

<b>Ambient Temperature</b>	The temperature of an environment in which power supply operates.
<b>Burn-in</b>	In power supplies, a period during which a supply is energized and loaded to peak output, with the intent of finding potentially weak components. Typical burn-in tests can include temperature cycling, input cycling, and/or load cycling.
<b>Class I Power Supply</b>	Protection against electric shock is achieved by basic insulation and protective earth ground to the device.
<b>Class II Power Supply</b>	Since there is no protective earth ground, protection against electric shock is achieved by double insulation or reinforced insulation.
<b>Dielectric Withstanding Voltage</b>	The maximum DC Voltage applied within a specified time period between two isolated points without causing breakdown of its insulation. (See Hi-Pot Test)
<b>Efficiency</b>	Ratio of output power to input power, generally measured at full load with nominal line conditions.
<b>EMI (Electromagnetic Interference)</b>	Unwanted energy, generally emitted from switching power supplies, which may be conducted or radiated.
<b>Hi-Pot Test (High Potential Test)</b>	A test to determine if the breakdown voltage of a transformer or power supply exceeds the minimum requirement. It is performed by applying a high voltage between two isolated test points.
<b>Hold-up Time</b>	The time during which a power supply's output voltage remains within specification following the loss of input power.
<b>Impedance</b>	The ratio of voltage to current in AC circuits, containing both resistance and reactance terms, usually expressed as ohms.
<b>Input Voltage (AC)</b>	Normally it is the sinusoidal input from AC source to the power supply, normally specified in volts RMS. The minimum and maximum voltage and frequency limits must be specified for proper performance of the power supply. Different countries have different AC Inputs and Frequencies.
<b>Inrush Current</b>	The peak instantaneous input current drawn by a power supply at turn-on.
<b>Isolation Resistance</b>	The electrical resistance, normally in Megaohms, between the input and output of a power supply, isolated electrically by means of the

power transformer. The isolation resistance is generally specified as a function of materials and spacings employed throughout the power supply.

**Leakage Current**

The AC or DC current flowing from input to output and/or chassis of an isolated power supply at a specified voltage.

**Line Regulation**

The change in value of DC output voltage resulting from a change in AC input voltage over a specified range, or from low line to high line or from high line to low line. Normally specified as the + or - change from the nominal DC output voltage.

**Load Regulation**

The change in value of DC output voltage resulting from a change in load resistance from open circuit to a value that yields maximum rated output current, or from full load to open circuit.

**Minimum Loading**

Minimum current required for voltages to be in specified range. Generally in multiple output power supplies, a minimum load is required on the main output to ensure regulation of auxiliary outputs.

**MTBF (Mean Time Between Failure)**

The failure rate of a power supply, expressed in hours, established by the actual operation or calculation from a known standard such as MIL-HDBK-217.

**Output Current Limiting**

An output protection feature which limits the output current to a predetermined value in order to prevent damage to the power supply or the load under overload conditions. The supply is automatically restored to normal operation following removal of the overload.

**Output Voltage (DC)**

The nominal value of the DC voltage at the output terminals of a power supply.

**Overcurrent (Overload) Protection**

Protection of the power supply and associated equipment against excessive output current, including short-circuit current. Protection circuitry is electronic with automatic recovery. Current characteristic is normally foldback type.

**Overshoot**

A transient change in output voltage in excess of specified output regulation limits that can occur when a power supply is turned on/off, or when there is a step change in line or load.

**Overvoltage Protection**

A power supply feature which shuts down the supply, or crowbars or clamps the output, when its voltage exceeds a preset level.

**PARD (Periodic and Random Deviation)**

A term used for the sum of all ripple and noise components measured over a specified band width and stated in either peak-to-peak or RMS values.

<b>Power Factor (input)</b>	Ratio of true input power to the apparent power (rms voltage x rms current) in AC circuits. This power is generally considered to be wasted, but can be corrected for.
<b>Ripple and Noise</b>	The magnitude of AC voltage on the output of a power supply, expressed in millivolts peak-to-peak or RMS, at a specified bandwidth. This is the result of feed through of the rectified line frequency, internal switching transients, and other random noise.
<b>Shock and Vibration</b>	A specification requirement for which a power supply is designed or tested to withstand, such as 20 G shock for 11 milliseconds and 10 G random vibration for 2 hours over a 2 - 2000 Hz bandwidth.
<b>Short-circuit Protection</b>	A feature which limits the output current of a power supply under short-circuit conditions so that the supply will not be damaged.
<b>Start-Up Time</b>	Time required for the output of a power supply to reach its full load after input power is turned on.
<b>Switching Frequency</b>	The rate at which the DC voltage is switched in a DC-DC converter or switching power supply.
<b>Temperature Coefficient</b>	A ratio by which the changes in power supply output voltage caused by temperature changes can be calculated. Usually output decreases as ambient temperature rises.
<b>Temperature (Range), Operating</b>	The range of ambient or case temperatures within which a power supply may be safely operated and meet its specifications.
<b>Temperature (Range), Storage</b>	The range of ambient temperatures within which a power supply may be safely stored, non-operating, with no degradation in its subsequent operation.
<b>Thermal Protection</b>	An internal safeguard circuit in a power supply that shuts down the unit in the event of excessive internal temperature.
<b>Transient Response</b>	Time required for output voltage to return to regulated value after a step change of output current, usually specified in microseconds for a specified percentage of load change.

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