

Stellar Microgrids

Modular solutions for off-grid power



Stellar microgrids offer remote customers the flexibility of reliable, affordable, renewable electricity available 24 hours a day 7 days a week. The modular nature of Stellar grids allows systems to start small and expand as customer demands change over time.

Stellar systems use high quality components. This enables reliable pooling of community resources, which grants more flexibility in the types of devices that can be used, including productive loads such as tools and pumps. Our advanced, cloud-based monitoring and control platforms give remote operators a clear window into our microgrids using any Internet-connected device.



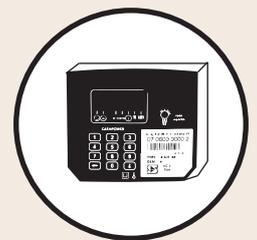
24 hr/day
solar
electricity



Modular,
expandable
design



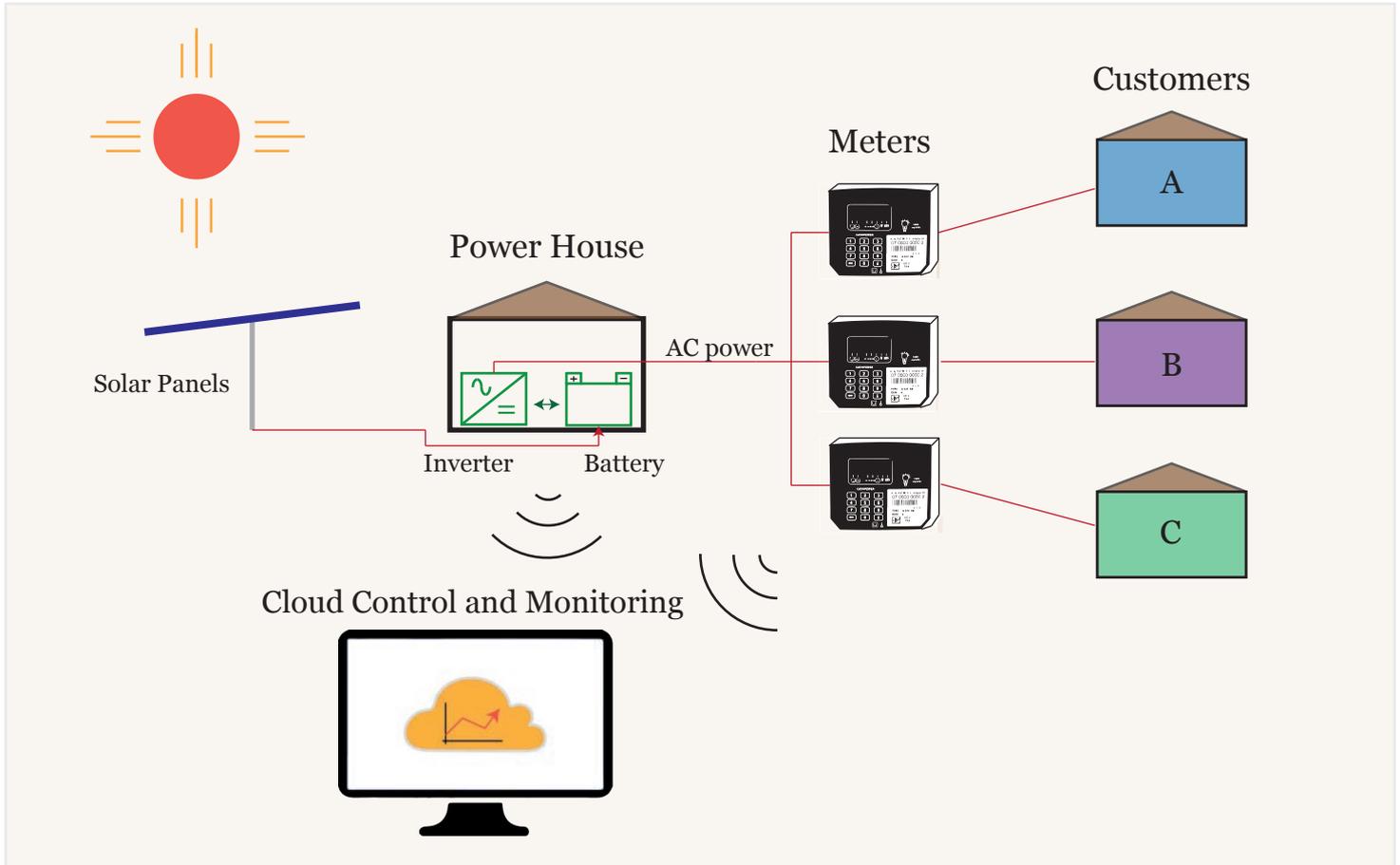
Cloud based
remote
monitoring



Prepay
electricity
meters

How **Stellar** Microgrids work

Stellar microgrids serve customer demand in real-time and charge battery banks to provide nighttime power and backup for cloudy days. Customers are connected to an electricity meter and pay per kWh of energy consumed. Meters are setup for “pay as you go” accounting and can be credited via mobile money.



Key Features

Modular

Stellar microgrids are modular, allowing them to expand organically to changes in demand, and can include community services such as broadband Internet access points and street lighting.

Investment Protection

Stellar electricity customers use mobile money channels to credit their prepay meters--customers “pay as they go,” giving investors peace of mind.

Global Ready

Stellar microgrids are containerized for international logistics and available in regional voltage and frequency configurations.

Lower Costs and Emissions

Compared to diesel-sourced rural electricity, customers on average pay 50% less per month, and our systems save on average one metric ton of CO₂ per megawatt hour generated.

Reliable

Our systems are assembled in the United States using premium components. Through our remote monitoring platform, threats to system health can be identified and corrected before they become problems.

Flexible Engineering

Stellar microgrids can be built using a centralized solar canopy, or if space is tight, using distributed, small footprint “Solar Trees.”

Customizable Systems

New Sun Road specializes in custom power system design. Through the use of our cloud-based energy audit software, community representatives can survey energy demand and system layout. Using these results New Sun Road will design a tailored system for the community, ranging in size from 5 customers to 5,000 customers. Listed below are “off the shelf” Stellar Microgrids that serve as the building blocks for various system configurations.

Typical System Specifications

	Units	Stellar 8	Stellar 16
Footprint			
Array Size	m ²	47	94
Power House Footprint	m ²	4	8
Shipping Container Size	m	6.1 x 2.1 x 2.6	6.1 x 2.1 x 2.6
Power			
Voltage	V	120/230	120/230
Max AC Output	kW	9.2	18.4
Nominal AC Output	kW	8.2	16.4
Output Frequency	Hz	50/60	50/60
Daily Average Energy Production*	kWh	36	72
Solar			
Number of Panels		27	54
Panel Technology		High-efficiency polycrystalline modules	
Battery Storage			
Energy Capacity	kWh	50	100
Chemistry		Flooded lead acid or lithium - ion	
Expected Lifetime	Years	10	10
Monitoring			
Communications		Cellular 3G/4G Satellite	
Control System		New Sun Road Stellar Monitor	
Misc			
Shipping Time		4-12 weeks	
Approximate number of customers**		25-50	50-100

* Daily energy production will vary based on location and climate. Indicated value assumes 5 kWh/m²/day solar radiation.

** True number of serviceable customers is based on appliances and usage habits

Warranty:

Limited warranties and service available on system and components.

Contact Us

Ready to discover more about how
Stellar microgrids can fit into your community?
Contact info@newsunroad.com



To find out more about New Sun Road technologies visit newsunroad.com

