

By far, the #1 and #2 most-FAQs:

(Be sure to also visit FAQs - Technical)

Can a SunRunr run my house? and What will it run and for how long? Complicated questions involving your usage requirements. One SunRunr can likely provide 5-10% of the power consumed by an average American house. What Will A SunRunr Run offers various examples involving refrigerators, lights, etc. A \$20 Kill-A-Watt Energy Usage Meter helps greatly in planning. EnergyStar appliances or CFL or LED bulbs will extend run times. Just like you can run out of gas, it is possible to run out of stored sunshine temporarily, so budgeting, conservation, and understanding consumption is key. As with any battery, it's run time before recharging is dependent on its usage.

General:

What if I need more power? There are two ways to add more power - simply add a second pair of panels to your main unit for more real-time and faster power recovery or link a SUNPWR power module to a main unit multiplying energy generation and storage.

How much does the system weigh? (i.e. comment on "portable") The units weigh 260lbs and the two panels weigh 60lbs. "Portable" meaning stand-alone, moveable/mobile, transportable, not installed. SunRunrs are heavy, even for two strong men, but they roll easily on hard surfaces and are ruggedly-constructed, able to be lifted by a fork truck tine through the handles!

Should I use my unit often or can I just wait until I need backup power? We highly recommend consistent use of all units. Usage-with-recharge exercises and extends the life of the battery (avoids sulfation). Besides, why not reduce your utility bill at the same time and ensure it is charged and ready when needed for backup emergency power. At worst, recharge it from the grid monthly and never let it sit discharged, especially in cold temperatures.

Can you help me understand the specifications, why they matter, and how they compare to other products? A few other products seem similar at first glance, but the difference is in the numbers. Look in the footer for links under Learn. SunRunrs are not meant to compete with the grid, permanent residential grid-tie installations, megaWatt trailered systems, scary do-it-yourself kits, low-power inverter/battery units, or hand held, limited-capacity, real-time sunshine supplies. They are unique in that they were designed to house all the necessary components of an industrial-strength power system within a rugged, easy-to-operate, safety-minded, self-contained enclosure, yet remain portable. We have yet to find any that offer as much continuous/surge power or are patented.

Can I recharge with sources other than solar? Yes. Using an Auxiliary Plug, you may recharge with your 12V, 300+W wind or water (microhydro) turbine. And of course, there is always the grid-powered AC/DC charger. (Wind and water turbines sold through their dealers.)

Warranty? Testimonials? American-made? A SunRunr comes with a limited one year warranty which covers material defects and workmanship. Please visit Testimonials from link in footer. Yes, proudly American-made! Assembled in Virginia using 75% Made in USA components.

Usage and Operation:

Can I run 240VAC appliances (like well pumps, compressors, most international appliances)? Yes, the SUN240 model offers 60Hz and the SUN220 50Hz, like often used overseas. The SUN240 cannot split a leg of power off and make 110VAC like a gas-powered generator can. And no, SUN220s and SUN240s are NOT just bigger versions of SUN110s - their designations come from their output, not size.

Can I run air conditioning? A SunRunr's inverter can likely handle the power requirements of your air conditioning, but a/c requires A LOT of power so duration is the problem. Fans are much better. Heat and cold (except refrigeration) take a lot of electricity, so we recommend cooking, heating (except fan), and air conditioning use some other source of power.

Can I get DC power out, too? Yes, each unit has a power socket similar to an automobile's. And the AUX portal along with an Auxiliary Plug is able to output 30 amps of DC power. Need more? The modified Link Cord offers a whopping 175 amps out.

What size pump can a SunRunr run? 15% of all SunRunrs sold are dedicated to well pumps! The casual answer to this question is 3/4 Hp, but there are exceptions in both directions. Call with your pump's specifications and we will provide a thumb's up or a thumb's down. We'll be asking for horsepower and depth, but what we really need to know is the "AMP DRAW" both at (locked rotor) start and while running and the run time of a pump cycle. You may need to ask an electrician or an electrically-inclined associate to take readings for these numbers.

Can I use my SunRunr indoors? With no carbon monoxide, toxic emissions, heat, or noise, a SunRunr may be used indoors. Of course, give it space to "breathe". Garages and outbuildings are perfect.

Is there any maintenance required? Besides ensuring the solar panels are clean and free of obstructions so that they make the most power, there is nothing to maintain - no oil changes, no checking battery cells, no refilling gas cans. However, to get the best life, we state that a unit needs to be turned off when not in use, charged when possible, and used on a fairly-regular basis (exercise the battery).

How much power can I have per unit per day sustainably? Trying hard to save the words Watts, amps, or Volts for FAQs-Technical page. The quick answer is 3kWh/day/4-panel system from panels and storage leaving enough to last until the sun comes up again.

What is the return on investment in general and as compared to a similarly-sized gas generator? Six years If used in place of a gas generator making equivalent power. However, incorporate a couple \$300 refrigerator or freezer loads of food and you have greatly increased your ROI. The ROI is even higher if a unit is allowing your business to stay open in places where grid power is unreliable or only available a few hours per day.

System Planning:

When/why would I need the pure sine upgrade? Typically, modified sine is fine, but some desktops (laptops already have a converter built-in to their power plug), pellet stoves, high-end audio, super-high-quality power tools, and new high-tech appliances require pure (full) sine.

What is cost of running new grid power to an off grid site? New connections can be as much as \$500/mi (avg \$200/mi).

How far can the main unit be from the solar panels? Standard length cable between unit and panels is 30'. Upgrades are available up to 150'. The stored power may be used whether or not it is being recharged, so a SunRunr can be used ANYWHERE without being connected to panels and only needs to be within cable range for recharge by panels in sunlight.

How far can electrical devices be from unit? Can I use an extension cord or power strip? We recommend plugging directly in to the unit and if necessary, you may use extension cords, but as always, some power is lost with distance.

What should I do/prepare/plan before purchasing to ensure I am satisfied with my investment? Planning your system usage and positioning is recommended. The standard solar panel-to-unit charging cable is 30 ft long. If longer than 50' distance is required, a thicker cable is available at additional cost. Because each owner application is different, we ship panels in "portable" configuration. The panels are designed with a rugged frame to stand alone and may be positioned as necessary to maximize sun exposure. Please visit [Products](#) to see racking options. If non-portable installation is desired, contact a local solar installer to find correct racks or mounts and install according to code.

Weather:

What if it is cloudy or dark? Charging is possible through clouds or any light source, although at possibly a much lower rate. The unit may also be charged by other 12 VDC supplies such as a wind turbine or small microhydro water turbine unit or from the grid. See Products for more info, but remember there is often bright sun after the storm.

How long in bright sunshine would it take to charge a fully-discharged SunRunr? The included solar panels are rated at 145 W/hr each, therefore charge from fully-discharged in 8 hours bright sun. We recommend charging the battery when possible or while in use. The AGM battery prefers to be charged at a rate about 10% of it's capacity, so if another brand of solar generator quotes a faster charge, it really just has less to charge or is shortening the life of the battery. You may add a second set of solar panels to the system halving charge time. Note: ANY shadow on any part of the panels significantly decreases their electricity generation.

Can I use a SunRunr in any weather? The solar panels are weatherproof, but the SunRunr itself should only be operated when it is protected from the elements and dry (e.g. garage, porch, outbuilding). Unlike gas generators, it has a zero carbon footprint - no pollutants or deadly carbon monoxide and may be used indoors.