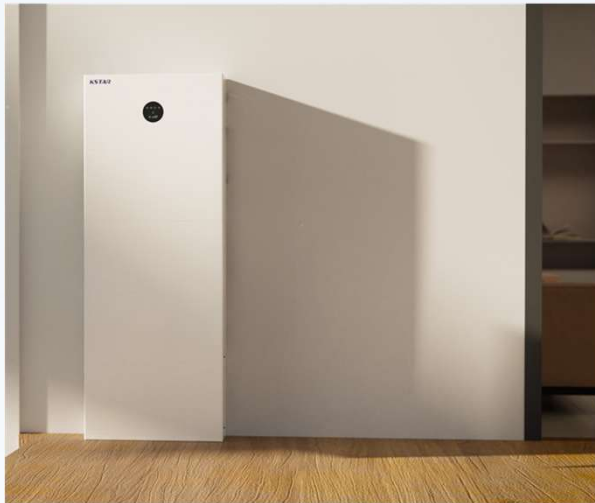




# Energizando el Futuro del Almacenamiento Residencial

Soluciones de energía Inteligente, Segura y Sencilla para hogares

# BlueSpark: Energía Inteligente para todos los Hogares



- Solución todo en uno para la integración de energía solar, almacenamiento y hogares inteligentes.
- Diseño inalámbrico y sin cables para una fácil instalación
- Modular y escalable para necesidades energéticas flexibles del hogar.



# BlueSpark: All-in-One Energy Solution

## Hybrid Inverter

- 1-phase : 3.68/5/6 kW
- 3-phase : 4/5/6/8/10/12 kW

## Battery Pack

- Tier-1 Premium Cell
- Swappable
- Expandable



**Plug and Play**



**200% DC/AC Ratio**



**EPS Function**



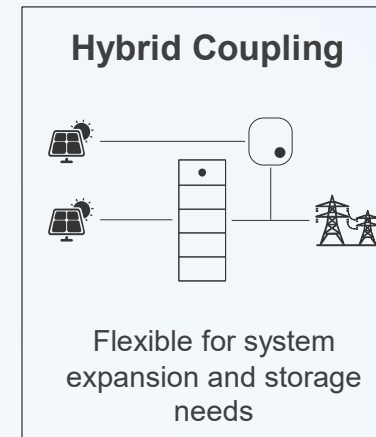
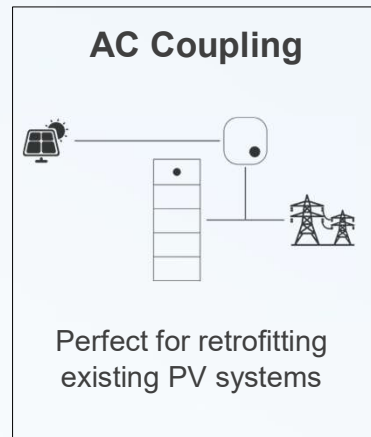
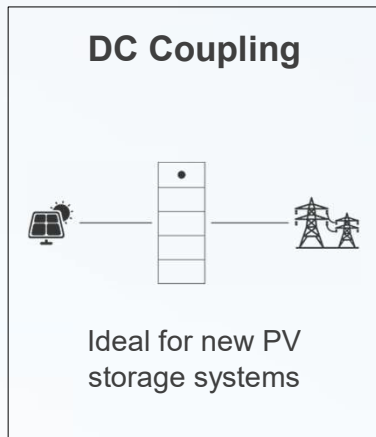
**VPP Enabled**



**Safe & Long life**

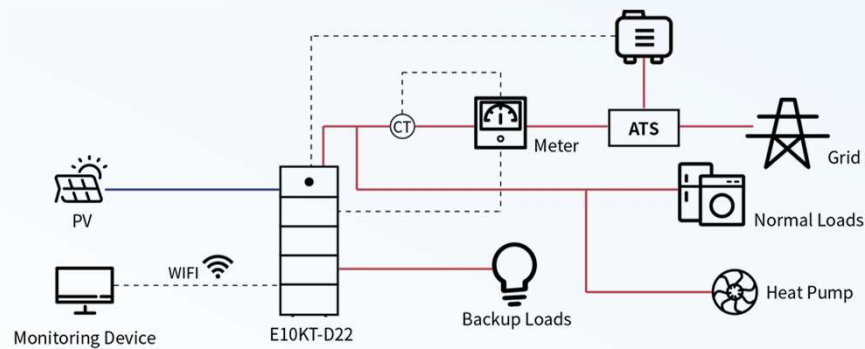


# Configuraciones para Todas Las Necesidades



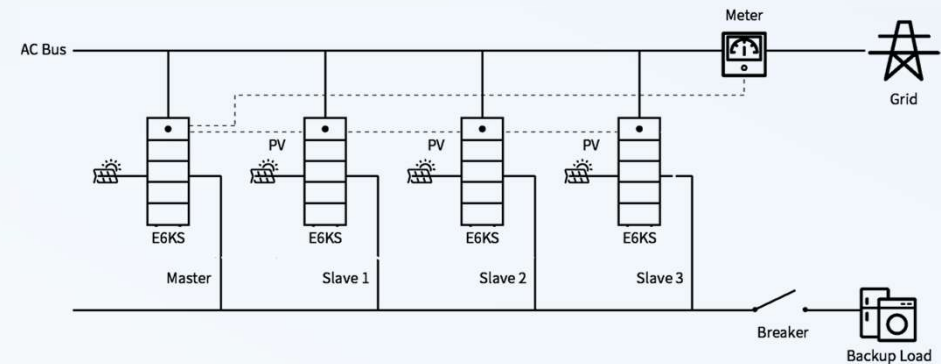
# Aplicaciones: Un equipo y en Paralelo

## Stand-Alone



- SG Ready Heat Pump
- DG Auto Control

## In-Parallel



- Up to 4 units, expand as required
- Full Backup Output



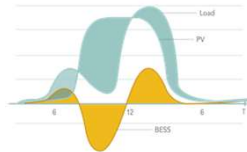


# Modos de Trabajo Flexibles para Maximizar el Ahorro



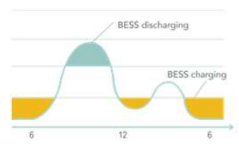
## Self Consumption

Prioritize on-site PV for local loads, storing surplus PV energy to maximize solar utilization and lower electricity costs



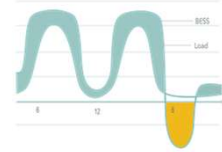
## Peak Shaving

Optimize energy use by charging during low-demand valleys and discharging during high-demand peaks, efficiently meeting energy needs



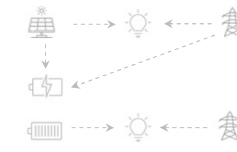
## Time of use

Customizable 5 daily charge/discharge periods, dynamically optimizing costs and load balancing



## Battery Priority

Prioritize all power for battery charging to maintain high SoC and ensure seamless backup during grid failures





# Por Qué Elegir BlueSpark?

## Rendimiento

- 200% DC/AC Ratio
- SG-Ready Heat Pump
- DG Mode
- Unbalance Output

## Seguridad

- Tier-1 Battery Cell
- AFCI Optional
- Meets EU Battery Regulation
- Intelligent Early Warnings

## Sencillez

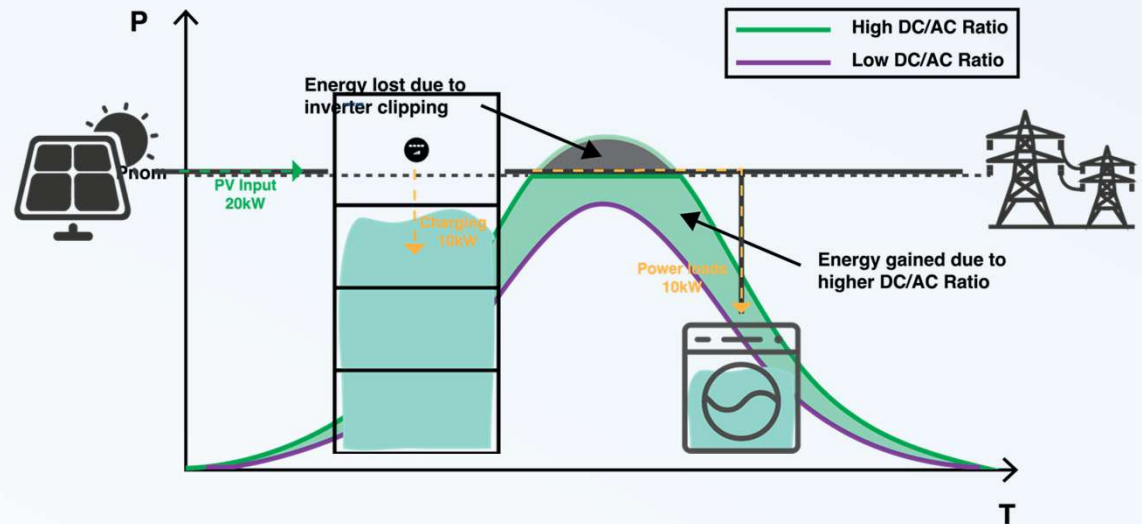
- Battery Ready
- Easy Installation
- Wireless Commission
- Smart HEMS



# 200% DC/AC Ratio

## Maximize Efficiency




- Supports up to 200% PV Oversizing for higher yields
- Reduces LCOE by up to 30%, ideal for dynamic tariffs
- Enhances solar utilization in Germany's high-price market



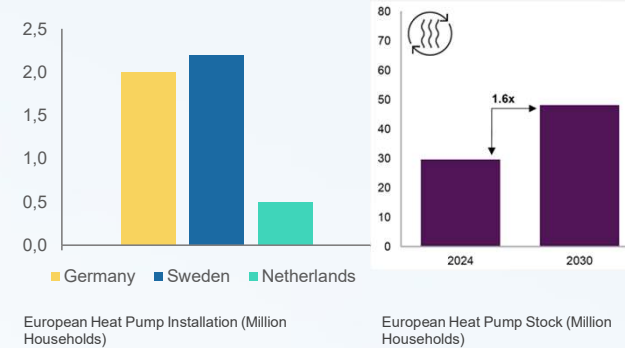


# Soporte para Aerotermia SG-Ready

## Smart Energy Control

-  Day Mode: Activates when excess power exceeds threshold
-  Night Mode: Turns on if SOC > set value, optimizing energy use
-  Saves costs with dynamic tariffs in Europe's high-price market

## Growing Demand for Smart Heat Pump Integration



European Heat Pump Installation (Million Households)

European Heat Pump Stock (Million Households)

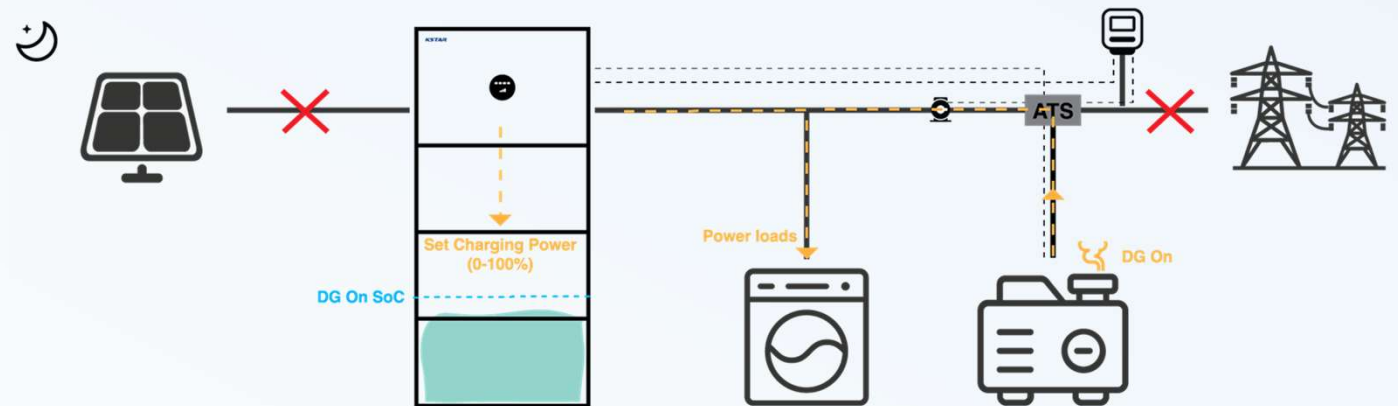
Source: S&P Global Commodity Insights



# Grupo Electrónico: Potencia de Respaldo

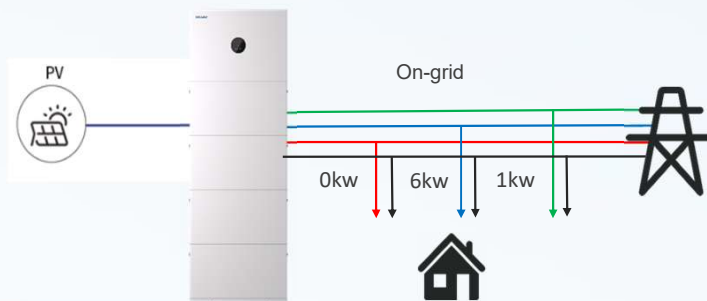
## Configuration & Work Modes

- **Components:**
  - PV + ESS + Diesel Generator + ATS + Meter
  
- **Work Modes:**
  - Disable: No DG operation
  - Manual: User-controlled DG on/off
  - Auto: SOC-based control (On: 5%-90%, Off: 5%-100%)
  
- **Enhanced Reliability**
  - Ensures power supply during grid outages



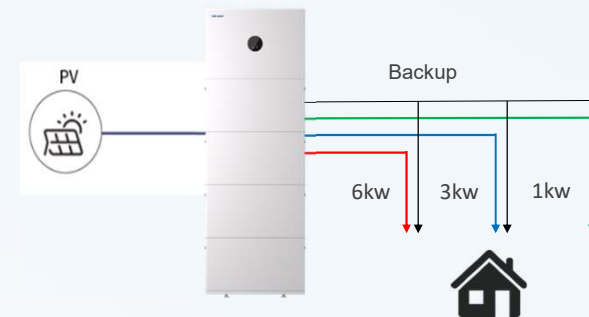
# Salida Trifásica con Desbalance

## Conexión a Red



- Max 6 kW por fase, total 10 kW
- Se adapta a demanda de potencia variable.

## Modo Backup



- Max 6 kW por fase, total 10 kW

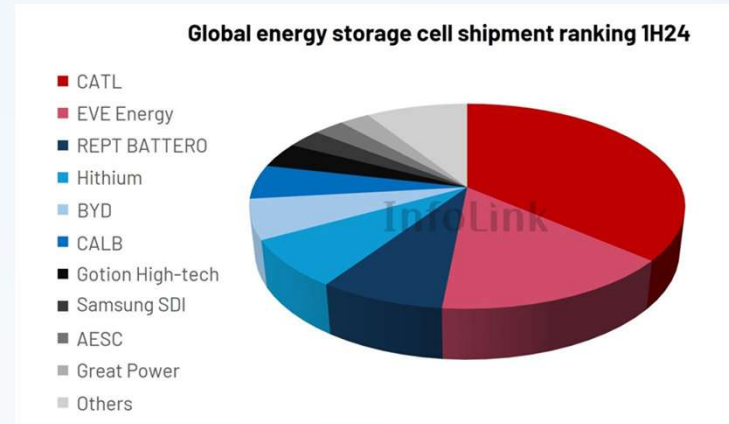


# Opción de CATL y EVE: Seguridad Demostrada



- Tier 1 Cells: CATL & EVE, >6000 cycles
- Certified: UL9540A & IEC62619 for safety
- 10-Year Performance Warranty

## 100+ GWh-Scale Validation



Source: InfoLink's Global lithium-ion battery supply chain database



# AFCI 3.0: Industry-Leading Arc Fault Protection

## • Theoretical Excellence:

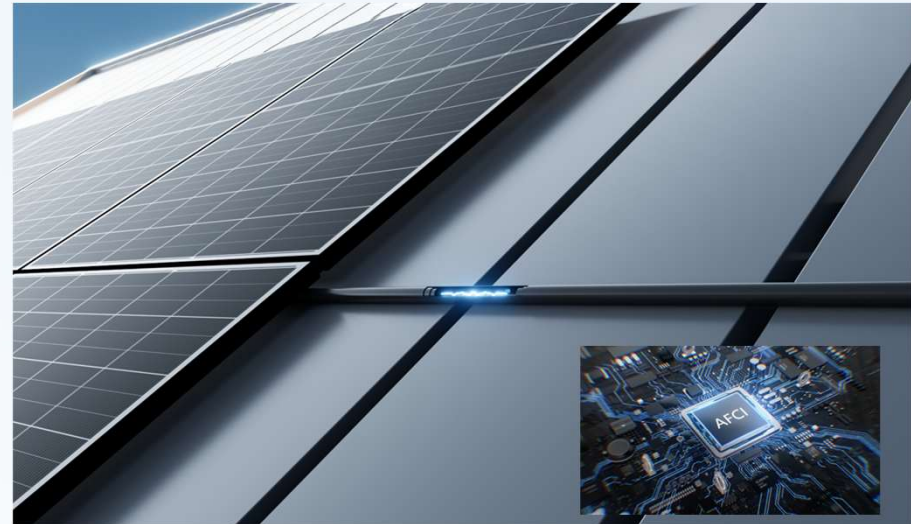
- Arc Formation: Detects erratic current fluctuations from DC arcs.
- Arcing Types: Targets series, parallel, and ground arcs with precision.
- Global Standards: Fully compliant with AFCI 3.0 and international regulations.

## • Breakthrough Solution:

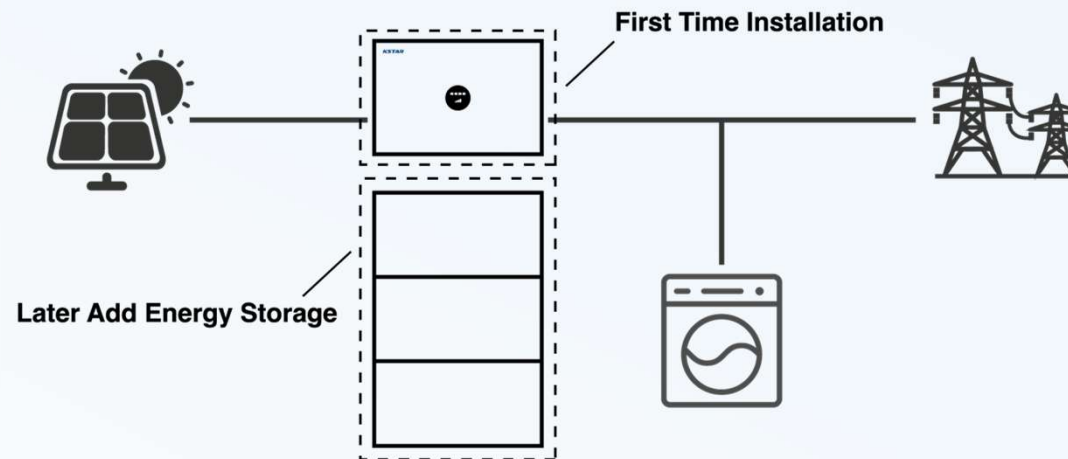
- Arc Detection: Advanced current spectrum analysis for instant fault identification.
- Technical Highlights:
  - Instant Disconnection: Inverter halts arcs in milliseconds.
  - **0.5s Rapid Shutdown**: Ensures safety for **20A** modules under **200m** PV cables.

## • Performance Testing:

- AFCI Testing: Ongoing rigorous protocols to ensure reliability in real-world scenarios.
- In-depth testing to confirm risk minimization and system uptime.
- Future-Ready Reliability: Engineered to set the standard for solar safety upon test completion.



# Preparado para batería: Diseño a Futuro



- Añade almacenamiento de energía en cualquier momento.
- Solución escalable para necesidades en evolución.



# Fácil Instalación: Plug and Play



- Blind plug interface, no complex wiring



- Wireless connectivity saves 60% installation time



- One-step setup for quick deployment

Old Version



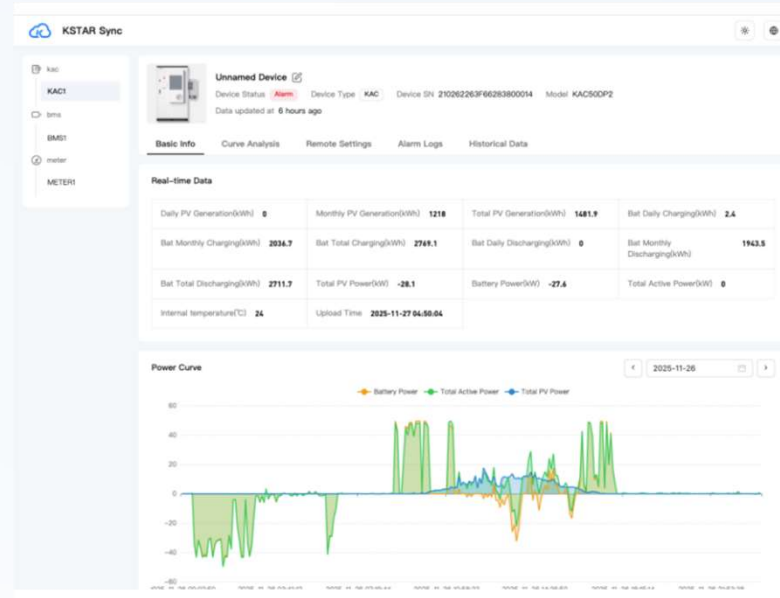
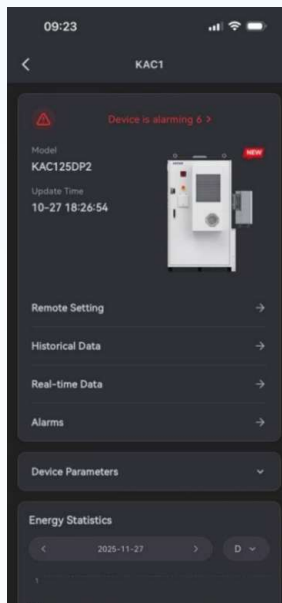
New Version





# Nueva Aplicación: KSTAR SYNC

Todos los dispositivos en un mismo lugar.



- Monitorización de distintos sistemas y EMS
- Configuración de parámetros en remoto
- Visualización de instalaciones en Web y APP móvil.
- Alarmas e información en tiempo real.

**KSTAR**

POWERING THE FUTURE

Muchas Gracias!



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