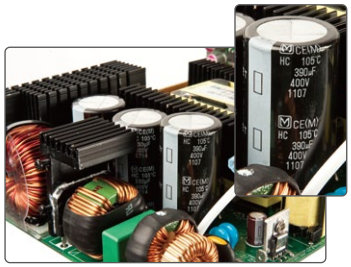
G1600 Power Supply

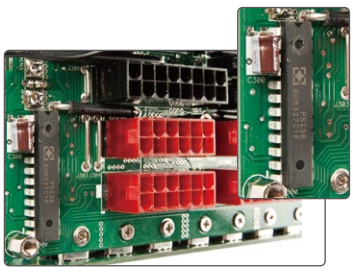
(G1600-MA)

Product Features

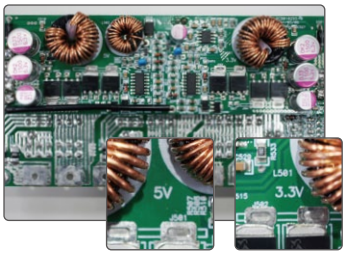
- **Powerful 1600W fully rated output,** peak power up to **1700W**
- **Surpassing 80 Plus Gold level** (G1600-MA is 80 Plus Gold certified.)
- **Full Modular Cabling Design** makes system upgrade and replacement easy
- **High Density PCB Design** makes G1600 only **18cm** in depth, providing more space to dissipate the heat inside the chassis
- **135mm ball bearing fan** with thermal programmed speed controller delivers silent, cool operation
- **Honeycomb-shaped ventilation design** increases airflow and keeps power supply cool
- **Solid State Capacitors and 105°C Japanese Grade A Capacitors** provide great reliability
- **DC-to-DC Converter Design** ensures system stability
- **Full Bridge and Zero Voltage Switch (ZVS) topologies** provide superior performance and reliability
- **Dual Sided PCB design** synergizes PCB layout
- **Six powerful +12V rails** with high maximum loads offer great compatibility with heavy-duty graphics cards
- **Ability to run up to 4-Way GPU (SLI / CrossFire) and Dual CPUs together** without difficulty
- **Compliance with EU ErP Lot 6 standards** (lower than 1W power consumption at standby mode)
- **Over Power, Over Voltage, Under Voltage, Over Current, Over Temperature, Short-circuit protection** provide great safety to your system
- **ATX12V version 2.4 and EPS12V version 2.92** compliant



Solid State Capacitors and 105°C Japanese Grade A Capacitors



Over Power, Over Voltage, Under Voltage, Over Current, Over Temperature, Short-circuit protection



DC-to-DC Converter Design

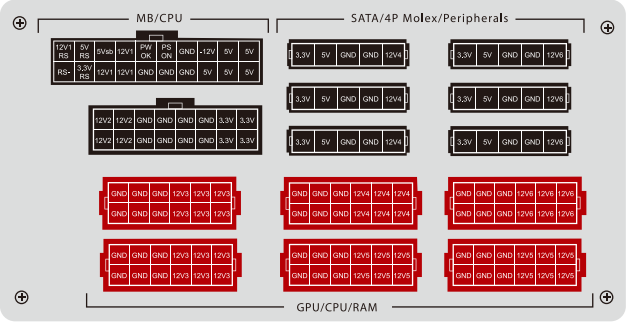
Product Specifications

Model		G1600-MA	G1600-MA-EU
AC Input / Frequency		115-240VAC, 50-60Hz (Maximum range : 100-264VAC, 47-63Hz)	220-240VAC, 50-60Hz
AC Current		16-8A	8.5-7.5A
DC Output	+3.3V	0-25A	0-25A
	+5V	0-25A	0-25A
	+3.3V&+5V	140W	140W
	+12V1	0-20A	0-20A
	+12V2	0-20A	0-20A
	+12V3	0-30A	0-30A
	+12V4	0-30A	0-30A
	+12V5	0-30A	0-30A
	+12V6	0-30A	0-30A
	-12V	0-0.5A	0-0.5A
	+5Vsb	0-4A	0-4A
	+12V	**1596W (133A)**	**1596W (133A)**
	Total	**1600W**	**1600W**
	Peak Power	**1700W**	**1700W**
MTBF		> 100,000 hours @25°C	> 100,000 hours @25°C
Operating Temp.		0°C ~ 40°C	0°C ~ 40°C
Dimension		180mm (D) x 150mm (W) x 86mm (H)	180mm (D) x 150mm (W) x 86mm (H)
Net Weight		2.4kg (without modular cables) +/-50g	2.3kg (without modular cables) +/-50g
Safety Approvals		FC Tested To Comply With FCC Standards FOR HOME OR OFFICE USE	CE, BZ02

Protection Point

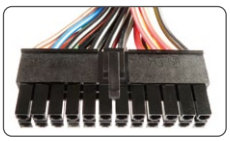
Protection Trigger Range			
	+3.3V	+5V	+12V1 / V2 / V3 / V4 / V5 / V6
Over Current Protection	30A ~ 45A	30A ~ 45A	40A ~ 50A
Under Voltage Protection	2.0V ~ 2.4V	3.3V ~ 3.7V	8.5V ~9.5V
Over Voltage Protection	3.9V ~ 4.5V	5.7V ~ 6.5V	13.3V ~ 14.5V
Protection Point			
Over Power Protection	Triggered when output power > 110 ~ 160% of rated max load		
Over Temperature Protection	Triggered when PSU heat sink > 90°C ~ 110°C		
Short Circuit Protection	Main output power shall latch into shut down state within 50ms when short circuit applied. +5Vsb is designed as auto recovery mode protection.		

Modular Sockets & DC Rails Distribution

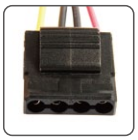


This product incorporates multiple 12V rails over current protection. If you let many peripherals consume the power on only one 12V rail, it may trigger the over current protection and shut down the system. Please re-direct certain peripheral power cable to other 12V rail to share the current loading to ensure highest stability and safety.

Connectors



Mainboard 24P	+12V CPU 8P	+12V CPU 4P
X 1	X 2	X 1



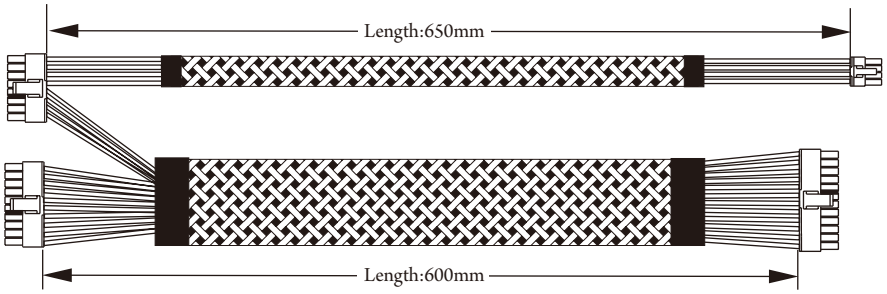
4P Molex	SATA	FDD	6+2P (8P) PCI-E
X 10	X 14	X 2	X 10

Cable Length

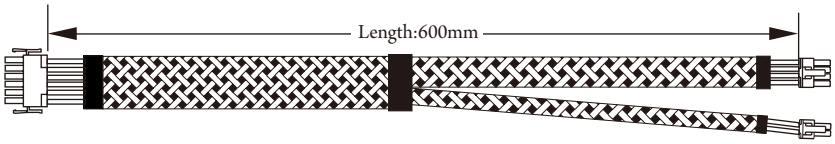
All modular cables are sleeved

Tolerance:±20mm

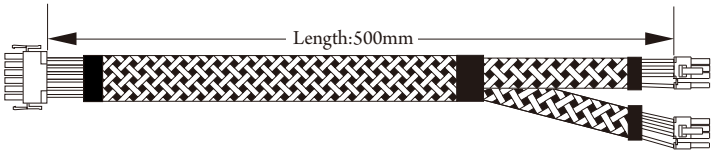
【24P MB & 8P CPU】x 1



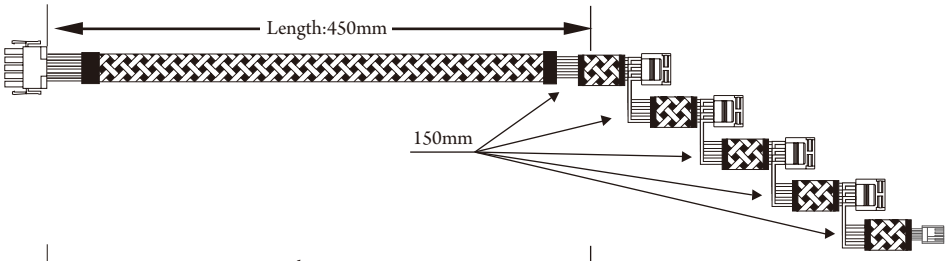
【 8P & 4P + 12V CPU 】x 1



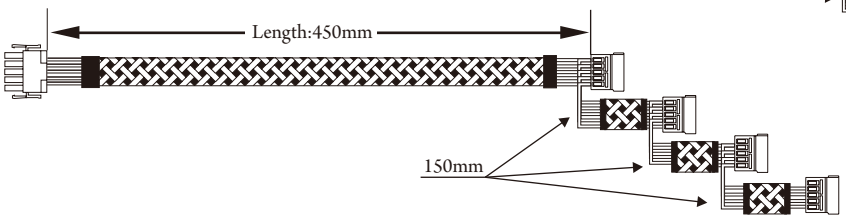
【2 x 6+2P PCI-E】x 5



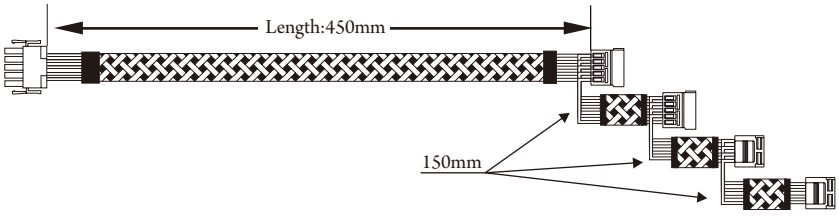
【 4 x 4P Molex & FDD】x 2



【 4 x SATA 】x 3



【 2 x SATA & 2 x 4P Molex】x 1



WARNING : USE of AC POWER CORD

This power supply can draw a very large amount of electric current, to prevent any damage, please be attentive to :

1. Use only the AC power cord included with the power supply.
2. Make sure the computer is plugged directly to the wall outlet and do not use extension socket or power strip.

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