**POWER SUPPLY**

The power supply unit of the system, mostly found in the top corner of the system case, which accepts the Alternating Current (AC) from the power socket in the Wall. It converts the AC to Direct Current (DC) for the system. This unit is called Switch Mode Power Supply (SMPS).  
 It generates 3.3V, 5V and 12V. The Microprocessor and chipset in the system use 3.3V and 5V, while other disk drive use 12V.  
 The power supply unit is packed in a metal box.

-12 V (Blue) - Serial Port  
-5 V (White) - Older Floppy Controller  
0 V (Black) - Ground Voltage or Earth  
+3.3 V (Orange) - PCI/AGP, Processor Voltage controller, DIMMs.  
+5 V (Red) - Disk Drive logic, Voltage regulator, SIMMs.  
+12 V (Yellow) - Drive motors, Fans Motor.

PG Signal (Grey) - Indicates to the motherboard that all the supplies given  
 at proper level. Informs the computer that power supply  
 working properly.  
Power-On (Green) - It indicates when to turn On & Off.  
+5SB (Violet) - Supplies line is used to power standby circuitry. It is always  
 on when the AC power input is active, even if the system is  
 turned off.

**Power Connector**  
**AT Power Connector** – Advanced Technology power connector are two 6 wire connectors, which are to be connected to the motherboard with black wires inside.  
**ATX Power Connector** – Advanced Technology Extended power connector is a 20/24 connectors with 6 types of voltages coming out of it.  
**Standard peripheral power connectors (Molex)** – The disk drive power connectors use 4 wire connectors. The hard disk drive, CD/DVD drives use large size connectors, commonly called as Molex.  
**Floppy Drive Power Connectors (Mini/Berg)** – The 3.5-inch floppy disk drive use smaller size connectors, called as mini-plug.

**UPS (Uninterrupted Power Supply)**  
UPS is a device which maintains continuous supply of electricity power to the connected equipment by supplying power from a battery when main power is not available.  
 In the event of a power failure, using the backup power supply, the system can safely shutdown. It is used to protect the system from failure due to power cuts.