



2023 COMPANY CATALOG

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We started Amped with the vision of delivering world class appliances to off-grid customers. Yes, there were already solar products in the market, but they were disappointing ... lots of off-the-shelf AC appliances that were dimmed to achieve good runtimes, and lots of cheap products that lasted less than a year. Villagers told us that using solar was inferior compared to the experience of their wealthy cousins in the city. We set out to change solar's reputation.

For battery-run products, the key to performance is energy efficiency. If you can make an appliance more efficient, you can increase its brightness and make it louder without losing runtime. And if you own the power electronics (full-stack hardware development), you can build in additional beneficial features that improve the solar experience - like long shelf life, the ability to charge from both the wall or a from solar panel, and automated dimming of the appliances at the end of the night to extend runtimes by over an hour.

Being engineering nerds, we spent countless hours tearing down appliances. We identified exactly which circuit components were drawing the most energy and designed our own energy efficient alternatives. We applied this approach to solar lamps, and then progressed to solar televisions, and are now tackling solar fridges. The result? We build products that perform so well that you want to brag to your neighbors about them.

We are now tackling a new market segment: the 1.5 billion people who suffer up to 10 hours of blackouts per day. If they can afford it, they use dirty fossil fuel generators whenever there is a blackout. Fuel generators are polluting, emitting over 5 tons of CO₂ per year, and hazardous, increasing lung cancer risk by 70%. Amped's solar generator is the first viable clean alternative, which out-competes the fuel generator on both performance and price.

At Amped, we are curious, creative, bold and on a mission to...

REDEFINE **SOLAR**





Kurt Kuhlmann Co-Ceo

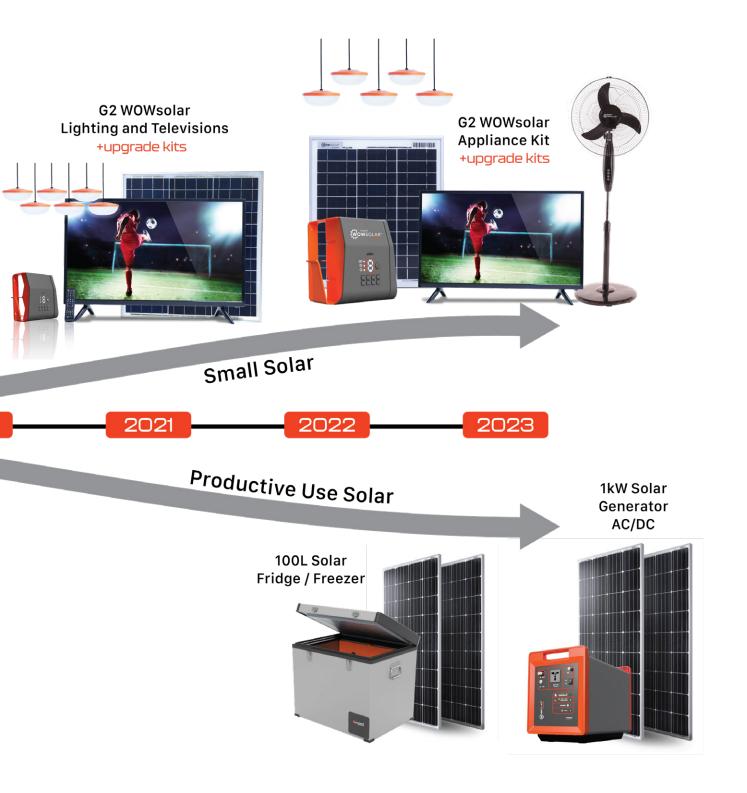




GROW YOUR BUSINESS WITH US

Back in 2018, we launched our **WOW**SOLARTM family of upgradeable solar lighting kits. Even our smallest lighting kits could upgrade into a TV kit by simply adding battery and solar panel. Our 19-inch solar televisions were the brightest in the market, and we quickly added a 22-inch TV, 24-inch TV, and 32-inch TV to the mix.

This year, we are excited to announce a whole new solar home family, a second generation (or G2, for short). Built to power appliances, the G2 platform can handle twice the power of G1. To support the rise of smart



phones across emerging markets, the G2 is jam-packed with places to stash smart phones as they are being charged. We also offer a USB expansion port for even more phones to be charged at once. G2 also offers more value per dollar, with competitive 80Whr, 120Whr, and 200Whr controllers, perfect for powering fans, 32" and 43" TVs, and our new, brighter lamps: 210 lumens!

After two years of R&D, we are releasing two new productive appliances: the EasyFreeze100 and the PowerHub1600. Feel free to skip to page 30 to see what all the buzz is about.





Solar Home Systems

Amped's solar home systems come with SmartPerformance™ appliances that boast city-like performance for off-grid use. Businesses can use our solar television in an open café playing football games that can be seen far and wide, even on a bright day. Restaurants can cool off customers with Amped's high-flow fans. And barber shops can power a full salon: razors, television, plus a fan. SmartPerformance™ means longer runtimes and brighter appliances.



Lights & Charging

Amped offers a range of solar lighting and phone charging Kits. Explore our entry-level 20Whr + 2-lamp kits as well as our larger 40Whr kits, perfect for charging smart phones, even at night!





Televisions & Fans

Mix and match Amped's solar televisions, stand-fans, and lamps to configure the entertainment kit of your dreams. Amped's extra-bright TV screen and high-flow fan are definite crowd-pleasers.

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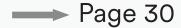
Productive Use Solar

For our solar fridge/freezer,
SmartPerformance™ means that businesses
can earn extra income with a powerful
compressor that chills drinks to freezing
in less than 45 minutes. For our Solar
Generator, SmartPerformance™ means that
businesses can run any AC appliance they
need and they get 24/7 clean backup power
that is resilient to heat, dust, and monsoons.
While most solutions last one year, Amped's
lasts at least five.



Fridge & Freezer

Amped's EasyFreeze has 2X better cooling power at half the cost of competing solutions. It also stays cold for over 30 hours even at night or on cloudy days. The powerful compressor flash cools drinks even on the hottest African days.





Solar Generator

Amped's Solar Generator delivers uninterrupted power for weak-grid users who suffer regular power outages. We replace dirty fuel generators with clean solar and turn the weak-grid into a reliable grid.

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LIGHTING & CHARGING -

LIGHTING AND PHONE CHARGING

WOWSOLAR™ is Amped's premium lighting kit



WOWSOLAR™ is Amped's premium lighting kit. From affordable to high-performance home setups, our lighting and phone charging kits do it all. Our lighting systems are designed to provide more light points (up to ten), brighter lamps (up to 400 Lumens), bigger solar panels for more phone charging, and portable accessories like a torch or radio with an extra-large battery for long runtimes between charges.



More Light Points and Brighter Lamps



More Phone Charging



Longer Torch/ Radio Runtime



Every WOWSOLAR™ Lighting Kit allows a customer to upgrade to an Amped Solar Television in their home without having to replace their initial purchase investment.

Wowsolar****G1 LIGHTING & PHONE CHARGING**





Amped's most affordable lighting kit with 20Whr of LiFePO4 battery, 2-3 pendant lamps and built-in phone charging.





Amped's premium lighting and phone charging kit with 20Whr of LiFePO4 battery, a larger solar panel, 4 pendant lamps and radio!





Amped's most affordable lighting kit with 25Whr of LiFePO4 battery, 4 pendant lamps and a radio!



Wowsolar™ 400

Amped's premium lighting and phone charging kit with 40Whr of LiFePO4 battery, a larger solar panel, 4 pendant lamps and radio!

Comparison Chart

Product	Lighting System Configuration	PAYGO Controller	Solar Panel	Radio with Inbuilt Torch	Standalone Metal Torch	Max Power Input	Max Power Output	Upgradable to TV & Fan
WOW SOLAR™ 60	3-Point w/3 hanging lamps	20Whr	6W	No	No	50W	120W	Yes
	4-Point w/4 hanging lamps	2000111						
WOWSOLAR™ 100	4-Point w/3 hanging lamps	20Whr	10W	Yes	No	50W	120W	Yes
	5-Point w/4 hanging lamps							
WOWSOLAR™ 250	4-Point 2/3 hanging lamps	25Whr	10W	Yes	No	50W	120W	Yes
	5-Point w/4 hanging lamps							
WOWSOLAR™ 400	5-Point w/3 hanging lamps	20Whr	15W	Yes	Yes	55W	120W	Yes
	6-Point w/4 hanging lamps	ZOVVIII	20W					

POWER THAT GROWS WITH YOU

Even with the launch of the G2, the beloved G1 system is still here to stay. At the low end (i.e. basic solar lighting kits), the Gen1 has a lean architecture that is unbeatable for price and performance.

Every system in the G1 family, even the smallest entry-level solar lighting kit has the capabilities of a large power center built right into the core of the PAYGO controller. It boasts three solar panel input ports, two 12V output ports, and dual USB ports. Start with just a 20Whr Controller and two lamps and later add more solar and batteries to grow into a large TV system or a barber shop kit. We support several sizes of upgrade options!





20WHR CONTROLLER

Three solar panel input ports.
30W max per port.





Two 12V appliance ports 30W max per port.

Two USB ports
10W max combined.

Two battery upgrade ports 50W max per port.



40WHR CONTROLLER

input ports.

30W max per port.





Four 12V appliance ports 30W max per port.

Two USB ports
10W max combined.

Two battery upgrade ports
50W max per port.



PANELS

6, 10, 15, 20, 40, and 50 Watt Panels available across the G1 Kits.

LAMPS

Support as many as ten lamps on the system! Lamps all have two brightness settings and come in two models: daisy-chain and non-daisy-chain.



TELEVISION UPGRADE

Upgrade with a 24 or 32" TV, fan, hair razor, ultra-bright lamps, and more!



@owsolar

BATTERY UPGRADE

Add up to two 80Wh battery expansion packs over time to increase runtimes.

PORTABLE TORCH & RADIO

Add a portable torch and/or radio to any of our kits. Both include a longlasting 7.4Wh battery. The radio runs for over 24 hours on a full battery, and includes a built-in torch!





TELEVISIONS & FANS

Introducing... THE G2 FAMILY



Auto-dimming lamps provide an extra hour of runtime.



2X the power of G1 Up to 120 Watts of solar panel.



Lots of places to store phones while charging.



Rain or shine... always have power. Multiple charge input sources (grid, minigrid, or solar).



40 / 80 WHR CONTROLLER

Three solar panel input ports. 30W max per port.

Two battery upgrade ports 50W max per port.





Four 12V appliance ports 45W max per port.

Two USB ports 10W max combined.

120 / 200 WHR CONTROLLER

2.5X the battery!

Three solar panel input ports. 30W max per port. Two battery upgrade ports





Four 12V appliance ports 45W max per port.

Two USB ports 10W max combined.



BIGGER PANELS

Up to 120 Watts of Solar panel.



MORE APPLIANCES

Power a 16" Standing Fan, a TV up to 43", or both at once! Run an extra-large 43" TV.

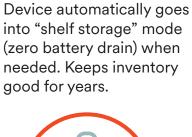
BIGGER ADD-ONS

High current external battery port.



MORE FLEXIBLE UPGRADES

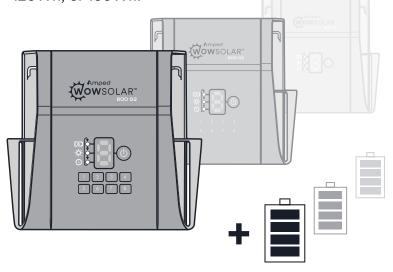
Upgrade with a wider range of add-on sizes: 40Wh, 80Wh, 120Wh, or 160Wh.



MORE FLEXIBLE

INVENTORY





Television

WOWSOLAR™ TV is Amped's complete solar television solution based on SmartPerformance™ technology.



The **WOW**SOLAR™ TV has the brightness of a TV in the city but with the energy efficiency needed for off-grid living, allowing customers to enjoy their TV anytime and anywhere, including outdoors. Business owners can display the TV in a restaurant or small shop. Minigrids can save on nighttime power budgets by deploying this ultra-efficient television.

Our TV includes Amped Intelligent Power Control, Appliance Security, and Appliance PAYGO. These exclusive Amped features set the WOWSOLAR™ TV system apart from other 12V DC TVs making it the industry's first true Solar TV. With so many features packed into one system, the **WOW**SOLAR™ TV is a must have for viewing your favorite football team or TV show.



On Grid Like Brightness



Longer Runtimes



Intelligent Security







Amped's entry-level television offering - perfect for home or business. It has an industry leading 120 nits of brightness on a 24" or 32" LED screen. Buy with either a 100 or 120Whr battery configuration.

INNOVATION INSIDE

The Amped engineering team built the TV from the ground up for efficiency. We use custom LED light strips with the highest Lumens per Watt and the highest transmissivity screens for the brightest and longest-running TVs.



Wowsolar™**TV G2**





Amped's premium TV & fan offering. It has an industry leading 120 nits of brightness on a 32" LED screen. Get either a 120Whr or 200Whr Controller. Run 4-6 lamps. Add in a 16" Stand Fan as well!



WowSOLAR™ TV 32 MINIGRID

Amped's premium minigrid television
- perfect for home or business. It has an
industry leading 120 nits of brightness on
a 32" LED screen. Comes with AC wall
charger.

Comparison Chart

Product	Included Battery	Solar Panel	TV Screen Size	Number of Lamps
WOW SOLAR™ TV 24100	100Whr	40W	24"	4 (10 Maximum)
WOWSOLAR™ TV 32120	120Whr	40W or 50W	32"	4 (10 Maximum)
WOWSOLAR™ TV 32120 G2	120Whr	40W or 50W	32"	4 (10 Maximum)
WOWSOLAR™ TV 32200 G2	200Whr	50W or 60W	32" (plus 16" Stand Fan!)	4 (10 Maximum)
WOW SOLAR™ TV 32 MINIGRID	-	-	32"	-

Fan

The Amped WOWSOLAR™ FAN is a solar powered cooling solution designed to provide 24-hour comfort in any environment.



WOWSOLAR[™] **FAN** is a premium cooling solution powered by a high-efficiency brushless DC motor that maximizes the power from the sun. Every **WOW**SOLAR[™] **FAN** kit comes with an energy-efficient 16" pedestal fan that operates between 9W to 11W depending on the airflow speed selected. The heigh of the fan can be adjusted to fit the room. using an optional 7-meter extension cables enabes further reach of the fan to other rooms.



Advanced Motor Design



Longer Runtimes



High Speed Airflow







Amped's **standard G1 Fan offering** with 120Whr of lithium iron phosphate battery. Come with a 16" Stand Fan with industry leading efficiency, an air flow of 100m³/min at 11 Watts.

Wowsolar™**G2 FAN KITS**

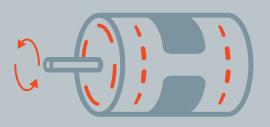




Amped's entry-level Fan offering with 80Whr of lithium iron phosphate battery. Come with a 16" Stand Fan with industry leading efficiency, an air flow of 100m³/min at 11 Watts.

INNOVATION INSIDE

We use a brushless DC motor for longevity, reliability, and efficiency. We also tested and iterated the fan blades to maximize the airflow per watt.





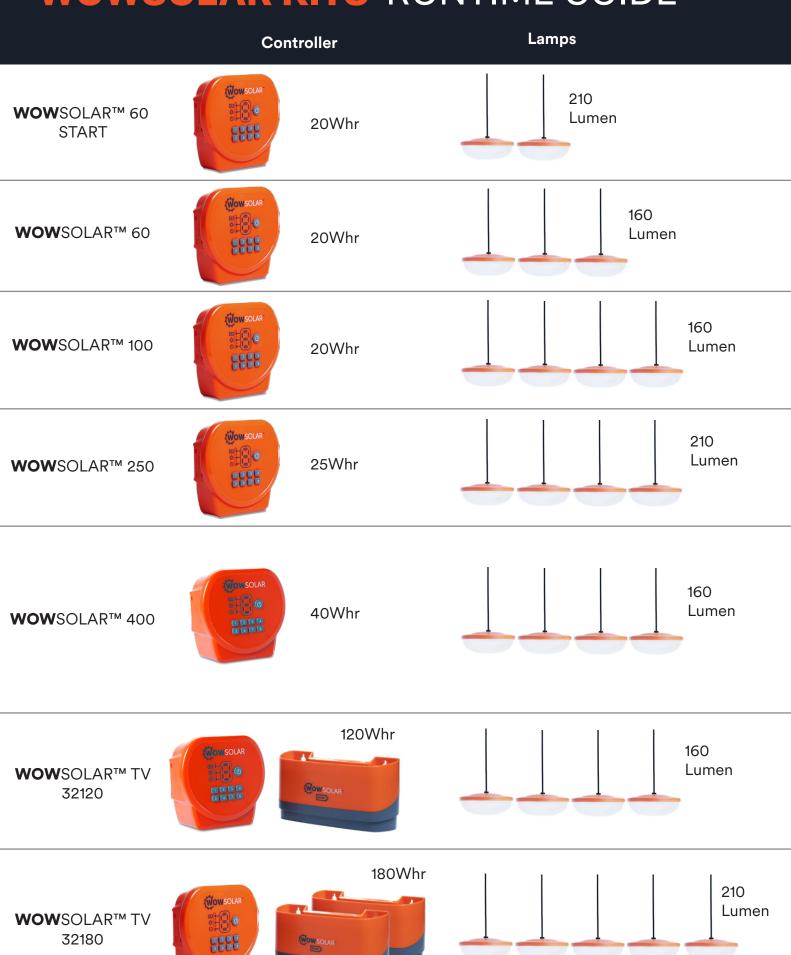


Amped's premium Fan offering with 160Whr of lithium iron phosphate battery. Come with a 16" Stand Fan with industry leading efficiency, an air flow of 100m³/min at 11 Watts.

Comparison Chart

Products	Included Battery	Solar Panel	Lights	Radio and Torch Available
WOWSOLAR™ FAN 16100	100Whr	40W	3-Point w/3 hanging lamps	Yes
WOWSOLAR™ FAN 16120 G2	120Whr	40W	3-Point w/3 hanging lamps	Yes
WOWSOLAR™ FAN 16160 G2	160Whr	60W	4-Point w/3 hanging lamps	Yes

GEN 1 WOWSOLAR KITS RUNTIME GUIDE



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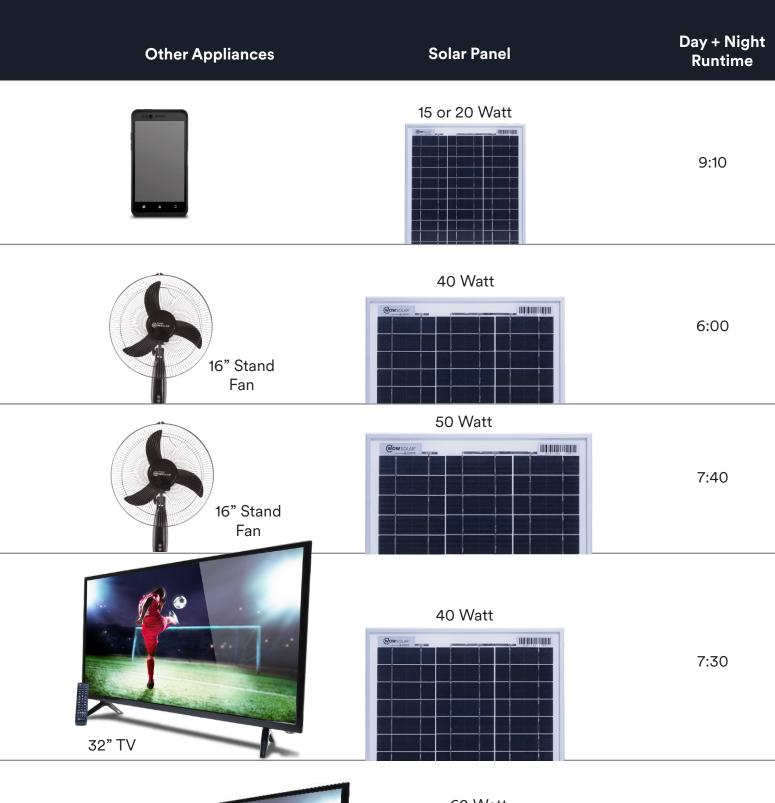
32" TV

GEN 2

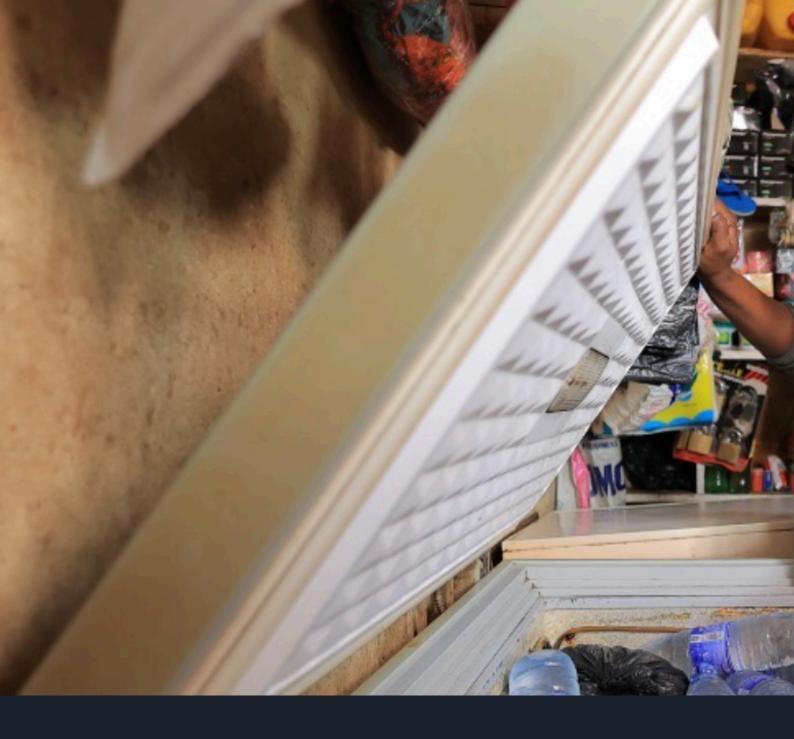
WOWSOLAR KITS RUNTIME GUIDE

Lamps Controller Radio, Torch 40Whr 160 optional Lumen **WOW**SOLARTM optional Lighting 400 G2 80Whr 160 Wowsolar Lumen optional **WOW**SOLARTM optional Ø 6 Fan 800 G2 120Whr 160 optional Lumen **WOW**SOLARTM optional * B Fan 1200 G2 120Whr 160 optional Lumen **WOW**SOLARTM optional TV 1200 G2 * 8 210 200Whr Lumen **WOW**SOLAR™ TV+Fan 2000 G2 optional

optional







Productive Solar Power

Productive use of solar products holds immense potential to uplift rural Africans out of poverty by fostering economic growth. For example, solar fridges reduce post-harvest losses and enable farmers to preserve their produce for longer periods. This ensures a stable food supply and allows farmers to sell their goods at higher prices, thereby increasing their income and improving livelihoods. Small businesses can use solar freezers to sell cold drinks at a premium.

Peri-urban dwellers can also benefit from productive solar. Even those small businesses connected to the grid suffer frequent black outs in emerging markets. Instead of using expensive, dirty fuel generators, small businesses can use a solar inverter to continue operating without interruptions.

Amped is pioneering productive solar solutions with less than 12 month payback.



SOLAR FRIDGE & FREEZER



The Amped EasyFreeze has a powerful compressor that delivers 2X faster cooling than the best fridges on the Verasol appliance database. With its 5.5L Phase Change Battery, the EasyFreeze also has 5X better autonomy than the competition (staying cold at night and when cloudy).



SOLAR GENERATOR

The Amped PowerHub is built to be Africa-tough. Heat-proof, dust-proof, and splash-proof, the PowerHub is perfect for keeping homes and businesses powered up even when the grid fails.

Solar Fridge / Freezer

Amped's ground-breaking solar fridge/ freezer delivers unrivaled cooling performance at an affordable price.



WOWSOLAR™ EasyFreeze100 is a high-performance, top-opening 100L fridge perfect for home or business use. Even on warm days (at 32°C ambient), it takes just 20 minutes to reach fridge temperatures below 8°C and 35 minutes to reach freezer temperatures below 0°C. Plus, it stays cold for up to 40 hours during power blackout or rainy days. The fridge design leverages a Phase Change Material (PCM) battery, with the equivalent of 500Whr of battery capacity. The device utilizes a 5.5L PCM for the fridge configuration and 11L for the freezer configuration. The PCM is just 5% the cost of an equivalent lithium battery, and is maintenance free! The EasyFreeze also has a small lithium battery to ensure fast startup every morning. It can also be run from an AC port for minigrids, saving minigrid energy costs at night and providing productive income sources.



Fridge or Freezer



Cold for 40hrs after sunset!



20 minute cooldown

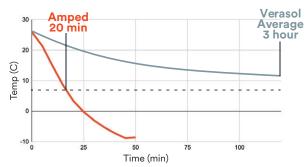


LONGEST AUTONOMY



*Average for all fridges on Verasol's appliance database, May2023.

FASTEST COOLING



Cool-down time to 8°C (32°C Ambient)

KEY FEATURES



Superior Performance in Hot Climates

All testing performed above 32°C to ensure fast pulldown in the harshest environments.



Strong 150W compressor



EV Grade Battery, LiFePO₄



Solar Charge, Wall Charge, or both!



Up to 200 Watt Solar Panel



Breakthrough Affordability

Mobile App with **PAYGO Plans** Easy-to-use phone

application for live

diagnostic monitoring

and flexible PAYGO plans. Integrated with Solaris, Upya, Angaza,





Easy local assembly



Uniform internal temperature profile



High-Precision Temp Control (0.25°C)

COMING SOON

Solar Generator

Amped's ground-breaking solar generator delivers uninterrupted power for a price that pays back within a year.



WOWSOLAR™ PowerHub is Amped's flagship solar generator. It is a plug-and-play AC power supply with a built-in lithium battery bank to provide reliable, 24/7 power. It is silent, stackable, and has the extra horsepower needed to run 95% of appliances. So, it's time to ditch that fuel generator and go solar. Plus, with its built-in payment plans, the Amped PowerHub is less expensive than a fuel generator from day one, and free after 9-15 months, by offsetting fuel and maintenance fees! The Amped PowerHub is "Africa Tough", which means it is heat-proof, dust-proof, and splash-proof. It is built to be run every day (charged up and down) to power businesses and homes.



Reliable Power Handling



Runs Any Appliance



Payback in a Year





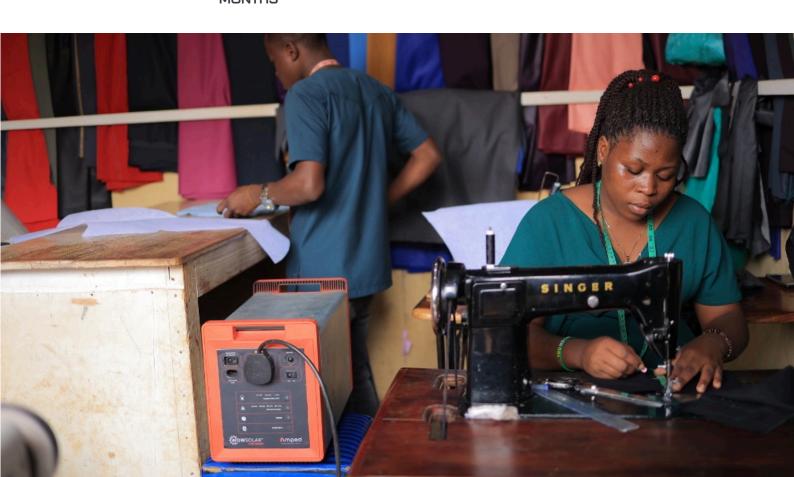
WOWSOLAR™ PowerHub1600 comes with 1600Whr of premium lithium iron phosphate battery and two 300 Watt solar panels. Great for powering a small business or home with appliances like lamps, a TV, a sewing machine, a fan, and a fridge. Comes with a bluetooth app for additional user interface display, PAYGO keypad interface, and diagnostic data logging and reporting.

Energy Solution Cost Over Time \$3000 **Fuel Generator** USD \$2860 FOB \$2000 USD COST Other Solar \$1365 FOB \$1000 9 Month Payback **USD ₩ow**solar \$650 FOB \$0 USD 20 12 **MONTHS**

AFFORDABLE ENERGY

Amped Hub has integrated PAYGO and is less per day than a fuel generator and free after 9-15 months after paid off, depending on the payment plan!

2x more affordable



SPOTLIGHT ON THE HUB

ALL IN ONE POWER SOLUTION

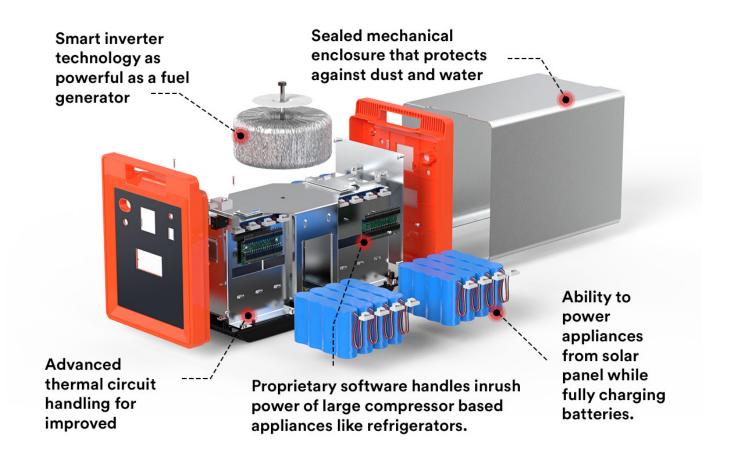
Run Productive Appliance to power your business and home: Fridge, Freezer, Power tools, and pumps! Of course - the little stuff too: TVs, lights and fans!

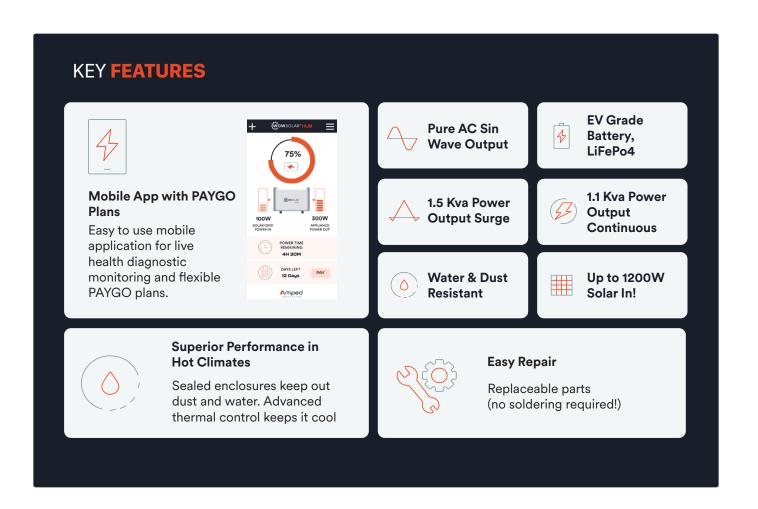


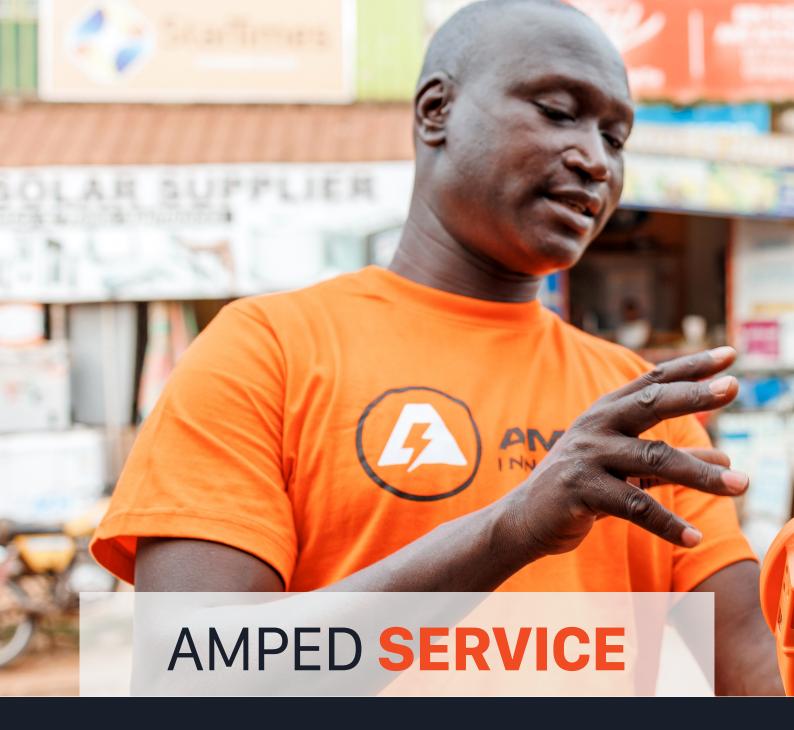
RUNTIMES AT A GLANCE

	Pharmacy (265W)	Tailor (395W)	Barber Shop (460W)		
Possible load groups					
Runtime (in full sunlight)	Non-Stop Power	Non-Stop Power	Non-Stop Power		
Battery Alone (1600 Whr)	6 hours	4 hour _s	3.5 hours		

^{*}Also comes in a smaller configuration with just 300W Solar Panel & 800Whr Battery

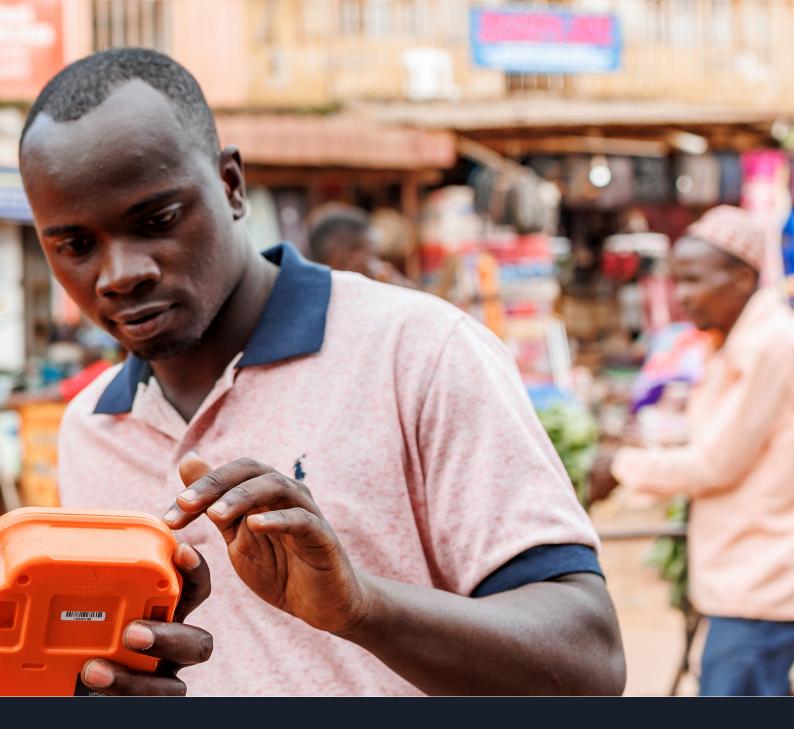






Energy consumers everywhere can recognize quality when they see and experience it. The African continent has been flooded with unreliable and cheap energy alternatives for years, and within hours of using a **WOW**SOLAR™ product - the feedback comes in loud and clear: this product is reliable, intuitive and outshines alternatives.

Amped creates relationships with our distributors through product trainings, technical support certifications and comprehensive sales and marketing coaching. Amped has a similar infrastructure for creating that trust between product supplier and product user. Amped provides product trainings and comprehensive customer support through our warranty program to all of our customers. Amped doesn't beleive in just dropping in a consumer good into a complex environment -- we believe in a creating a culture of learning, support and improvement for the healthier uptake of reliable and sustainable solar products for the coming decades.





UNMATCHED WARRANTY & TECH SUPPORT

The Amped Partner Program has been designed around distributor sales success, ease of doing business, and creating opportunities to grow their business. Support for local assembly.



AMPED CERTIFICATION PROGRAM

Amped launched the first and only solar manufacturer certification for free. Product training and certification for sales acceleration.



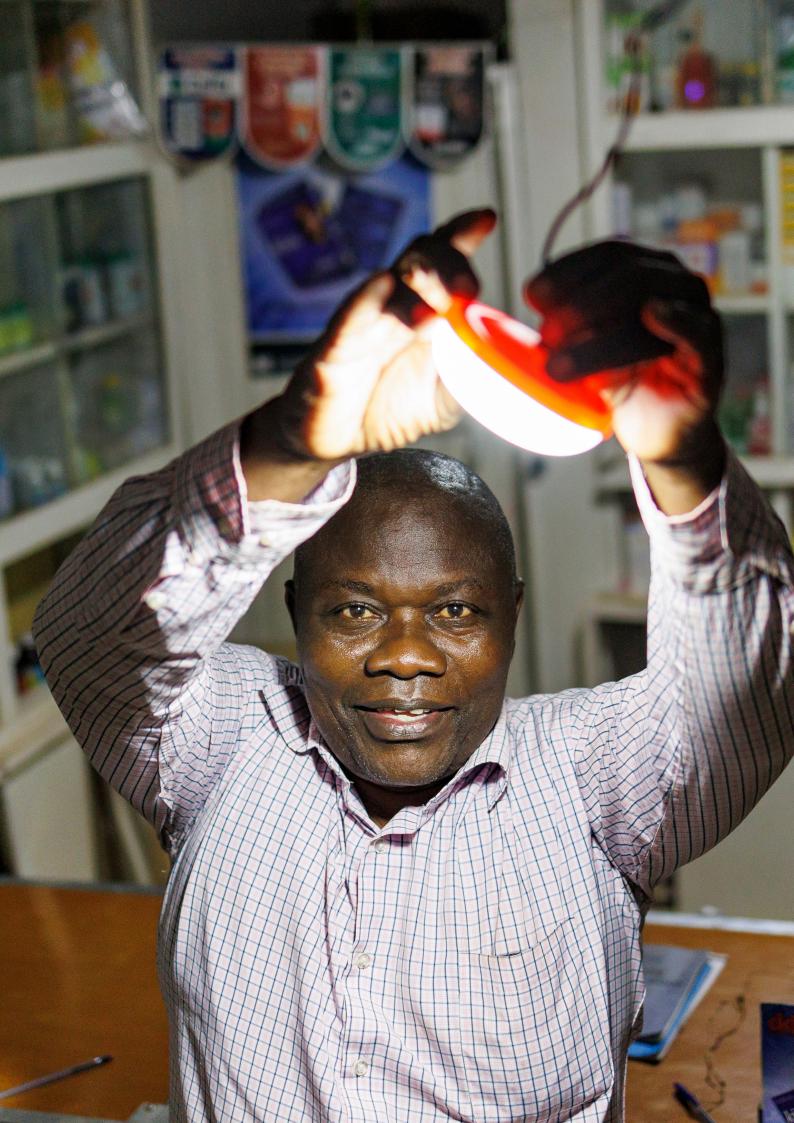
FINANCIAL TERMS AVAILABLE

Flexible financing terms to help you get that product. Up to 5 months of financing (after product arrives in country). Experience with Letters of Credit and expertise in logistics.

BENIN BURKINA FASO BURUNDI CAMEROON DRC ETHIOPIA FIJI GABON GUINEA HAITI KENYA LIBERIA MADAGASCAR MALAWI MALI MOZAMBIQUE MYANMAR NIGER NIGERIA PAPUA NEW GUINEA RWANDA SENEGAL SIERRA LEONE TANZANIA TOGO **UGANDA** ZAMBIA **ZIMBABWE**





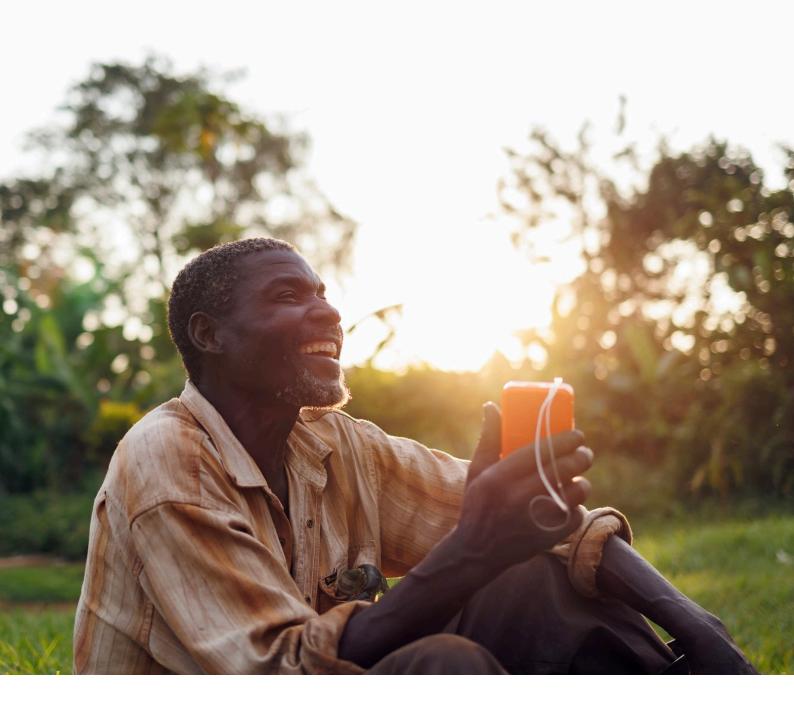






WARRANTY INFORMATION

The Amped **WOW**SOLAR™ products include a 24-month limited warranty on the PV module, control box, cables, lights, and system battery (capacity retention of at least 80% at two years). Any accessories shipped with the **WOW**SOLAR™ such as a torch, charging adapters, television, or radio include a 12-month limited warranty. The warranty covers manufacturing defects but not normal wear and tear or abuse. Warranty is void if product is tampered with in any way, if the enclosure is opened by any unauthorized person, or if the unit is immersed in water. Simply return the product to your distributor to get unit repaired or replaced under warranty.





2023 Catalog - V6.4

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