

Outdoor UPS

Outdoor UPS

wide temperature batteries

IP 44/NEMA-3R enclosure

Outdoor UPS model

550

550 VA
360 watts
120 vac
1.2 hrs @ 360W
2.5 hrs @ 180W
3.5 hrs @ 100W
6 hours @ 50W
-20° to +60°C;
-40° to +60°C
with optional
battery heater

Outdoor extreme wide temperature uninterruptible power system

OutdoorUPS-550 is constructed with extreme wide/low temperature batteries and housed in a weather protected wall-mountable IP44 (NEMA-3R) enclosure. It provides very long battery runtimes, excellent surge protection and communications capability.

Key benefits

This rugged outdoor UPS design is ideal for protecting mission-critical outdoor equipment in -20° to +60°C (-4° to +140°F) environments where ac power delivery is unreliable and long battery backup time is necessary.

An optional battery heater allows operation of the UPS system over a wider ambient temperature range of -40° to +60°C (-40° to +140°F).

Battery run-times for the OutdoorUPS-550 are approximately 1.2 hours @ 360 watts load; 2.5 hours @ 180 watts load; 3.5 hours @ 100 watts load; and 6 hours @ 50 watts load.

How the OutdoorUPS-550 works

Upon brownout, or loss of power, the OutdoorUPS-550 unit will transfer to battery in less than 8ms, enabling uninterrupted operation of your mission-critical outdoor systems.

One LED provides visual assessment of UPS status. Front panel rocker switches control UPS functions. Audible alarms activate upon power outage and low-battery conditions.

Typical applications

These outdoor extreme wide temperature rated UPS are for protection of mission-critical outdoor communications, security systems, surveillance cameras/CCTV, and industrial control equipment against long duration ac power outages, and surges/spikes due to nearby lightning strikes, etc.



Key features

- Cabinet can be pedestal (ground), pole, or wall mounted
- Full weather protection IP44(NEMA 3R) metal cabinet
- Wide temperature batteries
- Conformal coated boards for moisture ingress protection
- Undervoltage protection
- Enhanced surge protection
- Two year warranty on electronics, parts and labor; manufacturer's warranty on batteries
- Status and alarm signals available through DB9 connector



Ac input and UPS output cable entry via two 12 mm (1/2") liquid-tight cable glands



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Outdoor UPS



Outdoor UPS
with wide
temperature
batteries

Specification	Outdoor UPS-550
Electrical	
Capacity in VA (watts)	550VA (360 watts)
UPS type	Single conversion outdoor UPS with less than 8 ms transfer time.
Input	
Nominal voltage	120 volts ac single phase
Operating voltage/amps	100 to 130 volts ac, (5 amperes maximum input current)
Ac input (hardwire)	Terminal block via through-wall watertight cable glands (fittings).
Operating frequency	57 – 63Hz
Surge protection	Three stage protection via inductor, capacitor and MOV based assembly.
Output	
Nominal voltage and maximum amperage	120 vac, single phase, sine wave during normal operation. 3 amperes maximum.
Nominal frequency	57 – 63Hz
Power efficiency	>98% for normal operation, 80% or higher during battery inverter operation.
Transfer time	Less than 8ms typical between ac and inverter, phase-locked to the ac mains voltage.
UPS inverter output	105 to 130V _{RMS} , 60Hz +/- 1%, pulse-width-modulated, modified square wave.
Transfer: ac to inverter	Brown-out threshold: 97+/-2V _{RMS}
Transfer: inverter to ac	The line voltage has to stabilize to between 100 and 130V _{RMS} for at least 2 seconds in order to transfer back to ac mains.
Batteries	Wide temperature sealed gel-cells -20° to +60°C (-4° to +140°F); -40° to +60°C (-40° to +140°F) with optional battery heater.
Battery capacity	24 vdc, 32Ah
Battery backup time	Approximately 1.2 hours @ 360 watts load; 2.5 hours @ 180 watts load; 3.5 hours @ 100 watts load; 6 hours @ 50 watts load.
Battery recharge time	48 hours to 90% capacity after full discharge, via 27 vdc, 1 amp charger.
Battery protection	When battery is discharged below 21 volts, the system will shutdown automatically in order to protect the batteries from complete discharge. Upon return of normal power, the UPS will turn on automatically and begin recharging the batteries.
Indicators and alarm	LED indicator and audible signals for ac, inverter, and battery status.
Communications	DB-9 connector provides RS-232 compatible alarm signals.
Ac output (hardwire)	Terminal block via through-wall 12mm(1/2") water-tight cable glands.
Physical	
Dimensions	457 mm(18")high x 457 mm(18")wide x 203 mm(8")deep
Weight	41 kg(90 lbs)
Cabinet	IP44 (NEMA-3R) fully weather protected painted light gray metal cabinet.
Mounting options	A wall mounting bracket is standard. Optional pole mounting kits and optional pad mounting brackets (see next pages) are also available, but are factory installed, so must be ordered at the same time as the unit.
Safety	
Overload protection	Internal fuses protect all ac and dc circuits.
Environmental	
Operating temperature, battery heater option	-20° to +60°C (-4° to +140°F) ambient air temperature. -40° to +60°C (-40° to +140°F) with optional battery heater.
Moisture protection	Conformal coating of electronic boards for moisture resistance to protect against high humidity environments.
Warranty	
Warranty	Two year limited warranty, parts & labor; manufacturer's battery warranty.



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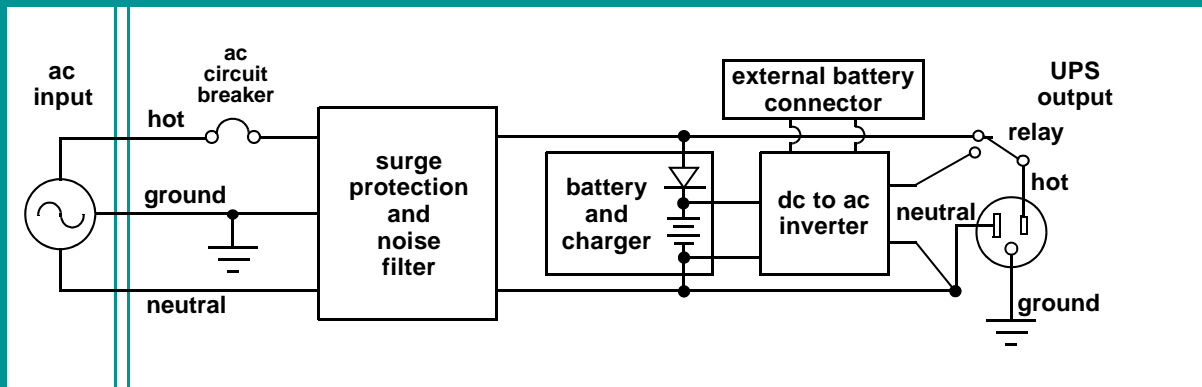
Outdoor
UPS



optional bandable or
boltable monopole
mounting brackets



OutdoorUPS-550 system architecture



OutdoorUPS-550 at a glance

Heavy-duty outdoor UPS with extreme wide-temperature batteries

- Wide ambient temperature range sealed gel-cell batteries:
-20° to +60°C (-4° to +140°F); or
-40° to +60°C (-40° to +140°F)
with optional thermostat
controlled battery heater
- 24 vdc battery bus
- Backup time, approximately
1.2 hours @ 360 watts, or
2.5 hours @ 180 watts, or
3.5 hours @ 100 watts, or
6 hours @ 50 watts
- For longer runtimes, please call
for extended options
- 120 vac, 60Hz input and output
- Weather protected
IP44 (NEMA-3R)
painted metal cabinet
- Less than 8ms transfer time
- Thermostat controlled
fan is included
- Conformal coated boards for
moisture ingress protection
- Larger cabinet options are
available for customers requiring
extra 'hotel' space inside the
cabinet (for customer's own
equipment)



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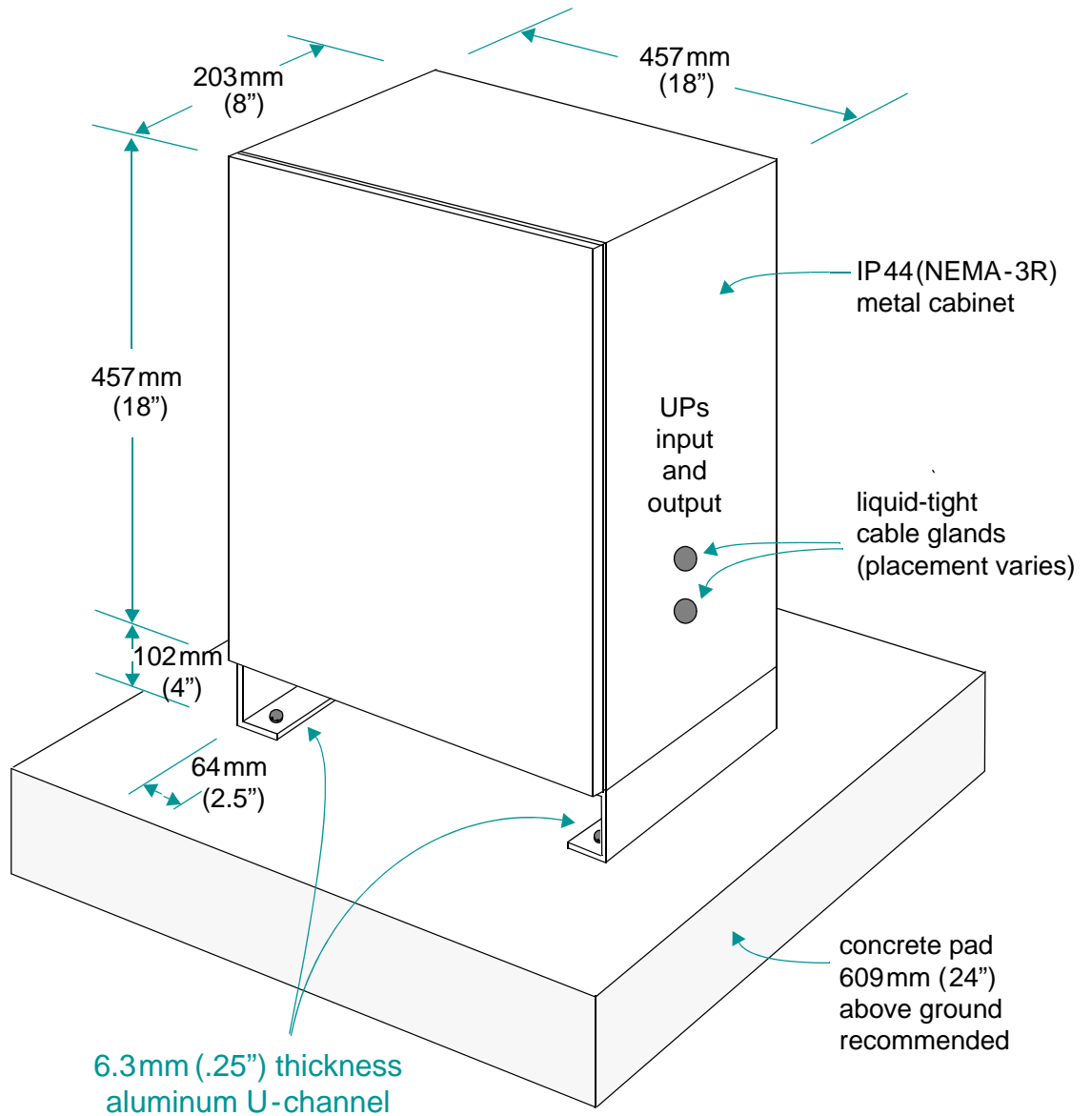
Outdoor UPs



Mounting on a concrete pad with U-channel

Following is a drawing of a recommended pedestal/concrete pad mounted installation using the TSi Power aluminum U-channel mounting brackets. When ordered with these, the units will come with them already bolted to the bottom of the cabinet. There are four pre-drilled bolt holes that will then allow bolting of the unit to a concrete pad or other mounting surface, such as a Quazite® pad or Unistrut®.

Outdoor UPs pad mounted



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