI-E 5.0 Ready
(**12V-2x6 cable**)

Test Condition

Table 3-1: PCIe* AIC and PSU Power Budget used for Peak Power Excursion

Power Excursion % of PSU Rated Size PSU ≤ 450 Watts & PSUs without 12VHPWR Connector	Power Excursion % of PSU Rated Size PSU > 450 Watts & 12VHPWR Connector present	Time for Power Excursion (T_E)	Testing Duty Cycle
150%	200%	100 µs	5%
145%	180%	1 ms	8%
135%	160%	10 ms	12.5%
110%	120%	100 ms	25%
100%	100%	Infinite	--

1. AC Input: 115Vac/60Hz, 230Vac/50Hz
2. Load slew rate is 5A/uS
3. Capacitive Load: 12V1/3,300uF, 12V2/3,300uF.

Voltage Regulation	12.6V~11.2V

Test Result: PASS AMB: 25°C

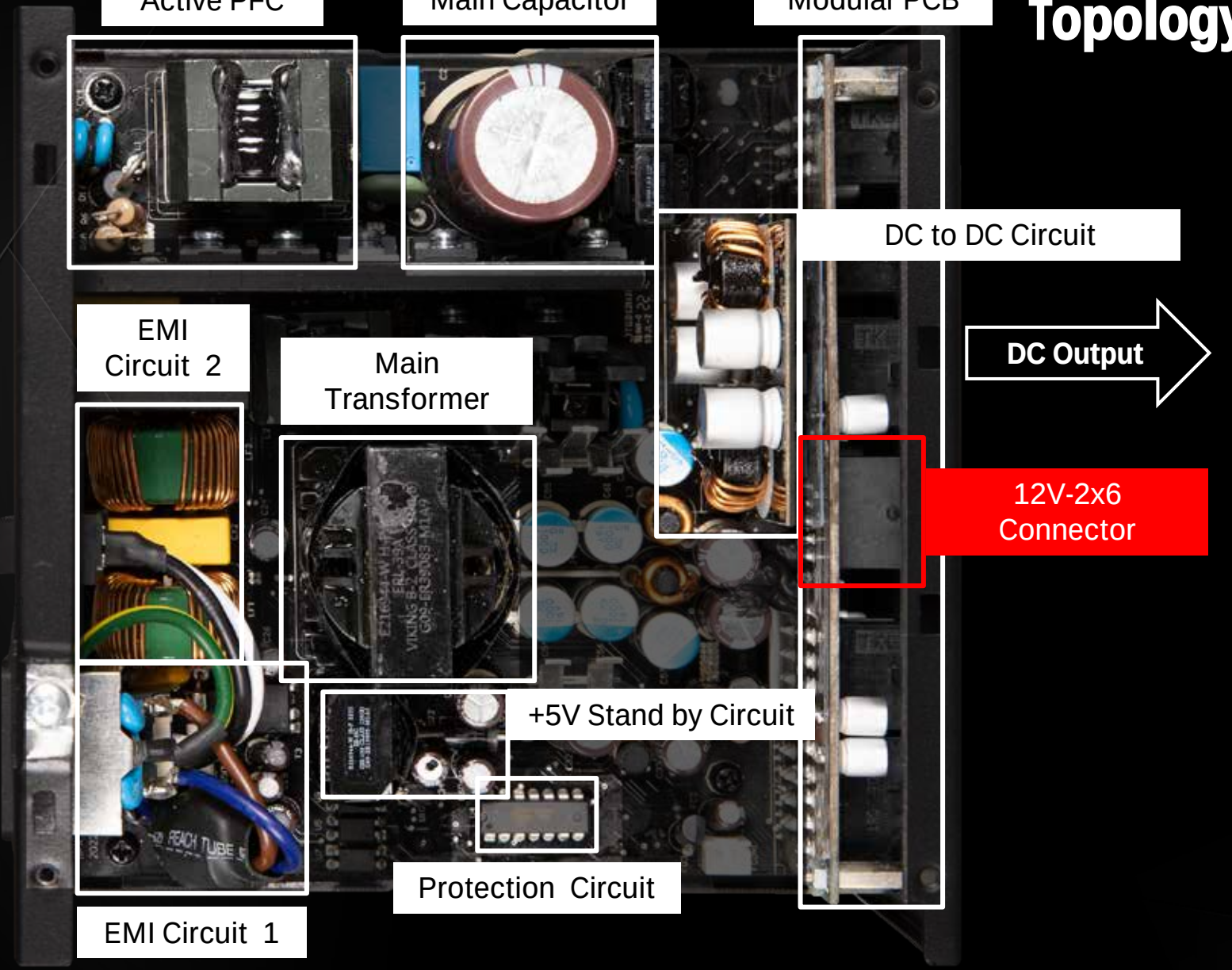
Item	Max(V)	Min(V)
PCIE GEN5_200%L_ 115Vac/60Hz@CH1: Current; CH2: 12V3; CH4: POK	12.560	11.390
PCIE GEN5_200%L_ 230Vac/50Hz@CH1: Current; CH2: 12V3; CH4: POK	12.560	11.390
PCIE GEN5_180%L_ 115Vac/60Hz@CH1: Current; CH2: 12V3; CH4: POK	12.480	11.560
PCIE GEN5_180%L_ 230Vac/50Hz@CH1: Current; CH2: 12V3; CH4: POK	12.550	11.550
PCIE GEN5_160%L_ 115Vac/60Hz@CH1: Current; CH2: 12V3; CH4: POK	12.400	11.680
PCIE GEN5_160%L_ 230Vac/50Hz@CH1: Current; CH2: 12V3; CH4: POK	12.320	11.730
PCIE GEN5_120%L_ 115Vac/60Hz@CH1: Current; CH2: 12V3; CH4: POK	12.100	11.980
PCIE GEN5_120%L_ 230Vac/50Hz@CH1: Current; CH2: 12V3; CH4: POK	12.100	11.980

PCI-E CEM5 100% to 200% for Power Excursion

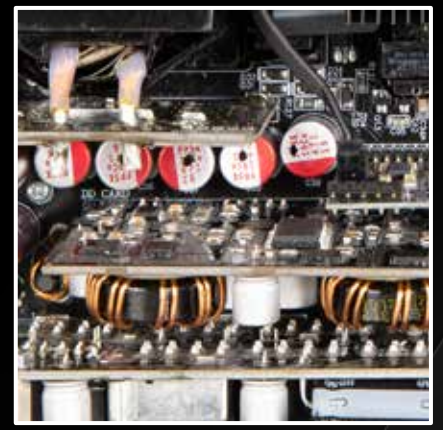
Power Excursion % of PSU	Time for Power Excursion (TE)	Time Constant(TC)	Duty Cycle
100%	Infinite	- - -	- - -
120%	100ms	100ms	50%
160%	10ms	30ms	25%
180%	1ms	4ms	20%
200%	100us	900us	10%

Tested under the most rigorous conditions, the BitFenix **750W** & **850W** & **1000W** has passed all the PCIe Gen 5 standards with flying colors. They support up to 2x power excursions for a duration of over 100µs guaranteeing stable power outputs for even the latest top tier graphic cards.
The 12VHPWR connector is also tested for reliability and low resistance to offer peace of mind.

Topology | 750W/850W/1000W



All Japanese Capacitor

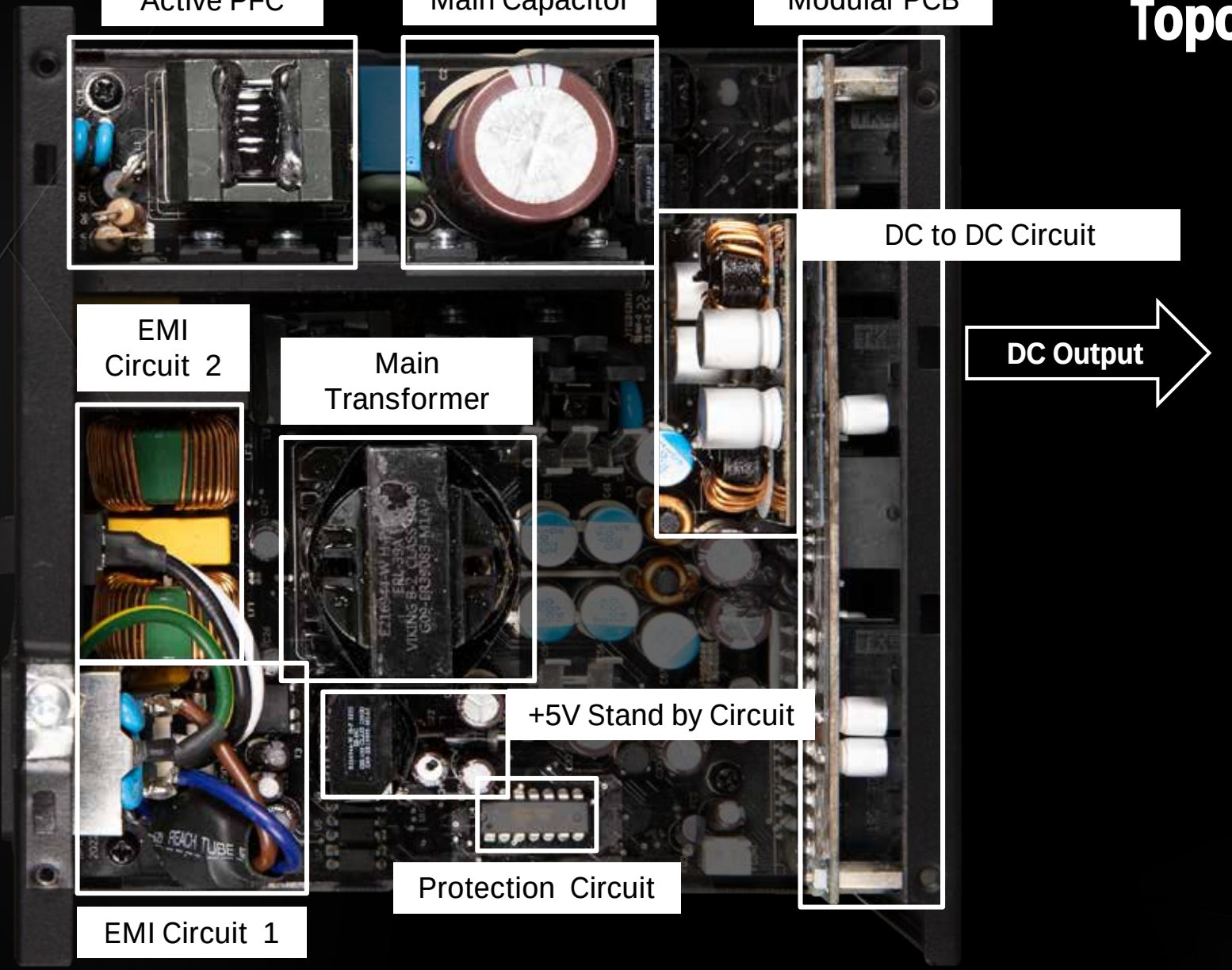


Solid Capacitor

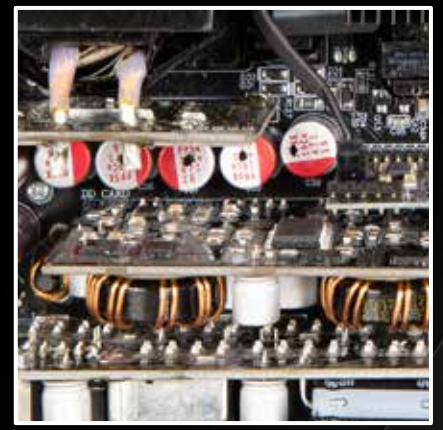
750W-1000W

Depending on the wattage of different PSUs, the main capacitor and related hardware will be different.

Topology | 550W/650W



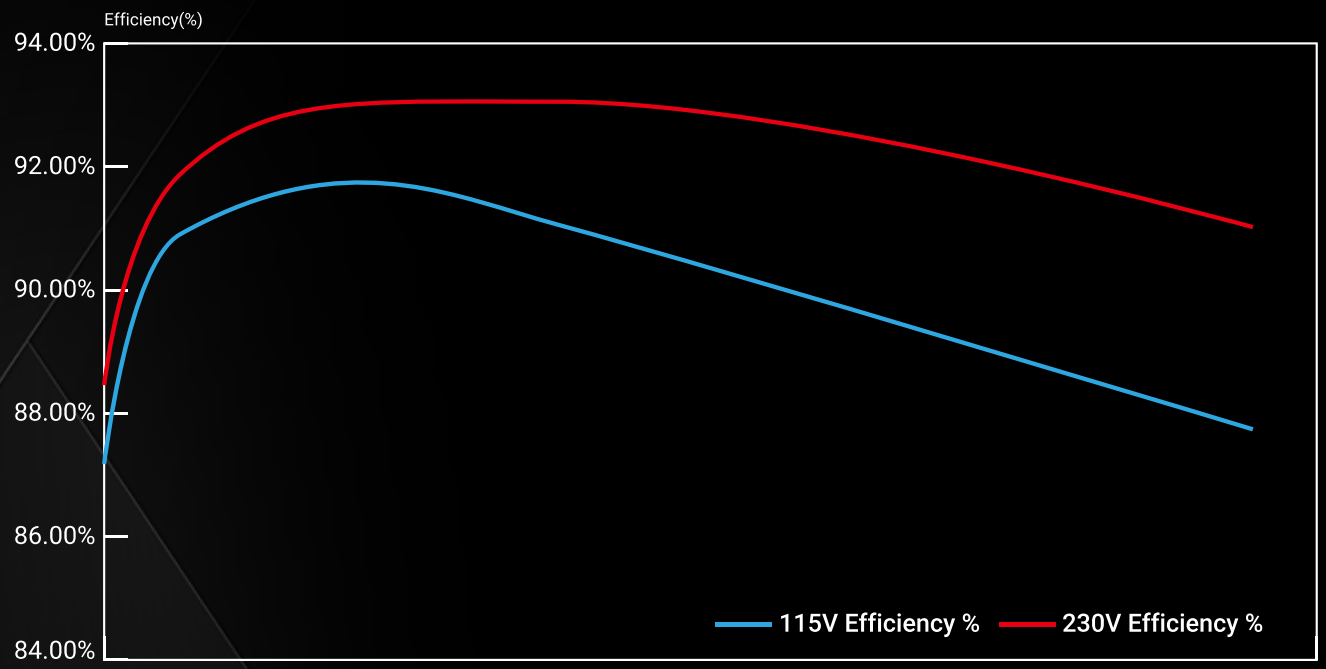
All Japanese Capacitor



Solid Capacitor

550W-650W

Depending on the wattage of different PSUs, the main capacitor and related hardware will be different.



Loading	+12V	+5V	+3.3V	-12V	+5Vsb	Required minimum efficiency
20%	12.33A	2.32A	2.32A	0.05A	0.44A	87%
50%	30.82A	5.79A	5.79A	0.13A	1.09A	90%
100%	61.64A	11.59A	11.59A	0.26A	2.19A	87%

HIGH EFFICIENCY

The 87+ high efficiency circuit guarantees both energy and money savings for the end user with the added benefits of 80% less heat output and stable power output. This translates to over 30% less power consumption in comparison to standard PSUs.
*87+ (0% to 100% load)/ 90+ (40% to 70% load)
100-240V Full range design offer worldwide compatibility, and with high efficiency LLC, Active PFC, DC to DC circuits not only benefits you but also planet Earth with higher energy savings.

Efficiency

Model		BFG GOLD 850W (GPX850S)							
AC Input Voltage & Temperature		115Vac @ 25°C							
Total Wattage		850W							
Combine Wattage		846W	110W		3.6W	12.5W			
Rail		+12V	+5V	+3.3V	-12V	+5VSB			
Max Current		70.5A	20A	20A	0.3A	2.5A	DC Power in Total(W)	AC Power Readingl (W)	Efficiency(%)
20% Loading	Current(A)	12.33	2.32	2.32	0.05	0.44	170.6	187.57	90.95%
	Voltage(V)	12.03	5.04	3.34	-12.43	5.05			
50% Loading	Current(A)	30.82	5.79	5.79	0.13	1.09	426.21	467.55	91.16%
	Voltage(V)	12.03	5.03	3.3	-12.67	5.02			
100% Loading	Current(A)	61.64	11.59	11.59	0.26	2.19	851.52	971.43	87.66%
	Voltage(V)	12.02	5.01	3.3	-12.75	4.99			

Model		BFG GOLD 750W (GPX750S)							
AC Input Voltage & Temperature		115Vac @ 25°C							
Total Wattage		750W							
Combine Wattage		744W	110W		3.6W	12.5W			
Rail		+12V	+5V	+3.3V	-12V	+5VSB			
Max Current		62A	20A	20A	0.3A	2.5A	DC Power in Total(W)	AC Power Readingl (W)	Efficiency(%)
20% Loading	Current(A)	10.69	2.28	2.28	0.05	0.43	150.57	166.7	90.32%
	Voltage(V)	12.04	5.02	3.32	-12.41	5.06			
50% Loading	Current(A)	26.72	5.71	5.71	0.13	1.08	375.77	412.5	91.09%
	Voltage(V)	12.02	5.01	3.31	-12.65	5.03			
100% Loading	Current(A)	53.44	11.42	11.42	0.26	2.15	750.86	856.9	87.63%
	Voltage(V)	12.01	5.01	3.3	-12.73	5.01			

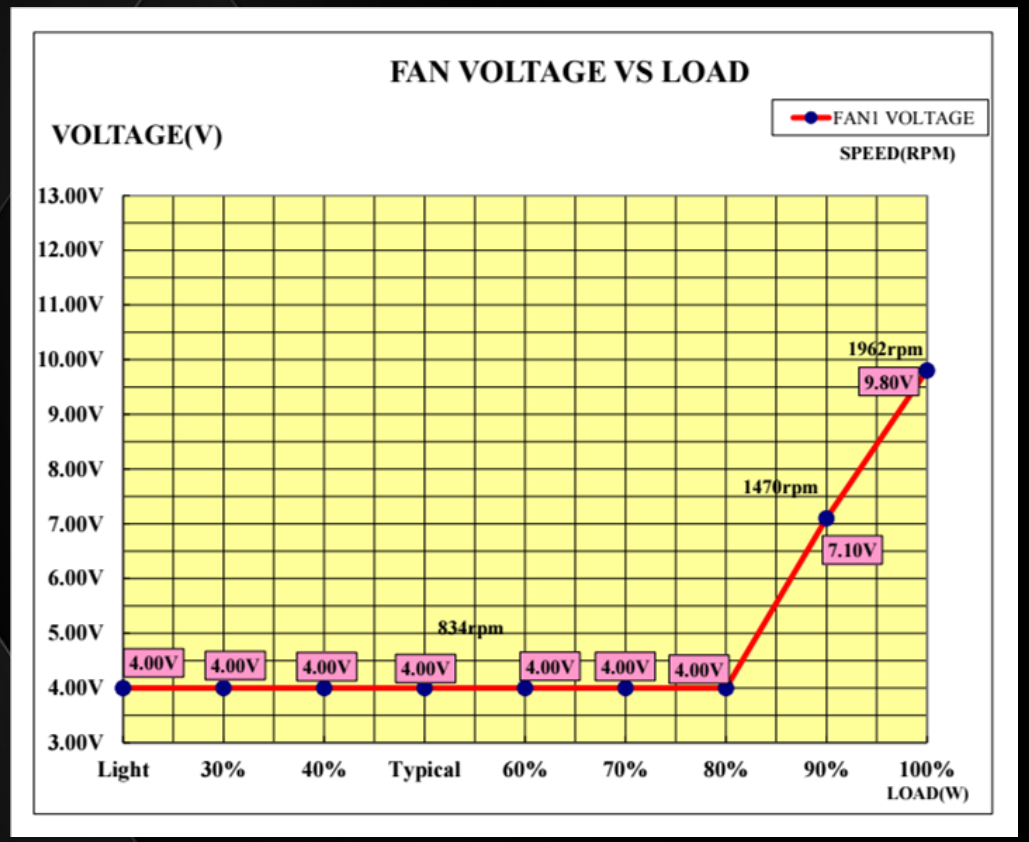
Efficiency

Model		BFG GOLD 650W (GPX650)							
AC Input Voltage & Temperature		115Vac @ 25°C							
Total Wattage		650W							
Combine Wattage		648W	100W		3.6W	12.5W			
Rail		+12V	+5V	+3.3V	-12V	+5VSB			
Max Current		54A	20A	20A	0.3A	2.5A	DC Power in Total(W)	AC Power Readingl (W)	Efficiency(%)
20% Loading	Current(A)	9.19	2.05	2.05	0.05	0.43	130.39	144.62	90.16%
	Voltage(V)	12.02	5.04	3.34	-12.46	5.05			
50% Loading	Current(A)	22.97	5.12	5.12	0.13	1.06	325.69	357.62	91.07%
	Voltage(V)	12.01	5.04	3.33	-12.63	5.02			
100% Loading	Current(A)	45.94	10.25	10.25	0.26	2.13	650.11	741.25	87.70%
	Voltage(V)	11.99	5.03	3.32	-12.65	4.95			

Model		BFG GOLD 550W (GPX550)							
AC Input Voltage & Temperature		115Vac @ 25°C							
Total Wattage		550W							
Combine Wattage		546W	100W		3.6W	12.5W			
Rail		+12V	+5V	+3.3V	-12V	+5VSB			
Max Current		45.5A	20A	20A	0.3A	2.5A	DC Power in Total(W)	AC Power Readingl (W)	Efficiency(%)
20% Loading	Current(A)	7.56	2	2	0.05	0.42	110.59	125.75	87.94%
	Voltage(V)	12.06	5.04	3.32	-11.67	5.07			
50% Loading	Current(A)	18.9	5	5	0.12	1.04	276.12	304.57	90.66%
	Voltage(V)	12.05	5.03	3.3	-11.83	5.04			
100% Loading	Current(A)	37.8	10.01	10.01	0.25	2.08	550.27	627.07	87.75%
	Voltage(V)	12.01	5.02	3.27	-12.12	4.98			

PSU Thermal Solution

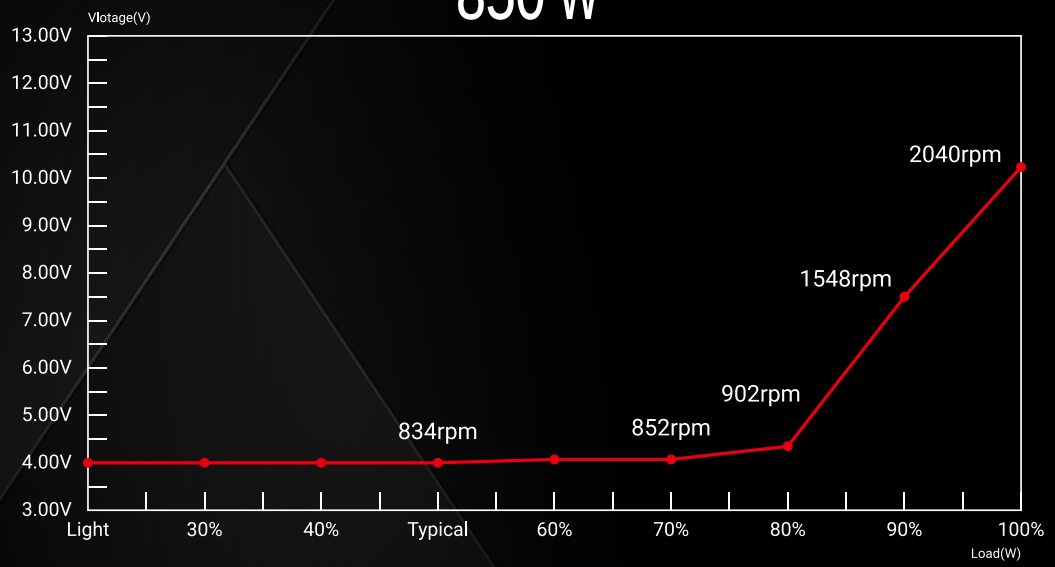
Vin=230Vac	Fan Model: DC Fan								
Fan Voltage	4.00V	4.00V	4.00V	4.00V	4.00V	4.00V	4.00V	7.10V	9.80V
Fan speed(RPM)	834	834	834	834	834	834	834	1470	1962
Load Condition	170W	225W	340W	425W	510W	595W	680W	765W	850W
	Light	30%	40%	Typical	60%	70%	80%	90%	100%



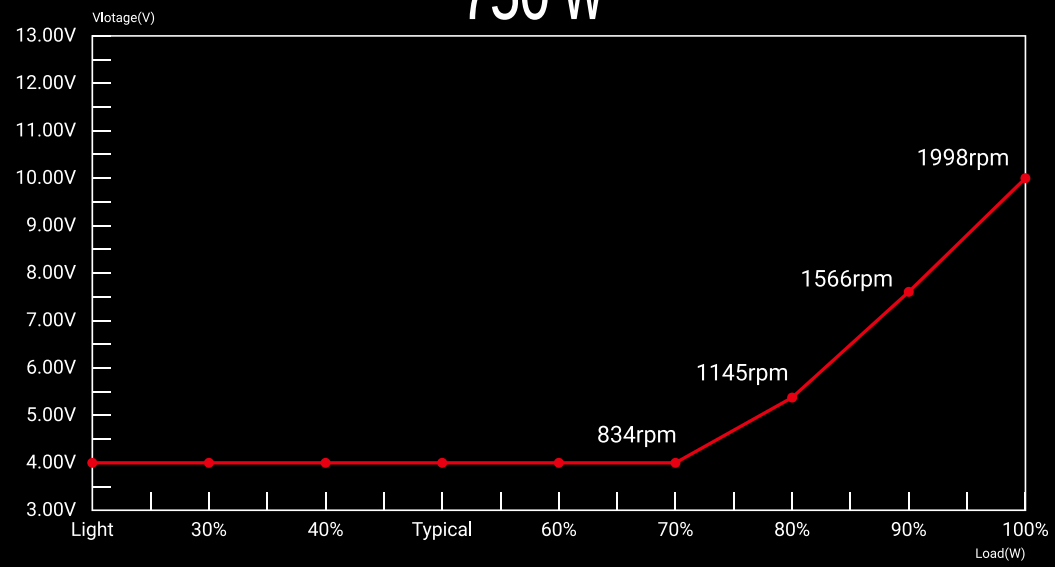
The compact design of the 750W-1000W is complemented by a high CFM, high speed 120mm Fluid Dynamic Bearing fan optimized for low fan-noise.
A custom tuned fan curve allows these PSUs to operate at optimum levels throughout varying workloads.
With only 32dBA at a speed of 2000rpm and only 18dBA at typical loads(60%), this low noise fan keep the components optimally cooled at 25°C even under full gaming loads without overheating.

PSU Low Acoustic Solution

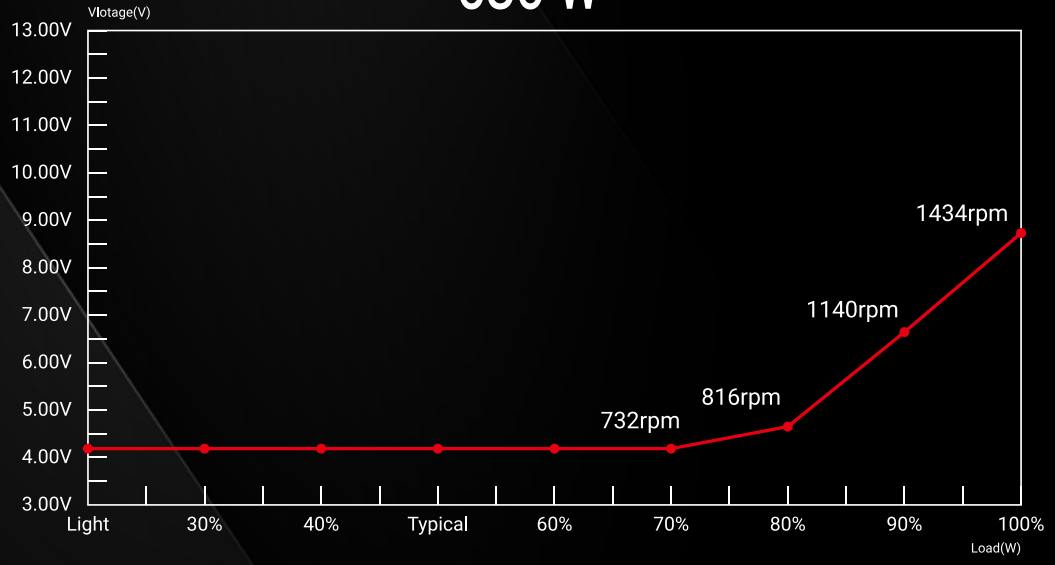
850 W



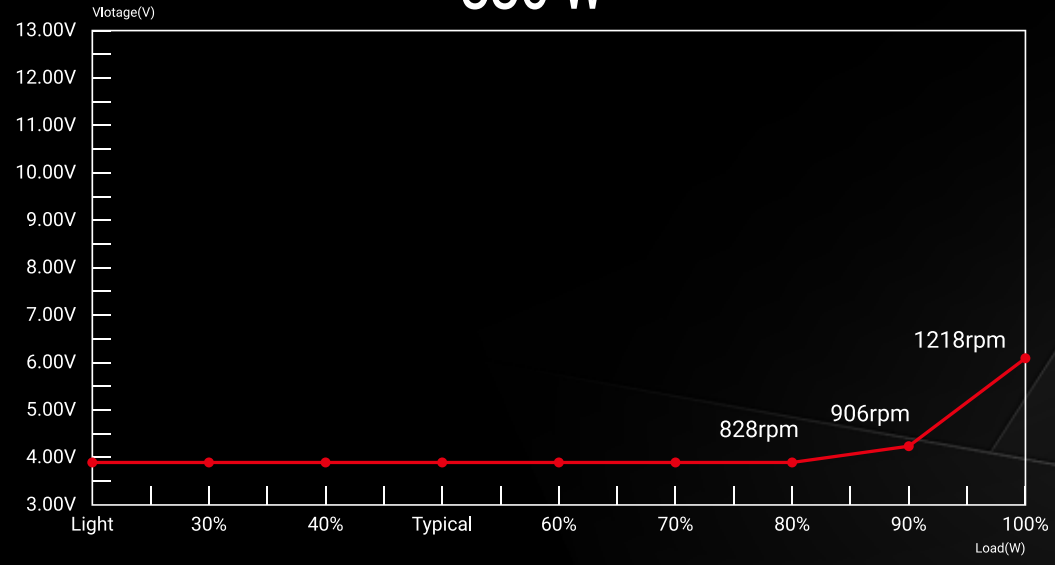
750 W



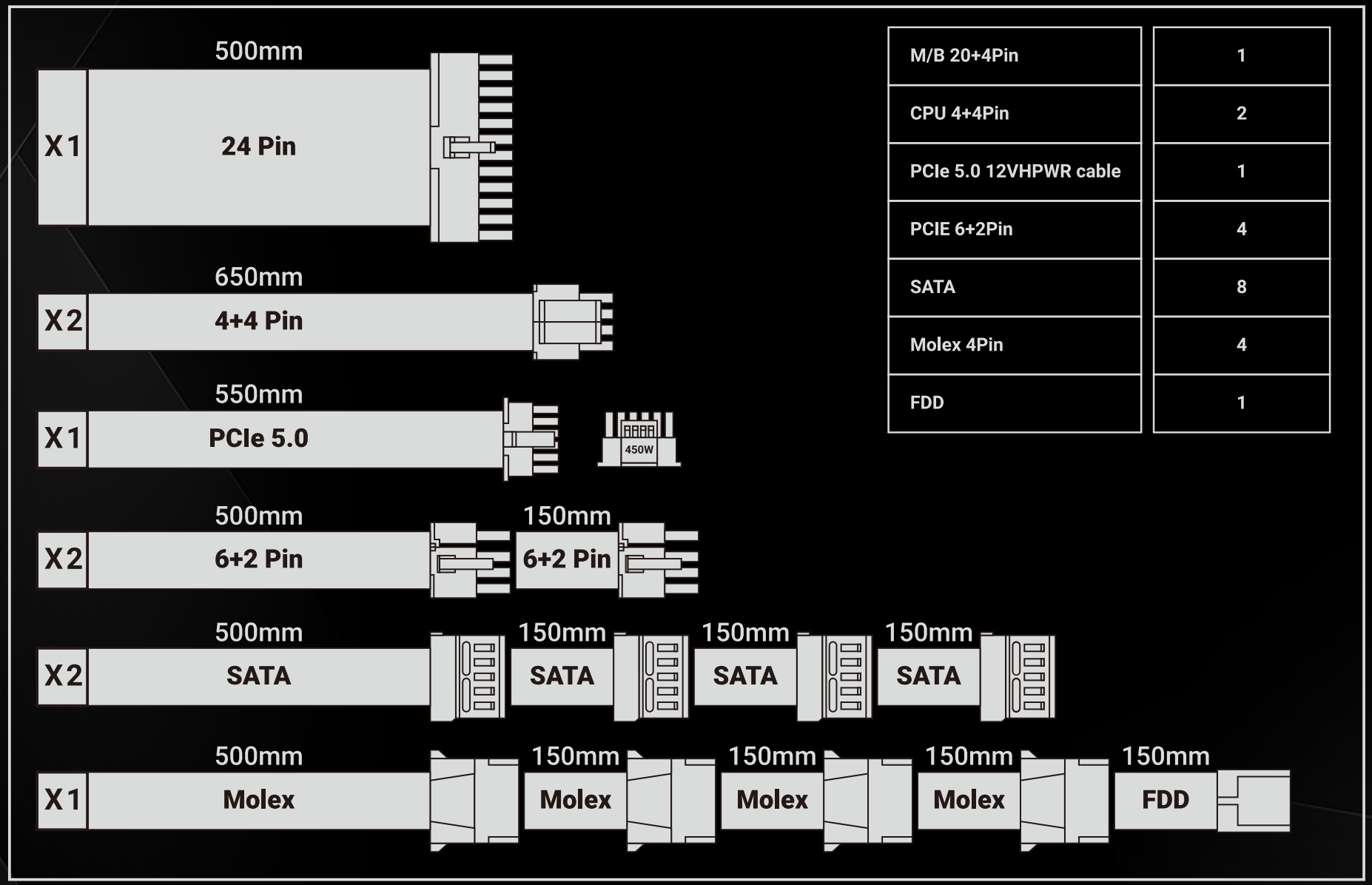
650 W



550 W

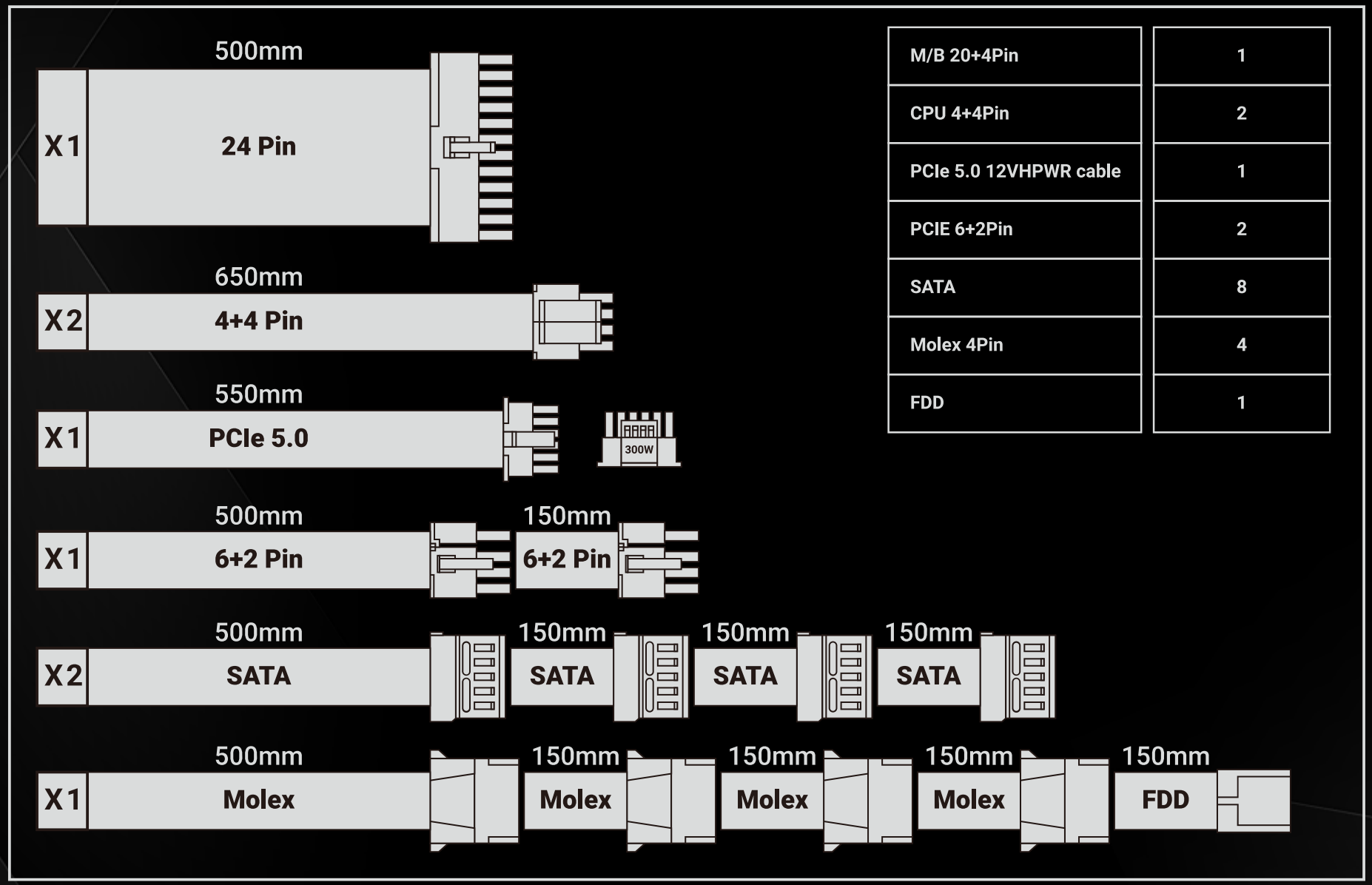


Output Cable-850W



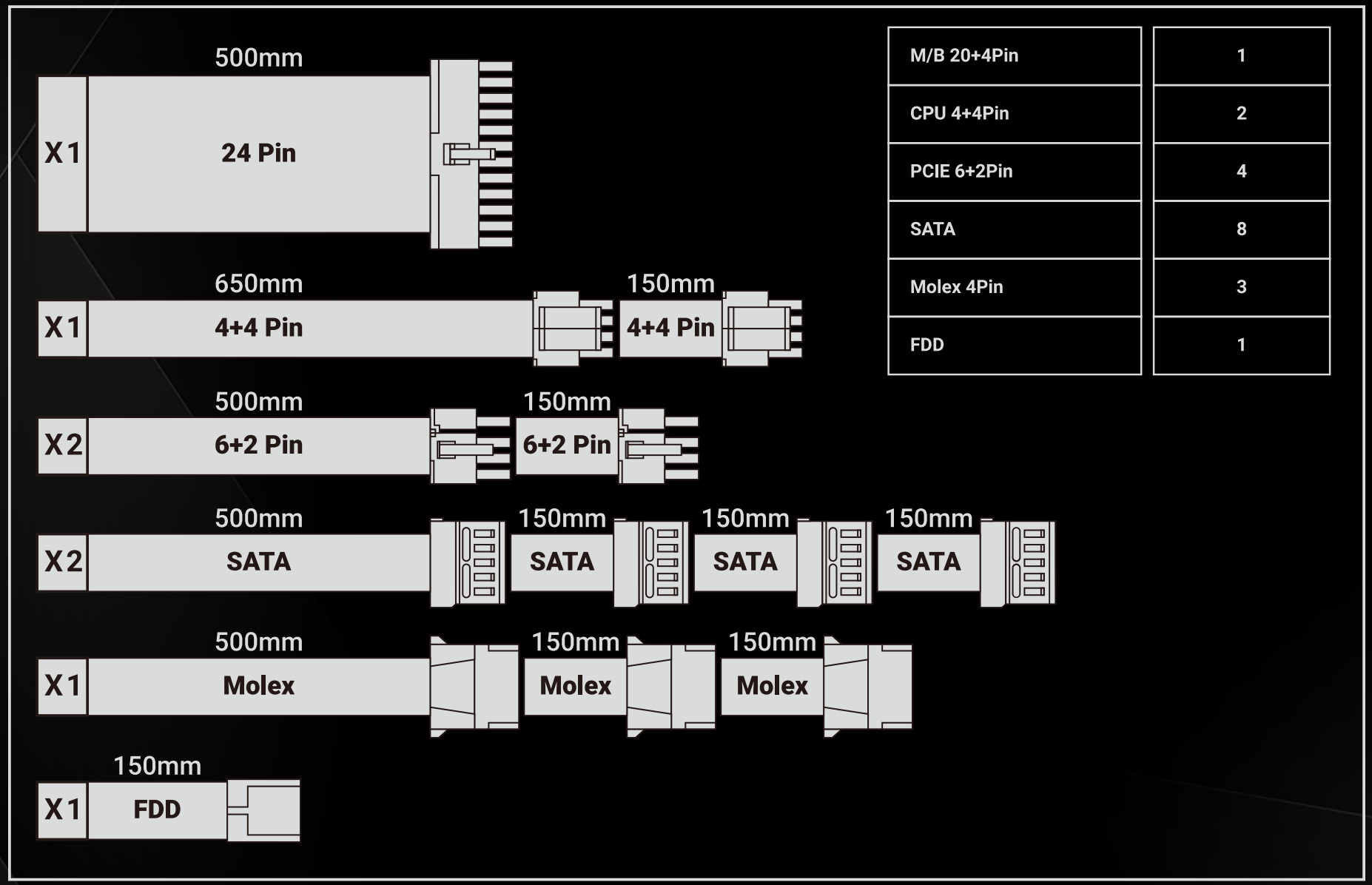
M/B 20+4Pin	1
CPU 4+4Pin	2
PCIe 5.0 12VHPWR cable	1
PCIE 6+2Pin	4
SATA	8
Molex 4Pin	4
FDD	1

Output Cable-750W



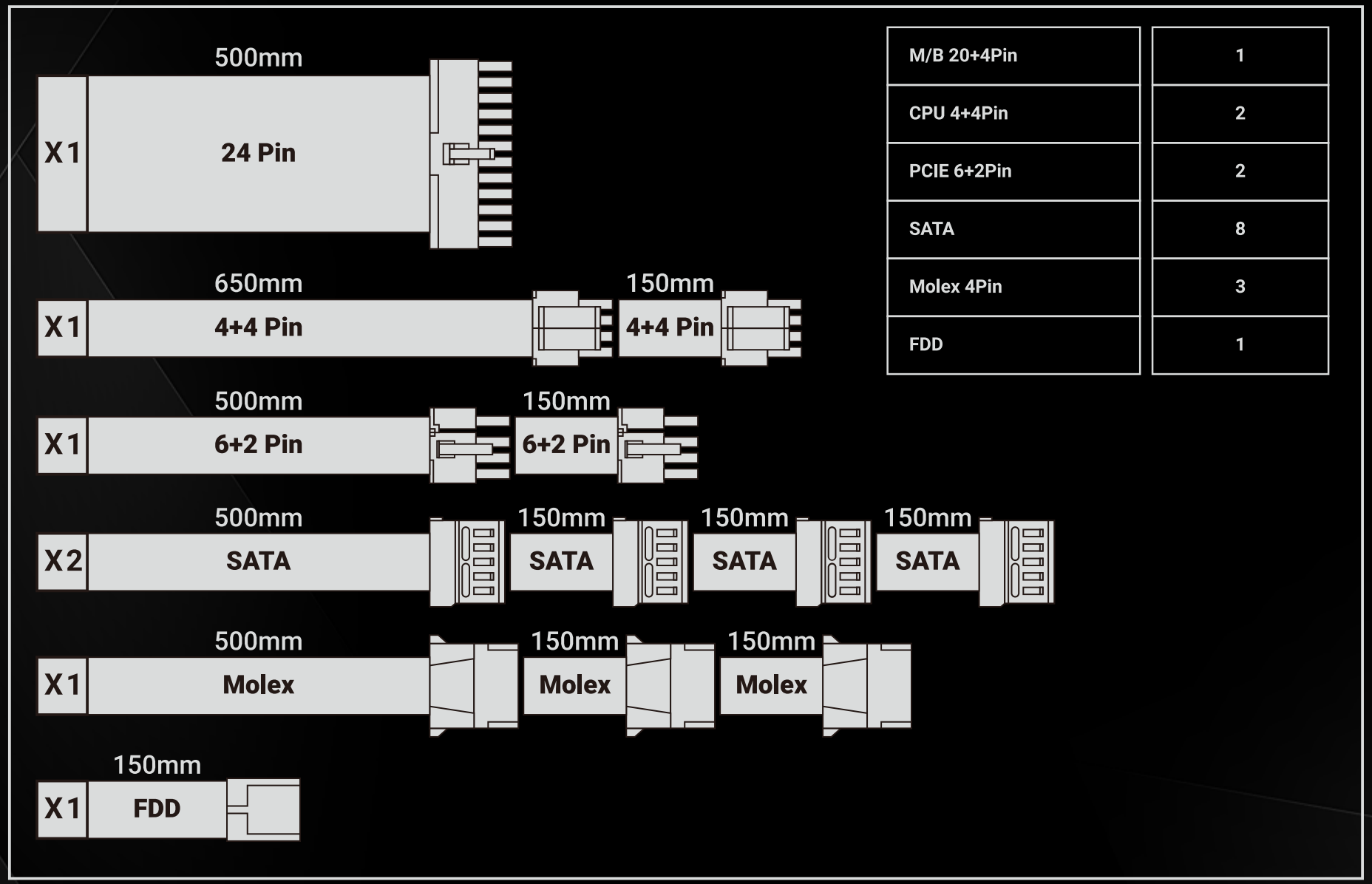
M/B 20+4Pin	1
CPU 4+4Pin	2
PCIe 5.0 12VHPWR cable	1
PCIE 6+2Pin	2
SATA	8
Molex 4Pin	4
FDD	1

Output Cable-650W



M/B 20+4Pin	1
CPU 4+4Pin	2
PCIE 6+2Pin	4
SATA	8
Molex 4Pin	3
FDD	1

Output Cable-550W



M/B 20+4Pin	1
CPU 4+4Pin	2
PCIE 6+2Pin	2
SATA	8
Molex 4Pin	3
FDD	1

HIGH QUALITY
ALUMINUM BITFENIX LOGO

ENVIRONMENT FRIENDLY,
UNDER ROHS &WEEE REGULATIONS

MODULAR DESIGN
& CPU /PCI-E MIX
12V-2X6 CONNECTOR

COMPACT DIMENSION

Housing

Spec Label

BFG GOLD ATX3.1 1000W					
AC INPUT (輸入 | 输入)	100-240Vac 47-63Hz 12.0A				
DC OUTPUT (輸出 | 输出)	+3.3V	+5V	+12V	-12V	+5VSB
MAX LOAD (輸出電流 | 输出电流)	20A	20A	83.3A	0.3A	3A
MAX OUTPUT POWER (輸出功率 | 输出功率)	110W		999.6W	3.6W	15W
TOTAL POWER (瓦數 | 瓦数)	1000W				

80 PLUS GOLD

BINFENIX

BFG GOLD ATX3.1 1000W

▪ WARNING! HAZARDOUS AREA
SAFETY INSTRUCTIONS:
DO NOT REMOVE THE COVER
NO SERVICEABLE COMPONENTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.
▪ 請勿開啟外蓋，避免觸電! ▪ 请勿开启外盖，避免触电!

▪ WARNUNG! GEFAHRENZONE
SICHERHEITSHINWEISE:
VOR DEM ÖFFNEN DES GERÄTES NETZSTECKER ZIEHEN.
KEINE SERVICERELEVANTEN BAUTEILE ENTHALTEN.
SERVICEARBEITEN SOLLTEN NUR VON AUTORISIERTEM FACHPERSONAL DURCHGEFÜHRT WERDEN.

CE CB UKCA FC TÜVRheinland TÜVRheinland CERTIFIED RoHS

CAN ICES (B) / NMB (B)
Model No.(型號/型号): GPX1000S5-B

Switching Power Supply/ 電源供應器/ 电源供应器
Made in China/ 中國製造/ 中国制造

製造商: 僑威科技股份有限公司
制造商: 侨威科技股份有限公司
Trade Mark: CWT

BFG GOLD ATX3.1 850W					
AC INPUT (輸入 | 输入)	100-240Vac 47-63Hz 12.0A				
DC OUTPUT (輸出 | 输出)	+3.3V	+5V	+12V	-12V	+5VSB
MAX LOAD (輸出電流 | 输出电流)	20A	20A	70.5A	0.3A	2.5A
MAX OUTPUT POWER (輸出功率 | 输出功率)	110W		846W	3.6W	12.5W
TOTAL POWER (瓦數 | 瓦数)	850W				

80 PLUS GOLD

BINFENIX

BFG GOLD ATX3.1 850W

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SAFETY INSTRUCTIONS:
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▪ WARNUNG! GEFAHRENZONE
SICHERHEITSHINWEISE:
VOR DEM ÖFFNEN DES GERÄTES NETZSTECKER ZIEHEN.
KEINE SERVICERELEVANTEN BAUTEILE ENTHALTEN.
SERVICEARBEITEN SOLLTEN NUR VON AUTORISIERTEM FACHPERSONAL DURCHGEFÜHRT WERDEN.

BFG GOLD ATX3.1 750W					
AC INPUT (輸入 | 输入)	100-240Vac 47-63Hz 12.0A				
DC OUTPUT (輸出 | 输出)	+3.3V	+5V	+12V	-12V	+5VSB
MAX LOAD (輸出電流 | 输出电流)	20A	20A	62A	0.3A	2.5A
MAX OUTPUT POWER (輸出功率 | 输出功率)	110W		744W	3.6W	12.5W
TOTAL POWER (瓦數 | 瓦数)	750W				

80 PLUS GOLD

BINFENIX

BFG GOLD ATX3.1 750W

▪ WARNING! HAZARDOUS AREA
SAFETY INSTRUCTIONS:
DO NOT REMOVE THE COVER
NO SERVICEABLE COMPONENTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.
▪ 請勿開啟外蓋，避免觸電! ▪ 请勿开启外盖，避免触电!

▪ WARNUNG! GEFAHRENZONE
SICHERHEITSHINWEISE:
VOR DEM ÖFFNEN DES GERÄTES NETZSTECKER ZIEHEN.
KEINE SERVICERELEVANTEN BAUTEILE ENTHALTEN.
SERVICEARBEITEN SOLLTEN NUR VON AUTORISIERTEM FACHPERSONAL DURCHGEFÜHRT WERDEN.

CE CB FC TÜVRheinland R43016 RoHS TÜVRheinland CERTIFIED 10 RoHS

CAN ICES-003(B)/NMB-003(B)
RoHS資訊: http://www.cwt.com.tw/QueryROHS.aspx
Model No.(型號/型号): GPX750S

Switching Power Supply/ 電源供應器/ 电源供应器
Made in China/ 中國製造/ 中国制造

製造商: 僑威科技股份有限公司
制造商: 侨威科技股份有限公司
Trade Mark: CWT

Spec Label

BFG GOLD 650W					
AC INPUT (輸入|输入)	100-240Vac 47-63Hz 9.0A				
DC OUTPUT (輸出|输出)	+3.3V	+5V	+12V	-12V	+5VSB
MAX LOAD (輸出電流|输出电流)	20A	20A	54A	0.3A	2.5A
MAX OUTPUT POWER (輸出功率|输出功率)	100W		648W	3.6W	12.5W
TOTAL POWER (瓦數|瓦数)	650W				

80 PLUS GOLD

BFG GOLD 650W

▪ WARNING! HAZARDOUS AREA

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▪ 請勿開啟外蓋，避免觸電！ ▪ 请勿开启外盖，避免触电！

▪ WARNUNG! GEFAHRENZONE

SICHERHEITSHINWEISE:
VOR DEM ÖFFNEN DES GERÄTES NETZSTECKER ZIEHEN.
KEINE SERVICERELEVANTEN BAUTEILE ENTHALTEN.
SERVICEARBEITEN SOLLTEN NUR VON AUTORISIERTEM FACHPERSONAL DURCHGEFÜHRT WERDEN.

CAN ICES-003(B)/NMB-003(B)
RoHS資訊: http://www.cwt.com.tw/QueryROHS.aspx
Model No.(型號/型号): GPX650S

Switching Power Supply/ 電源供應器/ 电源供应器
Made in China/ 中國製造/ 中国制造

製造商: 僑威科技股份有限公司
制造商: 侨威科技股份有限公司
Trade Mark: CWT

BFG GOLD 550W					
AC INPUT (輸入|输入)	100-240Vac 47-63Hz 8.0A				
DC OUTPUT (輸出|输出)	+3.3V	+5V	+12V	-12V	+5VSB
MAX LOAD (輸出電流|输出电流)	20A	20A	45.5A	0.3A	2.5A
MAX OUTPUT POWER (輸出功率|输出功率)	100W		546W	3.6W	12.5W
TOTAL POWER (瓦數|瓦数)	550W				

80 PLUS GOLD

BFG GOLD 550W

▪ WARNING! HAZARDOUS AREA

SAFETY INSTRUCTIONS:
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NO SERVICEABLE COMPONENTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

▪ 請勿開啟外蓋，避免觸電！ ▪ 请勿开启外盖，避免触电！

▪ WARNUNG! GEFAHRENZONE

SICHERHEITSHINWEISE:
VOR DEM ÖFFNEN DES GERÄTES NETZSTECKER ZIEHEN.
KEINE SERVICERELEVANTEN BAUTEILE ENTHALTEN.
SERVICEARBEITEN SOLLTEN NUR VON AUTORISIERTEM FACHPERSONAL DURCHGEFÜHRT WERDEN.

CAN ICES-003(B)/NMB-003(B)
RoHS資訊: http://www.cwt.com.tw/QueryROHS.aspx
Model No.(型號/型号): GPX550S

Switching Power Supply/ 電源供應器/ 电源供应器
Made in China/ 中國製造/ 中国制造

製造商: 僑威科技股份有限公司
制造商: 侨威科技股份有限公司
Trade Mark: CWT