

This glossary of technical terms is designed to help you understand the frequently used terms within the uninterruptible power supply (UPS) industry.

ACTIVE POWER

A measure of actual power (Watts) drawn by an electrical load.

ALTERNATING CURRENT

An electrical current whose electrons flow briefly in one direction to a peak before dropping back to zero and then flowing in an alternative direction before repeating itself. The waveform created is a sine-wave.

AMP OR AMPERES (A)

Power Sonic utilizes the latest technology and equipment to cast grids from a lead-calcium alloy free of antimony. The small amount of calcium and tin in the grid alloy imparts strength to the plate and guarantees durability even in extensive cycle service. Lead dioxide paste is added to the grid to form the electrically active material. In the charged state, the negative plate paste is pure lead and that of the positive lead dioxide. Both of these are in a porous or spongy form to optimize surface area and thereby maximize capacity. The heavy duty lead calcium alloy grids provide an extra margin of performance and life in both cyclic and float applications and give unparalleled recovery from deep discharge.

AMPERE-HOUR (AH)

The number of Amps that a battery set can deliver in one hour.

APPARANT POWER

The electrical current drawn by a load at a given supply voltage measured in VA.

AVAILABILITY

A measure of system up time compared to its downtime expressed as a percentage.

AUTOMATIC BYPASS

An electrical current whose electrons flow briefly in one direction to a peak before dropping back to zero and then flow An electrical circuit incorporated within a UPS (or bypass panel) creating a power path from and to a bypass supply, which may be relay or static

AUTOMATIC VOLTAGE STABILISER (AVS)

A mains power supply voltage stabilisation device. Also known as an Automatic Voltage Regulator (AVR) or Voltage Regulator (VR).

GLOBAL HEADQUARTERS

(USA AND INTERNATIONAL EXCLUDING EMEA) Power-Sonic Corporation

365 Cabela Dr Suite 300, Reno, Nevada 89523 USA **T:** +1 619 661 2020

E: customer-service@power-sonic.com

POWER-SONIC EMEA (EMEA - EUROPE, MIDDLE EAST AND AFRICA) Smitspol 4, 3861 RS Nijkerk, The Netherlands T NL: + 31 33 7410 700 T UK: + 44 1268 560 686 T FR: + 33 344 32 18 17 E: salesEMEA@power-sonic.com





AUTONOMY (RUNTIME OR BACKUP TIME)

The amount of time, stated in either minutes or hours, that a battery set or other power source will support the load.

BATTERY BLOCK

PA self-contained battery consisting of a number of individual and connected battery cells.

BATTERY CELL

CA small storage device for electricity within a battery block.

BATTERY SET

Comprises of a battery string or a number of battery strings.

BATTERY STRING

Comprises of a number of battery blocks arranged in series to achieve a set Vdc and Ah rating.

BLACKOUTS

A power cut or mains power supply failure, also referred to as an outage.

BOOST CHARGE

A high charge voltage applied to a battery set.

BOOSTER-CONVERTER

A transformerless assembly within a UPS used to step up the DC supply from a rectifier or battery set to the level required by an inverter.

BREAK-BEFORE-MAKE (BBM) BYPASS

A bypass that introduces a break when transferring a load from the output of a UPS to the bypass supply, or bypass supply to a UPS.

BROWNOUTS

A drop in the normal mains power supply voltage, which can last from a brief period of a few cycles to days.

GLOBAL HEADQUARTERS

(USA AND INTERNATIONAL EXCLUDING EMEA) Power-Sonic Corporation

365 Cabela Dr Suite 300, Reno, Nevada 89523 USA **T:** +1 619 661 2020

E: customer-service@power-sonic.com

 POWER-SONIC EMEA

 (EMEA - EUROPE, MIDDLE EAST AND AFRICA)

 Smitspol 4, 3861 RS Nijkerk,

 The Netherlands

 T NL: + 31 33 7410 700

 T UK: + 44 1268 560 686

 T FR: + 33 344 32 18 17

 E: salesEMEA@power-sonic.com

To ensure safe and efficient operation always refer to the latest edition of our Technical Manual, as published on our website. © 2021. Power-Sonic Corporation. All rights reserved. All trademarks are the property of their respective owners. All data subject to change without notice. E&O.E



BUILDING MANAGEMENT SYSTEM (BMS)

Not to be confused with Battery Management System (BMS). A centralised alarm monitoring system normally providing either a visual indication board, or a computer monitoring screen, both of which will indicate the power status.

BUNDING

A method of containing liquid spillage from a system, for example, oil or diesel from a standby generator.

BYPASS

A secondary power path providing a power supply in case the primary one fails.

CAPACITANCE

The ability of a circuit to store electrical energy as a charge. This is known as a capacitive circuit.

CENTRAL POWER SUPPLY SYTEM (CPSS)

A type of standby power system used within emergency lighting, security and medical applications, the operation of which is similar to that of a UPS.

CHILLED WATER SYSTEM

A type of precision cooling system widely used in mid-sized to large IT environments. Cold water is pumped from a Chiller to Computer Room Air Handlers (CRAH) designed to remove heat from the IT environment.

CHILLER

A device used to continuously refrigerate large volumes of water.

CIRCUIT BREAKER

A protection device against high surge currents. In the event of a high surge, the breaker will trip and cut power to the current.

CLAMPING LEVEL

The level at which a spike or transient protection device clamps the voltage down to a lower level.

COMMON MADE NOISE

High-frequency electrical noise generated by disturbances between the supply lines and earth (phase-to-earth or neutral-to-earth).

GLOBAL HEADQUARTERS

(USA AND INTERNATIONAL EXCLUDING EMEA) Power-Sonic Corporation

365 Cabela Dr Suite 300, Reno, Nevada 89523 USA T: +1 619 661 2020

E: customer-service@power-sonic.com

POWER-SONIC EMEA (EMEA - EUROPE, MIDDLE EAST AND AFRICA) Smitspol 4, 3861 RS Nijkerk, The Netherlands T NL: + 31 33 7410 700 T UK: + 44 1268 560 686 T FR: + 33 344 32 18 17 E: salesEMEA@power-sonic.com

To ensure safe and efficient operation always refer to the latest edition of our Technical Manual, as published on our website. © 2021. Power-Sonic Corporation. All rights reserved. All trademarks are the property of their respective owners. All data subject to change without notice. E&O.E



CONSTANT VOLTAGE TRANSFORMER (CVT)

A type of ferro-resonant transformer.

CRAC

The abbreviation for Computer Room Air Conditioning unit. A device that uses a self-contained refrigeration cycle to remove heat from the Computer Room and send it away from the Data Centre through some kind of cooling medium, usually piping.

CRAH

The abbreviation for Computer Room Air Handling unit. A device usually installed in a Data Centre or Computer Room that uses circulating chilled water to remove heat.

CRASH KITS

Spares stored on site to enable a fast emergency response to a system failure.

CREST FACTOR

The mathematical ratio of the peak to the root mean square value of an AC waveform.

CRITICAL LOADS

Electrical systems which directly affect the ability of an organisation to function and which must be kept operational during a mains power supply failure.

CRITICAL SYSTEMS

Electrical equipment essential to the operation of the organisation and which cannot be allowed to fail, and must be kept running during any interruption of the mains power supply.

CURRENT (A)

The 'volume' of electricity flowing in a circuit which is expressed in Amps.

CURRENT LIMIT

The restriction of the amount of current that can be drawn from any point within an electrical circuit or UPS output.

DEHUMIDIFICATION

The process of removing moisture from air.

GLOBAL HEADQUARTERS

(USA AND INTERNATIONAL EXCLUDING EMEA) Power-Sonic Corporation

365 Cabela Dr Suite 300, Reno, Nevada 89523 USA **T:** +1 619 661 2020

E: customer-service@power-sonic.com

POWER-SONIC EMEA (EMEA - EUROPE, MIDDLE EAST AND AFRICA) Smitspol 4, 3861 RS Nijkerk, The Netherlands T NL: + 31 33 7410 700 T UK: + 44 1268 560 686 T FR: + 33 344 32 18 17 E: salesEMEA@power-sonic.com

To ensure safe and efficient operation always refer to the latest edition of our Technical Manual, as published on our website. © 2021. Power-Sonic Corporation. All rights reserved. All trademarks are the property of their respective owners. All data subject to change without notice. E&O.E



TRUSTED BATTERY SOLUTIONS

GLOSSARY OF UPS SYSTEM TECHNICAL TERMS

DIRECT CURRENT (DC)

Electric current, the electrons of which flow in a single direction only.

DISCRIMINATION

A short circuit or overload disconnection protection device that protects other devices from being damaged, and does not interrupt their operation.

DISPLACEMENT POWER FACTOR

The ratio of Real Power (W) to Apparent Power (VA) at the fundamental frequency.

DISTORTION

A variation in wave form from a true wave shape.

DISTORTION POWER FACTOR

The power factor produced by the harmonics from non-linear loads.

DOUBLE CONVERSION

A system employed by an on-line UPS which feeds mains electricity into a rectifier/charger, and converts AC to DC. The DC then charges the batteries and also feeds the DC into an inverter which then converts the DC back to AC. This clean power then feeds the electrical equipment.

DRY-CONTACT

See Volt Free Contact.

DYNAMIC STABILITY

The ability of a device to respond to a load-step change and deliver a stable output voltage wave form.

EARTH FAULT (GROUND)

When a live component with mains power grounds to earth.

ELECTRICAL NOISE

High frequency disturbance on a sine-wave which may be Common Mode or Normal Mode.

POWER-SONIC EMEA

GLOBAL HEADQUARTERS

(USA AND INTERNATIONAL EXCLUDING EMEA) **Power-Sonic Corporation**

365 Cabela Dr Suite 300, Reno, Nevada 89523 USA T: +1 619 661 2020

E: customer-service@power-sonic.com

Smitspol 4, 3861 RS Nijkerk, The Netherlands **T NL:** + 31 33 7410 700 T UK: + 44 1268 560 686 TFR: + 33 344 32 18 17 E: salesEMEA@power-sonic.com

(EMEA – EUROPE, MIDDLE EAST AND AFRICA)

To ensure safe and efficient operation always refer to the latest edition of our Technical Manual, as published on our website. © 2021. Power-Sonic Corporation. All rights reserved. All trademarks are the property of their respective owners. All data subject to change without notice. E&O.E



ELECTRO-MAGNETIC COMPATIBILITY (EMC)

The extent to which an electronic device will tolerate and generate Electro-Magnetic Interference (EMI).

ELECTRO-MAGNETIC INDUCTION

The production of an electrical potential difference (or voltage) across a conductor, situated in a changing magnetic flux.

ELECTRO-MAGNETIC INTERFERANCE (EMI)

A type of electrical noise that causes an electro-magnetic disturbance.

EMERGENCY POWER OFF (EPO)/ EMERGENCY SHUTDOWN (ESD)

A signal contact on a UPS which will initiate a total UPS shutdown.

EMERGENCY RESPONSE TIME

The speed of response specified within a maintenance plan for an engineer to attend site.

ESSENTIAL SYSTEMS

Equipment which will need to be kept operational, but can withstand a 15 – 30 second power interruption.then feeds the electrical equipment.

FERRO-RESONANCE

A resonant interaction between capacitors and saturable iron-core inductors which limits current flow. This principle is employed within Constant Voltage Transformers (CVTs).

FERRO-RESONANT TRANSFORMER

A voltage regulating transformer using the principle of ferro-resonance.

FIXED CELLULAR TERMINAL (FCT)

A communications device that can receive and route telephone calls through a built-in mobile phone.

FLOAT CHARGING

A term used when charging a battery set at a steady voltage level.

GLOBAL HEADQUARTERS

(USA AND INTERNATIONAL EXCLUDING EMEA) Power-Sonic Corporation

365 Cabela Dr Suite 300, Reno, Nevada 89523 USA **T:** +1 619 661 2020

E: customer-service@power-sonic.com

 POWER-SONIC EMEA

 (EMEA - EUROPE, MIDDLE EAST AND AFRICA)

 Smitspol 4, 3861 RS Nijkerk,

 The Netherlands

 T NL: + 31 33 7410 700

 T UK: + 44 1268 560 686

 T FR: + 33 344 32 18 17

 E: salesEMEA@power-sonic.com

To ensure safe and efficient operation always refer to the latest edition of our Technical Manual, as published on our website. © 2021. Power-Sonic Corporation. All rights reserved. All trademarks are the property of their respective owners. All data subject to change without notice. E&O.E



TRUSTED BATTERY SOLUTIONS

GLOSSARY OF UPS SYSTEM TECHNICAL TERMS

FLYWHEELS (DC)

A device used to convert kinetic energy into a standby supply of DC power for a UPS either in place of a battery set or to reduce the initial discharge during momentary interruptions.

FREOUENCY CONVERTER

An electrical device for changing the input frequency to a different output frequency.

FUEL CELL

A device that uses gases such as hydrogen, or other fuels such as methanol, to generate an AC or DC electrical supply. Can be used as a greener alternative to battery power or generators.

GALVANIC ISOLATION

A separation of the input and output supplies to a device in such a way that energy flows through a field rather than through

GAS DISCHARGE TUBE (GDT)

A protection device consisting of an arrangement of electrodes in a gas within an insulating, temperature-resistant ceramic or glass case which

GAS TURBINE

A device that converts kinetic energy generated by combustion into electrical energy to provide an AC standby power source.

GENERATOR

A device that uses combustion to generate electrical energy and to provide an AC or DC power source.

HARMONICS

Harmonics are multiple wave-forms of the basic frequency. The basic frequency or first harmonic within Europe is 50Hz USA 60Hz.

HARMONIC DISTORTION OR TOTAL HARMONIC DISTORTION (THDi)

Distortion of a mains power supply sine-wave from its fundamental frequency and wave shape.

GLOBAL HEADQUARTERS

(USA AND INTERNATIONAL EXCLUDING EMEA) **Power-Sonic Corporation**

365 Cabela Dr Suite 300, Reno, Nevada 89523 USA T: +1 619 661 2020

E: customer-service@power-sonic.com

POWER-SONIC EMEA (EMEA - EUROPE, MIDDLE EAST AND AFRICA) Smitspol 4, 3861 RS Nijkerk, The Netherlands T NL: + 31 33 7410 700 T UK: + 44 1268 560 686 TFR: + 33 344 32 18 17 E: salesEMEA@power-sonic.com



HARMONIC FILTER

A device which reduces the generated harmonic distortion, enabling a high power factor to be provided to its AC source.

HERTZ (HZ)

The number of complete cycles per second of a waveform. Normal mains frequency in Europe is 50Hz and in North America 60Hz.

HOT AISLE/ COLD AISLE ARCHITECTURE

A rack enclosed architecture in which parallel aisles of enclosures are arranged with rack fronts always facing rack fronts and rack rears always facing rack rears. This ensures separation between cooling air in the 'cold' aisle entering the front of the racks and warm exhaust air leaving the back of the racks in the 'hot' aisle. Separation of cooling air and exhaust air results in higher cooling system efficiencies and the ability to cool higher power densities in the computing environment.

HVAC

An abbreviation for Heating, Ventilation and Air Conditioning. Sometimes an 'R' is shown at the end to represent Refrigeration (HVACR).

ICC

Short-circuit current.

INPUT

Nominal current.

INCOMER

The cable carrying the mains power supply into a building from the electrical substation and Point of Common Coupling (PCC).

INDUCTANCE

The generation of an electro-motive force in an inductive circuit by varying the magnetic flux through it.

INGRESS PROTECTION (IP PROTECTION)

An IP number is often specified when referring to protection against both solids and liquids offered by enclosures around electronic equipment. The first number refers to solid objects, one being the lowest and six the highest. The second refers to liquids, eight being the highest protection.

GLOBAL HEADQUARTERS (USA AND INTERNATIONAL EXCLUDING EMEA)

Power-Sonic Corporation 365 Cabela Dr Suite 300, Reno, Nevada 89523 USA T: +1 619 661 2020

E: customer-service@power-sonic.com

POWER-SONIC EMEA (EMEA - EUROPE, MIDDLE EAST AND AFRICA) Smitspol 4, 3861 RS Nijkerk, The Netherlands T NL: + 31 33 7410 700 T UK: + 44 1268 560 686 T FR: + 33 344 32 18 17 E: salesEMEA@power-sonic.com

To ensure safe and efficient operation always refer to the latest edition of our Technical Manual, as published on our website. © 2021. Power-Sonic Corporation. All rights reserved. All trademarks are the property of their respective owners. All data subject to change without notice. E&O.E



INSULATED GATE BIPOLAR TRANSISTOR (IGBT)

A high power switching device used in rectifiers and inverters.

IN-RUSH

The initial surge in current drawn loads, for example, to charge capacitive circuits.

INVERTER

Circuitry that converts DC energy to an AC output.

JBUS

A communications protocol that creates a hierarchical structure (one master and several slaves) from a single RS-232 communication link,

JOULE (J)

A measurement of energy defined as one Watt per second.

LINEAR LOADS

A load in which the relationship between voltage and current is constant, based on a relatively constant load impedance.

LINE INTERACTIVE UPS

This is an off-line UPS with an Automatic Voltage Regulator on the mains supply. This will adjust drops in the mains voltage back to the correct

LOAD

The electrical equipment powered from a device.

LOAD SHEDDING

Switching off non-essential equipment in order to increase the total runtime of the remaining system being powered by a finite power source.

GLOBAL HEADQUARTERS

(USA AND INTERNATIONAL EXCLUDING EMEA) Power-Sonic Corporation

365 Cabela Dr Suite 300, Reno, Nevada 89523 USA T: +1 619 661 2020

E: customer-service@power-sonic.com

POWER-SONIC EMEA (EMEA - EUROPE, MIDDLE EAST AND AFRICA) Smitspol 4, 3861 RS Nijkerk, The Netherlands T NL: + 31 33 7410 700 T UK: + 44 1268 560 686 T FR: + 33 344 32 18 17 E: salesEMEA@power-sonic.com

To ensure safe and efficient operation always refer to the latest edition of our Technical Manual, as published on our website. © 2021. Power-Sonic Corporation. All rights reserved. All trademarks are the property of their respective owners. All data subject to change without notice. E&O.E



MAINTENANCE BYPASS

A bypass supply which is used to power the electrical equipment during maintenance, which can be either internal or external to the equipment. Also known as a bypass panel or wrap-around bypass.

MAKE-BEFORE-BREAK (MBB) BYPASS

A bypass that makes contact between the primary (UPS output) and secondary (bypass supply) power sources before transferring the load.

MEAN TIME BETWEEN FAILURE (MTBF)

A measure of reliability and the average length of operational time between failures. This can be based on monitoring a field population, or calculated for a system based on the known MTBF values of its components to a defined process and standard.

MEAN TIME TO REPAIR (MTTR)

A measure of the average time taken to bring back a system to full operation following a failure.

METAL OXIDE VARISTOR (MOV)

A device capable of absorbing very high surge currents without damage to itself.

MODBUS

A communications protocol that creates a hierarchical structure (one master and several slaves) from a single RS-232 communication link, similar to JBUS.

NOISE LEVEL

Normally measured in decibels (dB) or (dBA). Noise may also be referred to as electrical noise in a circuit. This is a high frequency disturbance which can disrupt electrical circuits.

NON-ESSENTIAL LOADS

Electrical equipment that can be dropped during a mains power supply failure during load shedding.

NON-LINEAR LOADS

A load in which the relationship between voltage and current fluctuates based on alternating load impedance..

GLOBAL HEADQUARTERS

(USA AND INTERNATIONAL EXCLUDING EMEA)

 Power-Sonic Corporation

 365 Cabela Dr Suite 300,

 Reno, Nevada 89523

 USA

 T: +1 619 661 2020

E: customer-service@power-sonic.com

POWER-SONIC EMEA (EMEA - EUROPE, MIDDLE EAST AND AFRICA) Smitspol 4, 3861 RS Nijkerk, The Netherlands T NL: + 31 33 7410 700 T UK: + 44 1268 560 686 T FR: + 33 344 32 18 17 E: salesEMEA@power-sonic.com

To ensure safe and efficient operation always refer to the latest edition of our Technical Manual, as published on our website. © 2021. Power-Sonic Corporation. All rights reserved. All trademarks are the property of their respective owners. All data subject to change without notice. E&O.E



RAW CURRENT

Mains power which has not been cleaned.

REACTIVE POWER

Wasted energy returned back to the incoming AC power supply.

REAL POWER

A measure of the actual power (Watts) drawn by electrical equipment.

RECOVERY TIME

The time taken for the voltage to stabilize after a standby generator takes up the load.

RECTIFIER

A component part that converts an AC supply into a DC supply.

RECTIFIER/CHARGER

An assembly used within transformer-based UPS which converts an AC supply into a DC supply. This then powers the inverter and charges the battery set.

REGULATION

Control specification of an AC/DC output voltage

RESILIENCE

The capacity of a power protection system potentially exposed to hazards to adapt, by resisting or changing in order to reach and maintain an acceptable operational level.

RIPPLE

An undesirable AC disturbance superimposed onto the DC wave-form powering a device.

ROHS

Abbreviation for Restriction of Hazardous Substances, Directive 2002/95/EC.

GLOBAL HEADQUARTERS

(USA AND INTERNATIONAL EXCLUDING EMEA) Power-Sonic Corporation

365 Cabela Dr Suite 300, Reno, Nevada 89523 USA T: +1 619 661 2020

E: customer-service@power-sonic.com

 POWER-SONIC EMEA

 (EMEA - EUROPE, MIDDLE EAST AND AFRICA)

 Smitspol 4, 3861 RS Nijkerk,

 The Netherlands

 T NL: + 31 33 7410 700

 T UK: + 44 1268 560 686

 T FR: + 33 344 32 18 17

 E: salesEMEA@power-sonic.com

To ensure safe and efficient operation always refer to the latest edition of our Technical Manual, as published on our website. © 2021. Power-Sonic Corporation. All rights reserved. All trademarks are the property of their respective owners. All data subject to change without notice. E&O.E



ROOT MEAN SQUARE (RMS)

Taking one half of an AC current cycle, RMS is the square root of the average values of all the squares of current and voltage.

ROTARY UPS

An Uninterruptible Power Supply that converts kinetic energy from a flywheel into electrical energy to power electrical equipment.

RS-232

A standard interface for synchronous and asynchronous communications up to 20 kb/s between two compatible devices (one driver and one receiver) over distances of up to 15m.

RS-442

Similar to RS-232 but to a maximum transmission rate of 100Kb/s - 10Mb/s, up to ten receivers from a single driver and a distance of up to 1000m.

RS-485

An assembly used within transformer-based UPS which converts an AC supply into a DC supply. This then pow Similar to RS-442 but with up to 32 drivers and receivers.

SAGS AND DIPS

Decreases in power, below normal mains power, lasting several cycles.

SENSITIVE SYSTEMS

Electrical equipment that is not critical or essential but requires a clean shutdown.

SERIES-REDUNDANCY

A method whereby the output of one UPS module is used to supply the bypass of another. If one UPS fails the other automatically takes up the load.

SILICONE AVALANCHE DIODE (SAD)

A device which acts as a buffer reducing the initial surge currents of severe surges and transients.

GLOBAL HEADQUARTERS

(USA AND INTERNATIONAL EXCLUDING EMEA) Power-Sonic Corporation

365 Cabela Dr Suite 300, Reno, Nevada 89523 USA **T:** +1 619 661 2020

E: customer-service@power-sonic.com

POWER-SONIC EMEA (EMEA - EUROPE, MIDDLE EAST AND AFRICA) Smitspol 4, 3861 RS Nijkerk, The Netherlands T NL: + 31 33 7410 700 T UK: + 44 1268 560 686 T FR: + 33 344 32 18 17 E: salesEMEA@power-sonic.com

To ensure safe and efficient operation always refer to the latest edition of our Technical Manual, as published on our website. © 2021. Power-Sonic Corporation. All rights reserved. All trademarks are the property of their respective owners. All data subject to change without notice. E&O.E



SIMPLE NETWORK MANAGING PROTOCOL (SNMP)

A communications protocol that allows hardware, on a network, with a TCP/IP connection, to be monitored and controlled.

SINE-WAVE

A graphic depiction, viewed on an oscilloscope, of the wave-form produced by an Alternating Current (AC).

SINGLE-PHASE

A single-phase supply consists of a single sine-wave at a fundamental frequency. In Europe this refers to a mains electrical supply of 230V AC.

SLEW RATE

The speed at which a UPS can synchronise output frequency with another AC power source, such as a generator.

SPIKES

An assembly used within transformer-based UPS which converts an AC supply into a DC supply. This then pow Similar to R A very brief large voltage increase on the normal AC supply.

STATIC STABILITY

A term used to describe the delivery of a stable electrical output voltage from a device under stable load conditions.

STATIC SWITCH

A solid state high-speed switch capable of transferring a load between AC power sources.

STATIC UPS

An Uninterruptible Power Supply incorporating solid state electronics.

SUPER CAPACITORS

Electronic components capable of storing an electrical charge which can supplement usage of battery power within a UPS.

SURGES

Very short duration substantial increase of the mains power voltage..

GLOBAL HEADQUARTERS

(USA AND INTERNATIONAL EXCLUDING EMEA)

 Power-Sonic Corporation

 365 Cabela Dr Suite 300,

 Reno, Nevada 89523

 USA

 T: +1 619 661 2020

E: customer-service@power-sonic.com

POWER-SONIC EMEA (EMEA - EUROPE, MIDDLE EAST AND AFRICA) Smitspol 4, 3861 RS Nijkerk, The Netherlands T NL: + 31 33 7410 700 T UK: + 44 1268 560 686 T FR: + 33 344 32 18 17 E: salesEMEA@power-sonic.com

To ensure safe and efficient operation always refer to the latest edition of our Technical Manual, as published on our website. © 2021. Power-Sonic Corporation. All rights reserved. All trademarks are the property of their respective owners. All data subject to change without notice. E&O.E



SWITCHED MODE POWER SUPPLY (SMPS)

A type of Power Supply Unit (PSU), most commonly found within computer, telecommunications and electronic devices.

SWITCHING TIME

Also known as Transfer Time. The delay between the load transference from one AC electrical supply to another.

THERMAL RUNAWAY

An adverse condition whereby batteries dramatically overheat. Often caused by cells generating heat as they become fully charged and cannot be sufficiently dissipated into the ambient temperature.

THREE-PHASE

A 400V/415V mains supply achieved by overlapping three single-phases, each 120° out of phase with each other.

THYRISTOR

An electrical component which is a semi-conductor switching device

TOTAL HARMONIC DISTORTION (THDi)

The total harmonic distortion introduced into a system compared to a normal sine-wave.

TOTAL POWER FACTOR/TRUE POWER FACTOR

The total power factor including both distortion and displacement power factors.

TRANSFER TIME

Also known as Switching Time. The delay between the load transference from one AC electrical supply to another.

TRANSFORMER

An electrical component used for changing voltages. It consists of wire wrapped around a core with insulated iron plates. Also used to achieve Galvanic Isolation.

TRANSIENTS

A very brief but severe voltage increase within the normal mains electrical supply. Damaging to sensitive electronic equipment.

GLOBAL HEADQUARTERS

(USA AND INTERNATIONAL EXCLUDING EMEA)

 Power-Sonic Corporation

 365 Cabela Dr Suite 300,

 Reno, Nevada 89523

 USA

 T: +1 619 661 2020

E: customer-service@power-sonic.com

POWER-SONIC EMEA (EMEA - EUROPE, MIDDLE EAST AND AFRICA) Smitspol 4, 3861 RS Nijkerk, The Netherlands T NL: + 31 33 7410 700 T UK: + 44 1268 560 686 T FR: + 33 344 32 18 17 E: salesEMEA@power-sonic.com

To ensure safe and efficient operation always refer to the latest edition of our Technical Manual, as published on our website. © 2021. Power-Sonic Corporation. All rights reserved. All trademarks are the property of their respective owners. All data subject to change without notice. E&O.E



TRANSIENT VOLTAGE SURGE SUPRESSOR (TVSS)

An electrical component introduced into a circuit to attenuate brief voltage surges.

TRIPLENS (TRIPLE-N)

A multiple of the third harmonic in a waveform.

UNDER VOLTAGE

An extended drop in the specified voltage.

UNINTERRUPTIBLE COOLING

The process of continued heat removal from the IT Room or Data Centre during equipment failure or power failure to preclude thermal damage and data loss due to equipment overheating.

UNITERRUPTIBLE POWER SUPPLY (UPS)

A source of standby power capable of maintaining the electrical supply to connected electrical equipment for a specified period of time. A UPS

UPS GROUP SYNCHRONISER (UGS)

A device used when two separate groups of parallel UPS need to have their outputs synchronised.

VALVE-REGULATED LEAD ACID (VRLA) BATTERY

A type of Lead-Acid battery.

VOLT (V, KV OR MV)

A base unit of electrical force. One Volt will send one Ampere of electrical current through a resistance of one Ohm.

VOLT AMPERE (VA OR MVA)

A unit or units of Apparent Power..

VOLT-FREE CONTACTS (VFCc)

A pair of contacts used to make or break other circuits.

GLOBAL HEADQUARTERS

(USA AND INTERNATIONAL EXCLUDING EMEA) Power-Sonic Corporation

365 Cabela Dr Suite 300, Reno, Nevada 89523 USA **T:** +1 619 661 2020

E: customer-service@power-sonic.com

POWER-SONIC EMEA (EMEA – EUROPE, MIDDLE EAST AND AFRICA)

Smitspol 4, 3861 RS Nijkerk, The Netherlands **T NL:** + 31 33 7410 700 **T UK:** + 44 1268 560 686 **T FR:** + 33 344 32 18 17 **E:** salesEMEA@power-sonic.com





WATTS (W, KW, OR MW)

A measure of power which flows to electrical equipment.

WAVE-FORM

A graphical depiction, viewed on an oscilloscope, showing the shape of a wave.

WEEE

Waste Electrical and Electronic Equipment, Directive 2002/96/EC

GLOBAL HEADQUARTERS

(USA AND INTERNATIONAL EXCLUDING EMEA)

 Power-Sonic Corporation

 365 Cabela Dr Suite 300,

 Reno, Nevada 89523

 USA

 T: +1 619 661 2020

E: customer-service@power-sonic.com

POWER-SONIC EMEA (EMEA - EUROPE, MIDDLE EAST AND AFRICA) Smitspol 4, 3861 RS Nijkerk, The Netherlands T NL: + 31 33 7410 700 T UK: + 44 1268 560 686 T FR: + 33 344 32 18 17

E: salesEMEA@power-sonic.com