



MGE™ Galaxy™ 5500

Safety and Handling



IMPORTANT SAFETY INSTRUCTIONS - SAVE THESE INSTRUCTIONS



WARNING: ALL safety instructions in this document must be read, understood and followed. Failure to do so could result in equipment damage, serious injury, or death.



WARNING: For safety reasons, only authorized and qualified personnel is allowed to remove the front panel and perform operation and maintenance behind it.

Symbols Used



WARNING: Indicates an electrical hazard, which, if not avoided, could result in injury or death.



Caution: Indicates a hazard, which, if not avoided, could result in injury or death.



Note: Indicates important information.

Handling Safety



Caution: Heavy: Do not lift heavy loads without assistance. Refer to national regulations for lifting and see the Receiving and Unpacking sheet for weights and dimensions.

Operating environment



Caution: A protection isolator circuit breaker must be installed upstream and be easily accessible.



Caution: The UPS must be installed in a room with restricted access (authorized and qualified personnel only).



Caution: The UPS must be installed on a non-inflammable, level and solid surface (e.g. concrete).



Caution: Operating temperature range for UPS and batteries: 0 to 35°C. Extreme temperature variation must be avoided.



Caution: Installation and maintenance must be done by authorized and qualified personnel only.



Temperature range:
0° to 40° C / 32° to 104° F



Keep ventilated. Do not block ventilation openings.



Relative humidity:
<95% non-condensing.



Maximum elevation: 0 to 1000 m / 0 to 3280 ft.

For operation at higher elevation, derate as follows:
1500 m : 0.975
2000 m : 0.95
2500 m : 0.925
3000 m : 0.9
4000 m : 0.85

Unusual operating conditions may justify special design or protective measures, eg. :

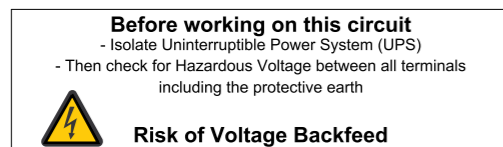
- Harmful smoke, abrasive dust,
- humidity, vapor, salt air, bad weather or dripping,
- explosive dust and gas mixture,
- extreme temperature variations,
- bad ventilation,
- conductive or radiant heat from other sources,
- cooling water containing acid or impurities which may cause scale,
- silt, electrolysis or corrosion of converter parts exposed to water,
- strong electromagnetic fields,
- radioactive levels higher than those of the natural environment,
- fungus, insects, vermin, etc.

Electrical Safety



WARNING: Electrical Hazard

- The units contain an internal energy source.
- Hazardous voltage can be present even when disconnected from the utility/mains supply. Before installing or servicing the equipment, ensure that the units are OFF and that utility/mains and batteries are disconnected.
- A label must indicate the existence of multiple supplies at each disconnect device and give the adequate instructions for the removal of all power (AC and DC) from the unit.
- The following labels must be placed at the terminals of the UPS and at all upstream disconnect devices.



- Isolation of the UPS from upstream power sources must be possible thanks to an isolation device (disconnection device, disconnection circuit breaker) in accordance with local regulations. The isolation device must be easily accessible.
- An automatic isolating device (back-feed option or any external system meeting the requirements of IEC / EN 62040-1) must prevent any possibility of hazardous voltage at the input terminals of the isolating device. Such isolating device (motorized breaker, contactor) will have 4 poles unless the neutral is strongly and permanently wired to the ground with the appropriate control to open within less than 15 sec when upstream supply voltage disappears.
- Before working on the upstream UPS supply cables, proceed to their isolation (disconnection) on both source and UPS sides in order to prevent any possibility of hazardous voltage feed-back on the cables or terminals.
- An emergency switching (disconnect) device preventing any further supply to the load in any mode of operation must be installed and will cut the upstream supplies of the UPS.
- The UPS must be installed or opened or serviced only by authorized and qualified service personnel.
- The UPS installation and operation instructions contained in the installation and operation manual must be followed in the indicated order.
- The UPS must be properly earthed and due to a high leakage current, the earthing conductor must be connected first.

- After powering off the UPS, wait five minutes before opening the UPS to allow the capacitors to discharge.
- Never install the UPS near liquids or in an excessively damp environment. Never let a liquid, excessive damp or a foreign body penetrate inside the UPS.
- Make sure that the indications on the rating plate correspond to your AC-power system and to the actual electrical consumption of all the equipment to be connected to the UPS.

Battery safety



WARNING:

- Risk of Energy Hazard! The units contain an internal energy source. Hazardous voltage may be present even when disconnected from the power sources. A Total Power Off procedure must be done only by authorized and qualified service personnel to completely de-energize the system.
- Work on batteries: Caution : A battery can present a risk of electrical shock and high short-circuit current. The following precautions should be observed when working on batteries:
 - a) Remove watches, rings or other metals objects.
 - b) Use tools with insulated handles.
 - c) Wear rubber gloves and boots.
 - d) Do not lay tools or metal parts on top of the batteries.
 - e) Disconnect the charging source prior to connecting or disconnecting battery terminals.
 - f) Determine if battery is inadvertently grounded. If inadvertently grounded, remove source from ground. Contact with any part of a grounded battery can result in electrical shock. The likelihood of such shock can be reduced if such grounds are removed during installation and maintenance (applicable to equipment and remote battery supplies not having a grounded supply circuit).
- When replacing batteries, always replace with the same number and type.
- Servicing of batteries should be performed or supervised by personnel knowledgeable of batteries and the required precautions. Keep unauthorized personnel away from batteries.
- Disconnect charging source prior to connecting or disconnecting battery terminals.
- Do not dispose of batteries in a fire, as they may explode.
- Do not open, alter, or mutilate batteries. Released electrolyte is harmful to the skin and eyes.

- The battery supplied with the UPS contains small amounts of toxic materials.



Caution: Handle, transport, and properly dispose of or recycle batteries in accordance with local codes and regulations.

Battery storage time

- The maximum storage time of the UPS is limited to sixth months due to the need of recharging the integrated batteries. If the UPS remains de-energised for a long period, we recommend that you energise the UPS for a period of 24 hours, at least once every month. This charges the battery, thus avoiding possible irreversible damage.

Regulatory Agency Approval

The UPS system is listed according to the CE norms as applicable.



The UPS must always be installed in compliance with the requirements and standard of:

- IEC 60364-4-42: Protection against thermal effects
- IEC 60364-4-41: Protection against electric shock
- IEC 60364-4-482: Protection against fire

and all national requirements and standards in force.

Contact Information

For local, country-specific centers: go to www.apc.com/support/contact.