

INTRODUCING

HomePlus Max

Powerful solar home system for TV
and fan power as well as laptop and
smartphone charging

March, 2025

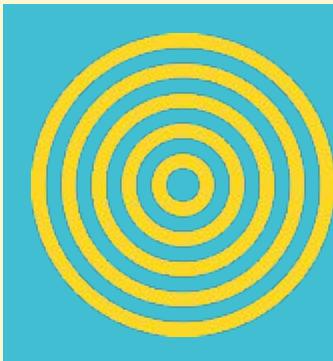


Powering access to brighter lives



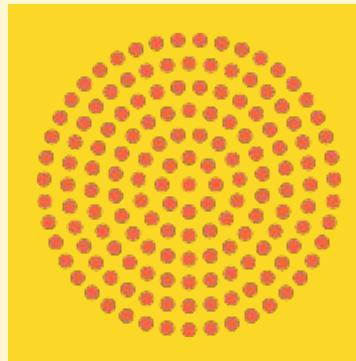
Sun King: The World's Leading Solar Home Systems Company

HomePlus Max leverages Sun King's 15+ years of expertise developing off-grid solar solutions and a deep understanding of customers' needs.



Unmatched Expertise

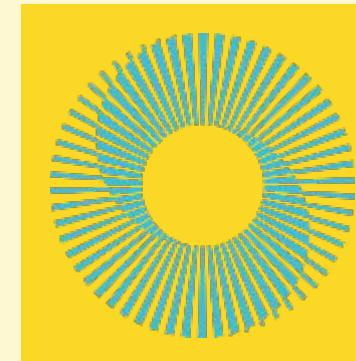
Sun King brings decades of off-grid solar experience to the HomePlus range.



Leading the Solar Home System

Product Category

Expertise across designing, installing, and servicing solar home systems has guided the development of HomePlus Max, allowing us to incorporate practical insights to improve quality and reliability.



Committed to Off-Grid Communities

With over 390+ shops and 30,000 field agents across Africa, Sun King has proven distribution channels and knowledge of this market segment.

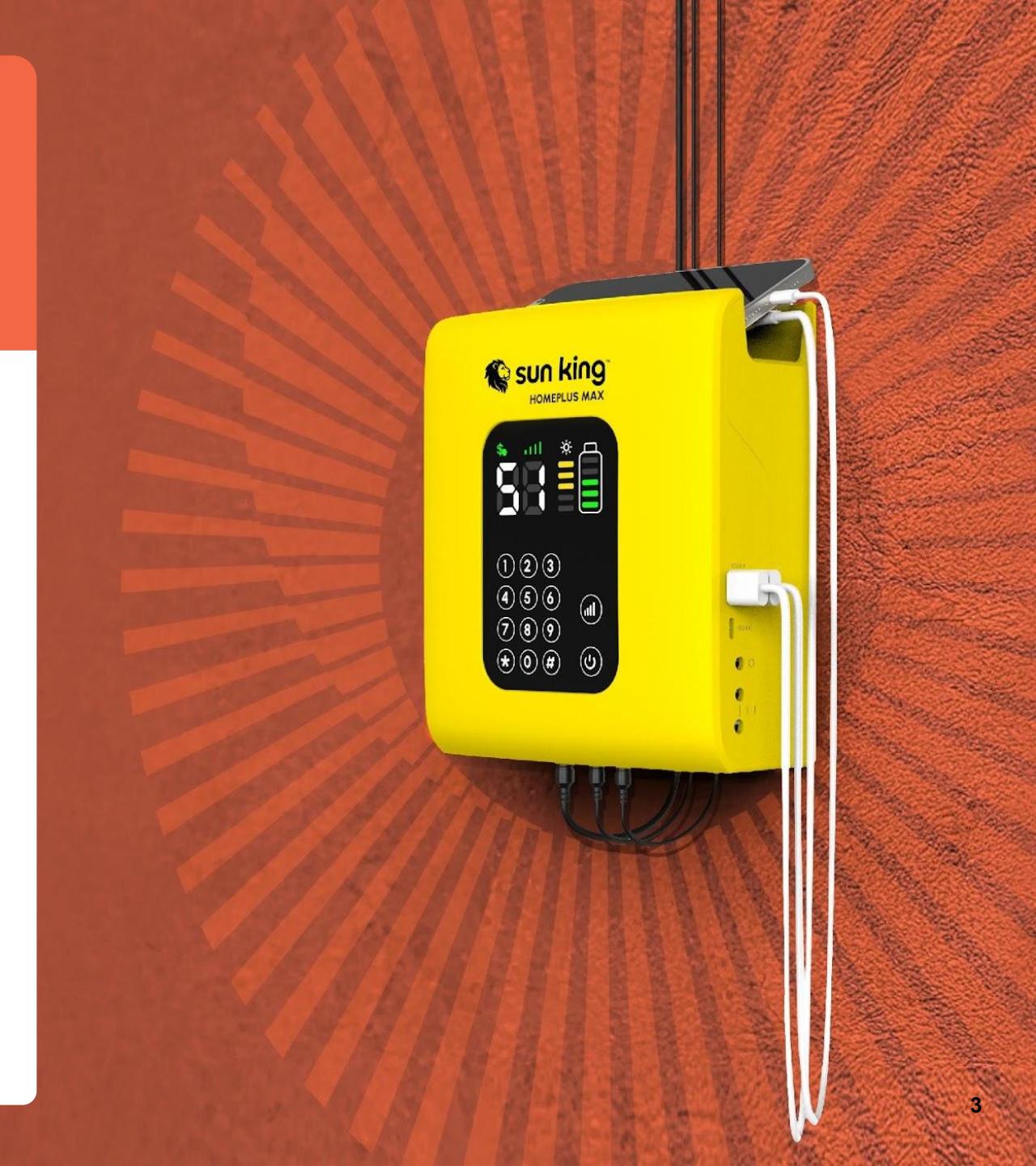
Sun King's Third-Generation Solar Home System: HomePlus

Tagline: Even more power for your essentials, at an unbelievably affordable price!

Key Message: Max light and power, at an unbelievable price. Home Plus Max is the most cost-effective way to run your home's essentials: lights, smartphones, TV, fan, and laptop.

Sub-messaging:

- **Max Power:** Run your TV, fan, and laptop with ease
- **Max Light:** Brightest-ever solar home system, multi-room lighting as good as the grid.
- **Max Charging:** Power up to three devices at the same time, comfortably power three smartphones over the course of the day.
- **Max Reliability:** New and improved solar homes and big battery provide backup power for blackouts
- **Unbelievably Affordable:** More power at the same great price!



HomePlusMax: Key Specs



HomePlus Max

Total Light Output	2,500 lumens
Fixed Lighting Points	4 x 600-lumens tube lights 1 x 100-lumens motion-sensor light
12 V DC Output Ports	4 x 12 V DC port (120 W max. total, 5 A max. per port) compatible with Sun King's DC appliances for powering Sun King's lights, TV, and pedestal fan
Battery	192 Wh LFP battery. 10-year battery lifespan with typical daily use (over 2,500 cycles).
Solar Panel	80 W, monocrystalline panel with an 8-metre cable
USB-A Port	2 x USB-A (5 V / 2.1 A max. per port) for smartphone charging.
USB-C Port (Bi-Directional)	1 x USB-C port. Output: Up to 65 W, for charging phones, laptops, and tablets. Input: Up to 60 W, for charging HomePlus from the electrical grid using any standard USB-C charger (not included).
TV Comm Port	1 x 24"/ 32"/43" TV

Specification Comparison: Home 500X Vs. HomePlus Max

	Sun King Home 500X (Old)	Sun King HomePlus Max (New)
Total Light Output	900 lumens	2500 lumens
Fixed Lighting Points	4 x 200-lumen tube lights 1 x 100-lumens motion sensor light (PIR)	4x 600-lumen tube lights 1 x 100-lumens motion sensor light (PIR)
DC Output Ports	3 x ports (12 V, 5 A (max. total))	4 x ports (12V (+/-0.3V) 10 A (max. total))
Battery	141 Wh NMC battery. 5-year battery lifespan with typical daily use (over 1,000 cycles).	192 Wh LFP battery. 10-year battery lifespan with typical daily use (over 2,500 cycles).
Solar Panel	50 W, polycrystalline panel with a 6-metre cable	80 W, monocrystalline with a 8-metre cable
USB-A Port	1 x USB-A (5 V / 2.1 A max. per port) for smartphone charging.	2 x USB-A (5 V / 2.1 A max. per port) for smartphone charging.
USB-C Port (Bi-Directional)	N/A	1 x USB-C port. Output: Up to 65 W, for charging phones, laptops, and tablets. Input: Up to 60 W, for charging HomePlus from the electrical grid using any standard USB-C charger (not included).
TV Communication Port	1 x TV communication port controls Sun King DC TV (24"/32" TV).	1 x TV communication port controls Sun King DC TV (24"/32"/43" TV).

Sun King HomePlus Max



Reliable Energy

Provides continuous 24/7 lighting, TV entertainment, laptop charging, and phone charging for families and businesses with no access to grid.



Bright, modern home lighting

The system includes four 600-lumen tube lights — each nearly as bright as a 60-watt incandescent or 7-watt LED, and over twice as bright as Sun King's 240-lumen lights.

A wall-mounted motion-sensor light adds outdoor security, bringing total output to 2,500 lumens for brighter, more expansive lighting than previous models.



Fast Smartphone and Laptop Charging

With its 65-watt USB-C output, it powers any common battery-powered electronic device, such as laptops, tablets, and smartphones.

Each of the two USB-A delivers 10 W for additional phone charging requirements.



Dual Charging

Uniquely, HomePlus Max can be charged using both solar power and, when available, grid electricity via its USB-C port.

HomePlus Max Components: Key Components and Optional Bolt-Ons

**Included
as Standard**



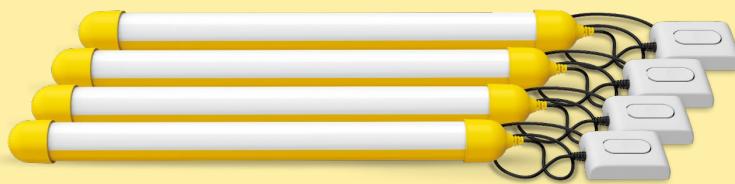
LFP Battery Control Unit



80 W solar panel
(packed separately)



Security Light: Wall-mounted
motion-sensor light



Four 600-lumens
tube lights

**Sold
Separately**



Optional: One
24"/32"/43" TV



Optional:
Pedestal fan

Brighter Lights Extended Across the Home, Inside and Out

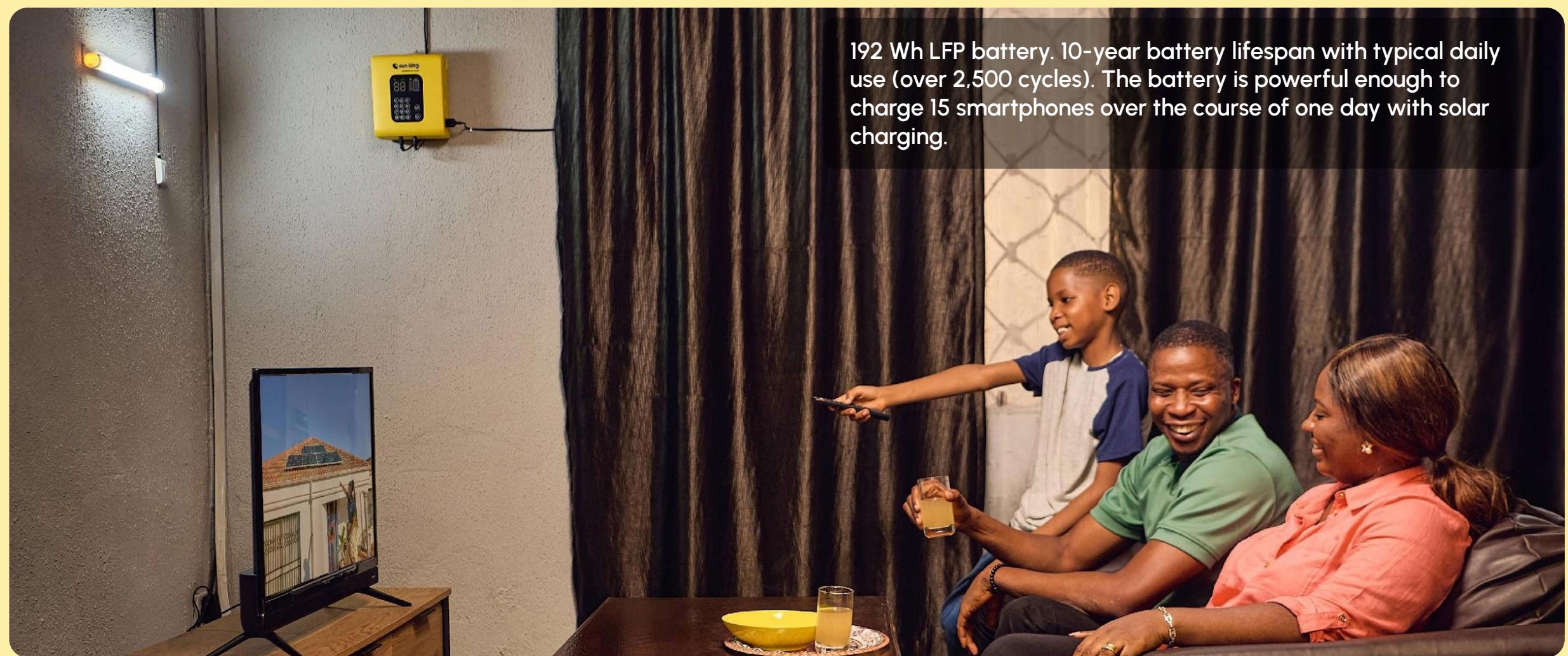
The system includes four tube lights as standard, extending bright, reliable lighting across multiple rooms.

Each 600-lumen lamp is three times brighter than previous Sun King tube lights and is individually dimmable via a wall-mounted switch for adjustable brightness. A motion-sensor security light is also included, enhancing safety and convenience.

With 2,500 lumens of total brightness, the system delivers illumination comparable to a modern, grid-powered home — without the grid.



Large LFP Batteries Provides Backup for Key Modern Appliances like TVs and laptops



192 Wh LFP battery. 10-year battery lifespan with typical daily use (over 2,500 cycles). The battery is powerful enough to charge 15 smartphones over the course of one day with solar charging.

Accessible with Sun King's EasyBuy Pay-As-You-Go

Sun King's EasyBuy "Pay-As-You-Go" technology allows customers to bring the HomePlus Max with only a small deposit.

Customers make regular top-up payments through mobile money, providing flexibility and affordability.

HomePlus Max comes in two versions:

1. With GSM: Allowing remote performance monitoring and automatic payment reconciliation.
2. Keypad operated: Payment codes delivered by SMS are entered via a keypad manually (non-GMS).



Easy-to-install kit with enhanced and smart solar technology



Roof-mountable solar panel that's fast and easy to install.

80 W, monocrystalline solar panel provides fast recharging throughout the day.

Maximum-Power-Point Tracker (MPPT) charge controller maximises the solar panel's output, uncommon in similar products.

Power the battery using a USB-C Cable and The Grid

Uniquely for a solar home system, the HomePlus Max's battery can be charged using solar power and, if available, power from the electrical grid.

HomePlus Max's USB-C port can be used to charge the battery from grid-delivered electricity, providing households and businesses with an extra layer of energy security.

A common 65 W type-C laptop or smartphone charger can plug into the USB-C port and recharge the HomePlus Max's battery.



Take Power With You

Primarily designed to serve as a fixed power source for homes and businesses, HomePlus Max easily disconnects from its wall mount to allow for mobile use or transport to a secondary location in or outside of the home.

This flexibility allows people to charge their smartphones and laptops when and wherever convenient.



Great Value, As Always

Power more appliances,
enjoy brighter lights, and
get a bigger battery —
all for a price similar to
the legacy Sun King
Home 500X.



Performance with 'Turbo' Mode Lighting

Scenario	Runtime (daytime charging and nighttime battery-only)
Four tube lights and one motion-sensor light	17 hours (maximum 11 hours at night)
Four tube lights, one motion sensor light, and 24" or 32" TV	14 hours of TV (maximum 7 hours of TV at night) 7 hours of light (maximum of 7 hours of light at night)
Four tube lights, one motion sensor light, and 43" TV	13 hours of TV (maximum of 6 hours at night) 7 hours of light (maximum of 7 hours at night)
Four tube lights, one motion sensor light, 43" TV, and two smartphones	10 hours of TV (maximum 5 hours of TV at night) 5 hrs of light (maximum 5 hours of light at night) 2 smartphones charged at night
Four tube lights, one motion sensor, one laptop (55 Wh), and one smartphone (20 Wh)	2 laptop charge cycles per day (maximum one at night) 3 smartphone charge cycles per day (maximum 1 at night) 4 hours of lighting (all at night if needed)

Assumptions:

1. Each smartphone battery capacity is 20 Wh; each laptop battery capacity is 55 Wh.
2. TVs operate in standard brightness mode.
3. All lights are set to turbo mode (600 lumens per light).

Performance with 'Normal' Mode Lighting

NOTE: ASSUMING ALL LIGHTS ARE ON NORMAL MODE.

Scenario	Runtime (daytime charging and nighttime battery-only)
Four tube lights and one motion-sensor light	24 hours (maximum 12 hours at night)
Four tube lights, one motion sensor light, and 32" TV	18 hours of TV (maximum 9 hours of TV at night) 9 hours of light (maximum 9 hours of light at night)
Four tube lights, one motion sensor light, and 43" TV	15 hours of TV (maximum 7 hours of TV at night) 8 hours of light (maximum 8 hours of light at night)
Four tube lights, one motion sensor light, two smartphones, and 43" TV	12 hours of TV (maximum 6 hours of TV at night) 6 hrs of light (maximum 6 hours of light at night) 2 smartphones charged at night
Four tube lights, one motion sensor lights, one laptop (55 Wh), and one smartphone (20Wh)	2 laptop charge cycles per day (maximum one at night) 5 smartphone charge cycles per day (maximum two at night) 5 hours of lighting (all at night if needed).

Assumptions:

1. Each smartphone battery capacity is 20 Wh; each laptop battery capacity is 55 Wh.
2. TVs operate in standard brightness mode.
3. All lights are set to turbo mode (600 lumens per light).

User Testimonials

Mrs Kemisola John, a newly married woman, who desires to enjoy the comfort of her home while she works.

However, due to the increasing cost of fuel in Nigeria, it has been expensive to fuel her diesel generator which has made the use of it time bound.

She desired to have a system that could provide her with lights, charge her phones and power a TV to allow and her family to enjoy their favourite TV programs without having to experience the hassle that accompany owning a generator.

Since she started using the HomePlus Max, she hasn't needed to rely on her generator, as the unit meets her expectations.

"The tube lights are so bright that I don't notice when the grid power is restored, the Battery lasts long enough and it doesn't take time to fully charge.

I enjoy watching my favourite show on Sun King 32" TV especially in the cool of the evening with my family as it serves as our bonding time"



User Testimonials

A Product Designer [UI/UX] who works long hours at home is often saddled with the responsibility of putting on and off his generator because he lives in an off-grid area.

Mr. Chukwuemeka Okafor is always concerned with is lack of productivity during his working hours.

His goal is to own a product that can provide him with uninterrupted power for his laptop, phones, and lights during working hours without having to entertain power distractions.

Hence he opted for the purchase of the HomePlus Max.

"I am able to meet up with my deadlines and deliver my projects on time as I get to work long hours uninterrupted while work area is well illuminated.

I plug my laptop into the HomePlus Max using the USB-C port and my system powers on and I get to charge my phone as well. This is the best product that I have ever purchased."



User Personas

Background

Peninah is a hardworking mother living in an off-grid rural community in Kenya. As a small business owner, she strives to provide a better life for her children while balancing her business and household needs. Despite limited access to electricity, she values entertainment as a way to bond with her family and unwind after a long day. She would like to save money from buying data bundles for entertainment.

Needs

- Reliable lighting solution for her home.
- Affordable entertainment system to watch her favorite shows and keep her children entertained
- A product that can charge multiple smartphones
- Long-lasting power solution to avoid the costly and unreliable process of purchasing data bundles for streaming

Product Preferences

- Solar-powered system with a large TV (32" or 43")
- Ability to power lights, TV, and charge smartphones
- Affordable payment plan to make the product more accessible



User Personas

Background

Samuel is a small business owner running a local pub in a rural off-grid area. His pub serves as a popular social spot where community members gather to relax, watch football matches, and catch up on the latest news. He is passionate about growing his business but struggles with limited access to electricity, which affects his ability to attract more customers and offer better services.

Needs

- Reliable power solution to run a TV for entertainment
- Ability to charge multiple smartphones and laptops for both business and customers
- Long-lasting power system that can operate throughout the day and night
- Affordable product with flexible payment options
- Secure and low-maintenance solar system

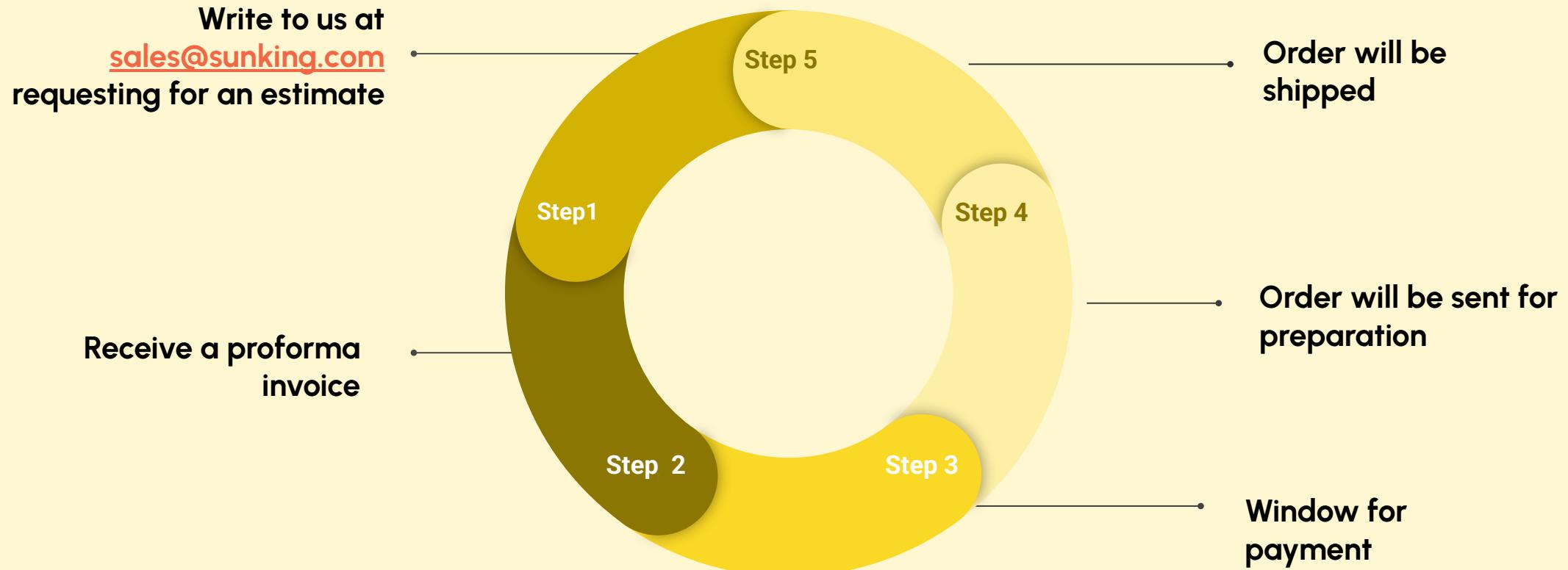
Product Preferences

- Solar home system that can power a 43" TV.
- Multiple charging ports for smartphones and laptops
- Durable system that offers backup power for more than 12 hours
- Simple installation and easy-to-use interface
- Energy-efficient lights to provide lighting for both business and home use.



USPs, Sales and FAQs

Order and Delivery Process- Partnerships



Support provided

Sun King provides competitive pricing and product support i.e. product training, a diverse range of product bundles for different applications and marketing collaterals resources, to our partners, as depicted below.

Additional Support & Material	
Competitive Pricing	✓
Product Training	✓
Product Bundles	✓
User Manuals & Specification Sheets	✓
'How To' Videos	✓
2-Year Warranty	✓



FAQS

1 - Can the HomePlus Max power TV?

Yes, the product can power the Sun King 24"/32"/43" TVs.

2 - Can the HomePlus Max power fan?

Yes, the HomePlus Max can power the Sun King Pedestal Fan

3 - What makes the new HomePlus Max better than the legacy TV SHS products?

36% Larger LFP battery capacity than the Home 500X
3X brighter lights than the Home 500X
60% increased solar panel module capacity using monocrystalline technology
MPPT charge controller technology for regulated charging of the battery

4 - What does the MPPT charge controller do?

The MPPT (Maximum Power Point Tracking) charge controller improves charging efficiency and ensures optimal performance, even in challenging weather conditions

5 - Does the new system include GSM technology?

Yes, the HomePlus Max features GSM technology and a Keypad technology version as Well

6 - What accessories can be bundled with the new systems?

Bundled options include a Sun King 24"/32"/43" TV and Sun King Pedestal Fan.

7 - Can I use the systems to charge my phone or laptop?

HomePlus Max: Highly recommended for dependable smartphone charging, it features 2 USB-A ports and a 1 USB-C port for charging your laptop and smartphones as well.

8 - Can I use the systems to charge my laptop?

Yes, I Recommended for reliable laptop charging with the USB-C input port with maximum power rating of 65 W.

9 - Will the battery runtime be affected if I charge my phone in the evening or at night?

Yes, charging smartphones at night reduces the battery capacity available for lighting. We recommend charging smartphones during the day, especially from morning to midday.

10 - Are there any changes in the customer purchase journey?

No, the purchase journey for customers remains unchanged.

11 - When will the legacy Home 500X systems be phased out?

These products will no longer be available for order after 30/09/2026 for partners

12 - Is the Home 500X GSM version also being phased out?

Yes, the GSM version of the Home 500X will be phased out.

13 - What happens to After Sales support for discontinued products?

Even after discontinuation, after-sales support for the Home 500X will continue. Maintenance, repairs, and spare parts will be available to ensure customer satisfaction.

Key Specifications



43" Sun King TV

TV Operating system	Digital
Display resolution	FHD, 1920x1080,full-view angle
Display aspect ratio	43", 16:9
TV Controller Type	Remote Control
Power Consumption (Standard)	13 W
HDMI Ports	1
USB Ports	1

