FORMULA

80 PLUS GOLD

5 YEAR WARRANTY

BitFenix is proud to announce its latest series of power supply units, the Formula Gold Series that boasts of extreme quality and world's best performance with 80+ Gold efficiency and up to 92% efficiency at typical loading. The new BitFenix Formula Gold power supply line up comes with a wide range of power options starting with 450W all the way up to 750W incrementing by 100W. Therefore, BitFenix Formula Gold is perfect for everything from energy efficient gaming PCs to Dual GPU system or heavily overclocked Platforms.
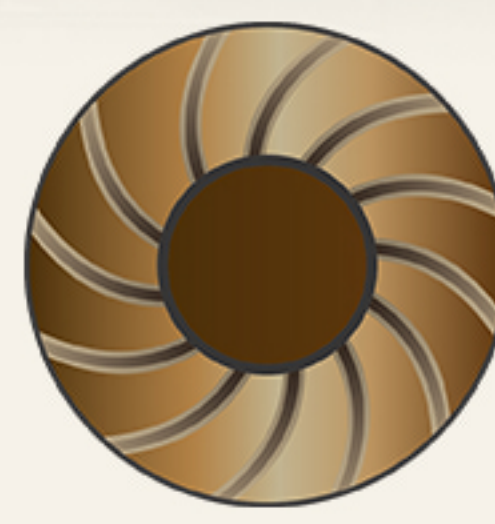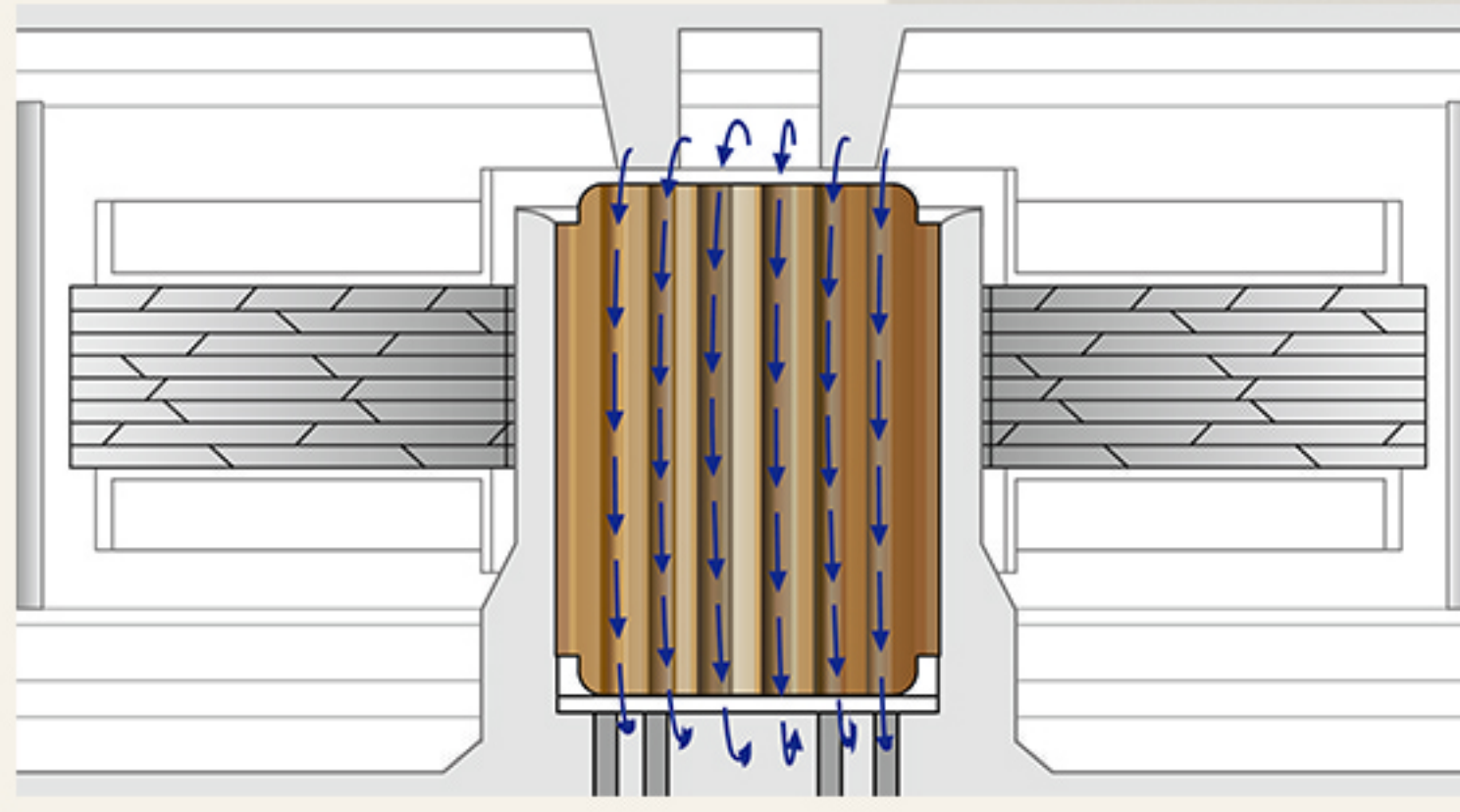
Efficient Performance

The Formula Gold is an extremely high-efficient power supply series with a 80+ Gold Efficiency Certification. With a custom 2oz pure copper and double layer PCB paired with high quality components, the Formula gold Series is rated at a Power Factor of 0.99 with an efficiency of up to 90+ at a 40% to 60% load, so it can achieve the performance of 80Plus Gold requirements. The Formula Gold Series was designed to provide an extremely stable power output with most efficient energy usage.

Silent Performance

The Formula Gold power supplies provide stable currents, even at high loads, all while keeping heat levels low due to the high efficiency layout. To keep the performance even more silent, all Formula Gold power supplies are equipped with ultra-low noise level & high life expectancy fans. Optimized with an intelligent fan control curve, the 120mm FDB fans start operating at a voltage as low as 3V with 500rpm ± 10%, keeping the noise levels under 15-18dBA at a 60% load in 25°C surroundings. BitFenix silence engineering has improved when the engineer is using the low starting voltage fan and Fluid Dynamic Bearing Fan. Even the PSU is using a 120mm fan, but the performance is better than some 140mm fan in the market. Therefore, Formula Gold series PSU has got the approval of Cybenetics and had LAMBDA A++ certified.

LAMBDA A++

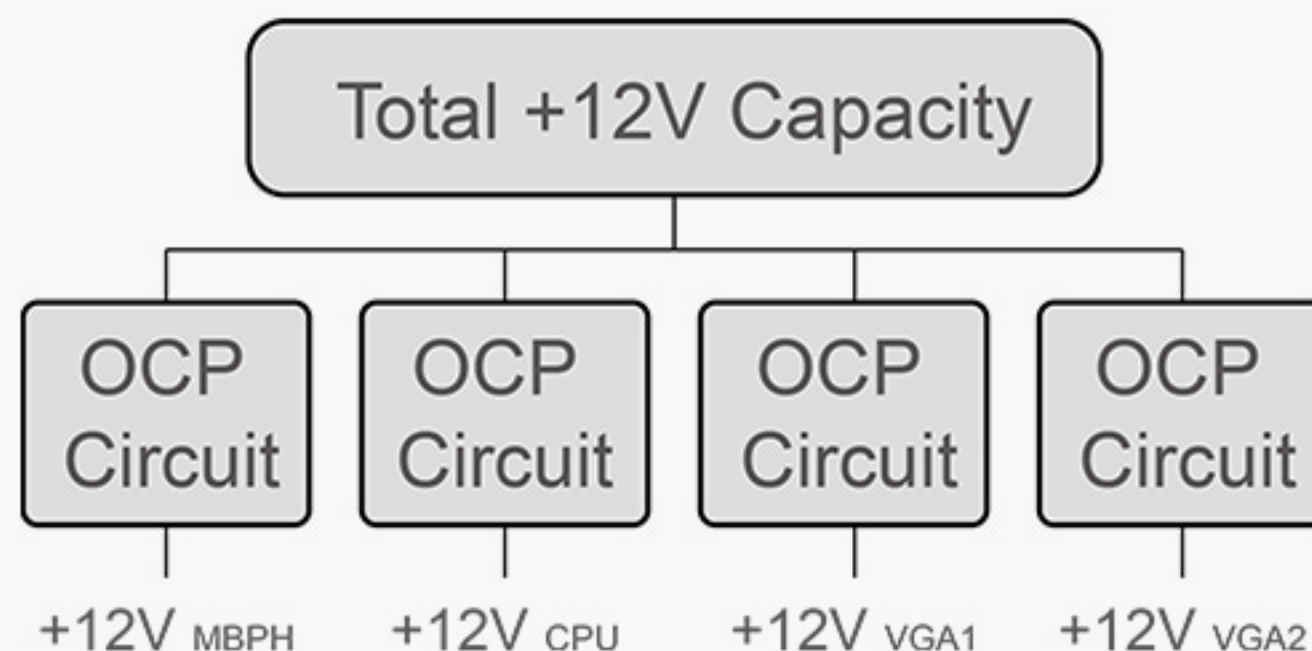## Best performance Components and Circuits

To ensure the best output quality and durability, BitFenix not only uses high quality components such as 100% Japanese industrial capacitors and solid capacitors but also built in with the all modern and advance circuit such as LLC resonant Converter and Synchronous Rectification & DC-DC converter…etc. The industrial capacitors are designed to withstand and continue working at elevated temperatures of up to 105°C, while the solid capacitors reduce up to 35% of ripple & noise on the motherboard.

The combination of all high quality extended lifetime components has only one main task which is resulting with solid performance and increasing the overclocking capabilities on Formula Gold PSU Platform. The specially designed flat ribbon-style cables feature pure copper and Japanese electronic components to improve the stability of the power delivered, thus resulting in better durability and reduced power drops caused by interferences of the system's environment.

Dedicated Rail Design

Working on a special and new design PSU platform which can only produce from BitFenix exclusively. A Dedicated multi-rail design is the symbol of BitFenix which paired with an advanced voltage switching circuit assure best output quality and stability. To support power hungry graphics cards and other components, the Formula Gold as a higher current capacity on the GPU and the other main rails. All main +12V rails feature an additional Over Current Protection (OCP) to avoid damage from over current or due to failing or damaged components, because each component has its own rail assigned.

Total +12V Capacity

| OCP Circuit | OCP Circuit | OCP Circuit | OCP Circuit |
| +12V MBPH | +12V CPU | +12V VGA1 | +12V VGA2 |

Advanced Protection Circuits and warranty

5 YEAR Warranty

Industrial Level protection

To provide the perfect balance between performance, silent operation and safety, the Formula Gold Series feature a series of protections as listed below to keep the power supply and the system components safe. The Formula Gold Series comes with a respectable 5-year warranty.

• Over Current Protection (OCP)
• Over Voltage Protection (OVP)
• Under Voltage Protection (UVP)
• Over Power Protection (OPP)
• Short Circuit Protection (SCP)
• Over Temperature Protection (OTP)
• No Load Operation (NLO)
• Surge & Inrush Protection (SIP)

For further information, check below links.   ▶ Product Page   ▶ Download Link

Specification

Model	BF750W	BF650W	BF550W	BF450W
Intel Specification	ATX 12V V2.4			
Dimension(DxWxH)	140mm(D) x 150mm(W) x 86mm(H)			
AC Input	100-240Vac			
Input Current	115Vac/10.0A max. 230Vac/5.0A max	115Vac/10.0A max. 230Vac/5.0A max	115Vac/8.0A max. 230Vac/4.0A max.	115Vac/7.0A max. 230Vac/3.5A max.
Frequency	47Hz ~ 63Hz			
APFC PF value	PF > 0.99 at 115Vac input and full load			
80Plus Certification	80Plus Gold, up to 92%			
Operation Temp.	0-50°C			
Fan Size	120mm			
Protection	OPP/ OVP/ OCP/ UVP/ SCP/ NLO/ OTP/ SIP			
Safety	cTUVus, TUV, CB, CE, FCC, BSMI			
ErP regulation	ErP 2013 Lot 6			
MTBF	> 100,000hrs			
Output cable Type	Fixed Cable | Flat Cable			
Connector Quantity	24Pin x 1 | CPU 8Pin x 1 | CPU 4+4Pin x 1 | VGA 6+2Pin x 4 | SATA x 8 | Molex x 4	24Pin x 1 | CPU 8Pin x 1 | CPU 4+4Pin x 1 | VGA 6+2Pin x 4 | SATA x 8 | Molex x 4	24Pin x 1 | CPU 4+4Pin x 1 | VGA 6+2Pin x 2 | SATA x 6 | Molex x 2	24Pin x 1 | CPU 4+4Pin x 1 | VGA 6+2Pin x 2 | SATA x 6 | Molex x 2

Name	Part Number	Region	EAN	UPC
Formula Gold 450W	BP-FM450ULAG-7R	US	4712883216497	8860270155551
	BP-FM450ULAG-8R	GB		
	BP-FM450ULAG-9R	EU		
Formula Gold 550W	BP-FM550ULAG-7R	US	4712883216480	8860270155544
	BP-FM550ULAG-8R	GB		
	BP-FM550ULAG-9R	EU		
Formula Gold 650W	BP-FM650ULAG-7R	US	4712883216473	8860270155537
	BP-FM650ULAG-8R	GB		
	BP-FM650ULAG-9R	EU		
Formula Gold 750W	BP-FM750ULAG-7R	US	4712883216466	8860270155520
	BP-FM750ULAG-8R	GB		
	BP-FM750ULAG-9R	EU		

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