DISCOVER
ENERGY SYSTEMS

AES CABINET

Sinexcel Integrated Packages

Pre-Engineered Microgrid Energy Storage. Bankable. Scalable. Ready.

We lead with our Cabinet Outdoor Energy Storage, designed for seamless integration with Sinexcel PCS. Our integration efforts support a simple goal, to deliver more value through every battery we ship. We ensure each battery deployment is:

- Supports 208VAC, 480VAC, and 600VAC with a transformer.
- Properly designed to match project voltage, current, and runtime requirements.
- Fully integrated with PCS, EMS, and Microgrid Control (MGC).
- Commissioned with confidence using validated, field-proven configurations.

By supporting Sinexcel integration, we enable our customers to deploy AES Cabinets at scale with reliable performance, flexible configurations, and technical support.

As a Sinexcel integration partner we bring:

- Field-tested commissioning packages.
- Pre-configured BMS-PCS mappings.
- Custom microgrid design and transfer integration (if required).
- Project sizing, drawings, and site-level controls via EMS or MGC.

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SINEXCEL POWER CONVERSION SYSTEM

High Power Range. Scalable from 125 kW to 1.72 MW per unit.
Outdoor Rated. NEMA 3R / IP54 enclosure.
High Efficiency. Up to 98.5% peak efficiency for maximum energy throughput.
Full Synchronous Operation. ComAp controller leverages Virtual Synchronous Generator (VSG) mode to deliver true synchronous performance, eliminating transfer delays and ensuring seamless transitions.
Advanced Grid Support. Grid-following for non-resilient applications, enabling full flexibility.
Flexible Integration. Standard Modbus TCP/RTU communications ensure smooth interoperability with BMS, EMS, and SCADA systems.

AES CABINET

Space-Efficient. High-energy density cabinet with optimized thermal management.

Scalability. Configurable to meet power and capacity requirements.

High Efficiency. Up to 94% round-trip efficiency (RTE).

Enhanced Safety. Audible and visual alarms with E-stop, heat and smoke detection, aerosol fire suppression and passive deflagration vent.

Flexible Integration: Compatible with third-party PCS, SCADA, and EMS systems.

Durable and Long-Lasting: Engineered for a 20-year service life, designed for easy maintenance and serviceability.

ComAp MICROGRID CONTROL

The ComAp controller acts as the central coordinator of the system architecture, delivering grid synchronization, automated breaker control, and VSG-based grid-forming for seamless transitions with no transfer delay. It ensures resilient operation with black start capability, advanced power management, and precise PLC-driven control of BESS, PCS, renewables, and gensets. With built-in cyber-secure communications, remote monitoring, and global grid code compliance, ComAp provides the highest levels of reliability, security, and system resiliency.

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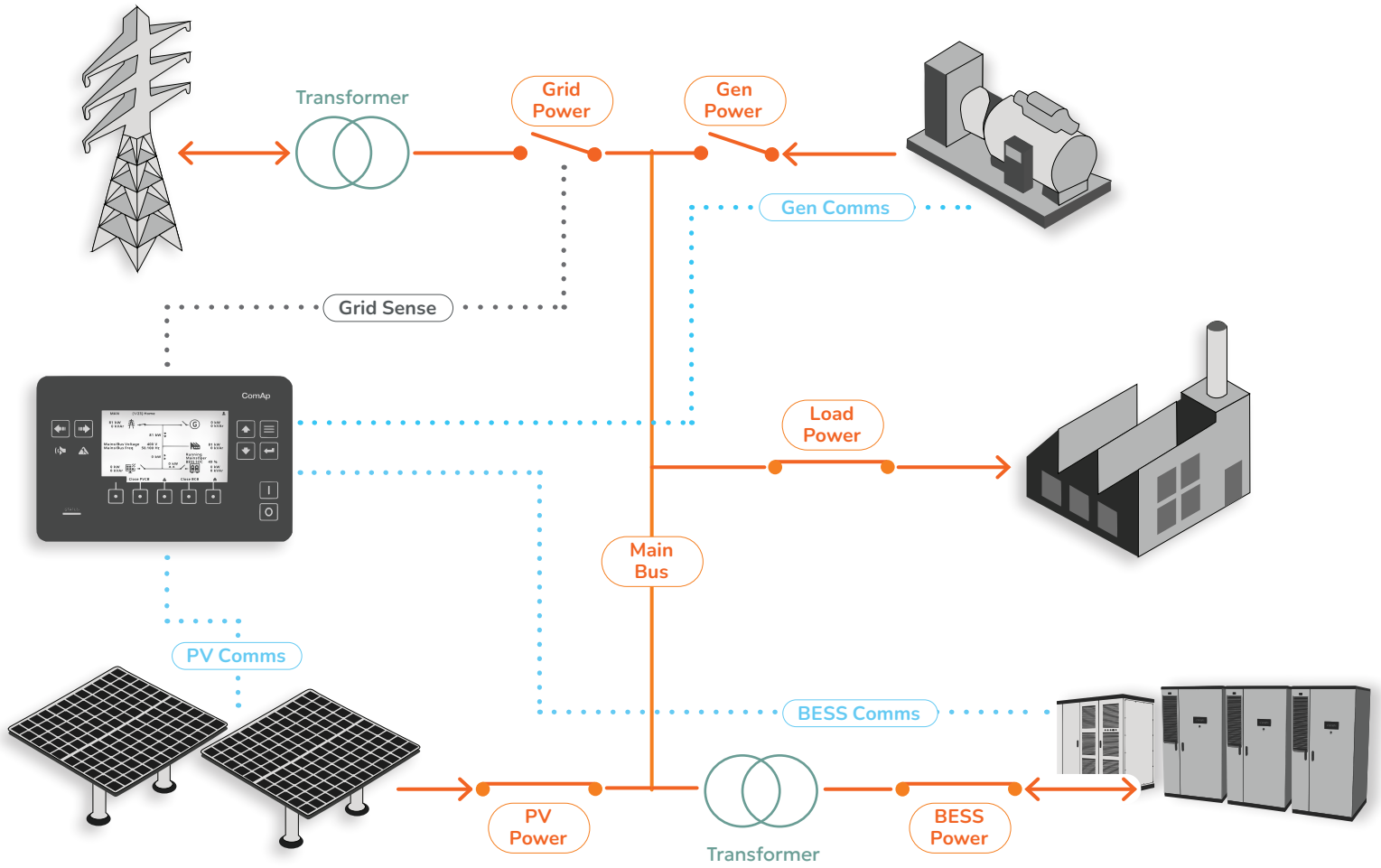
Pre-Engineered Energy System • Scalable Power Block • Integrated Micro-grid Solution

Part Number	Description	690V Power	kWh
CAB426-3/SXL-3M3/---VAC*	Sinexcel PCS 3P3W 690V 50/60Hz | 3x418kWh Discover CAB-426 | ComAp MGC IN5500	620 kW	1250 kWh
CAB426-4/SXL-4M4/---VAC*	Sinexcel PCS 3P3W 690V 50/60Hz | 4x418kWh Discover CAB-426 | ComAp MGC IN5500	830 kW	1670 kWh
CAB426-5/SXL-5M5/---VAC*	Sinexcel PCS 3P3W 690V 50/60Hz | 5x418kWh Discover CAB-426 | ComAp MGC IN5500	1040 kW	2090 kWh
CAB426-6/SXL-6M6/---VAC*	Sinexcel PCS 3P3W 690V 50/60Hz | 6x418kWh Discover CAB-426 | ComAp MGC IN6000	1250 kW	2500 kWh
CAB426-7/SXL-7M7/---VAC*	Sinexcel PCS 3P3W 690V 50/60Hz | 7x418kWh Discover CAB-426 | ComAp MGC IN6000	1460 kW	2920 kWh
CAB426-8/SXL-8M8/---VAC*	Sinexcel PCS 3P3W 690V 50/60Hz | 8x418kWh Discover CAB-426 | ComAp MGC IN6000	1670 kW	3340 kWh

** Replace the dashes (---) with the voltage requirement of the Power Conversion System - PCS*

** Supports 208VAC, 480VAC, and 600VAC with a transformer.*



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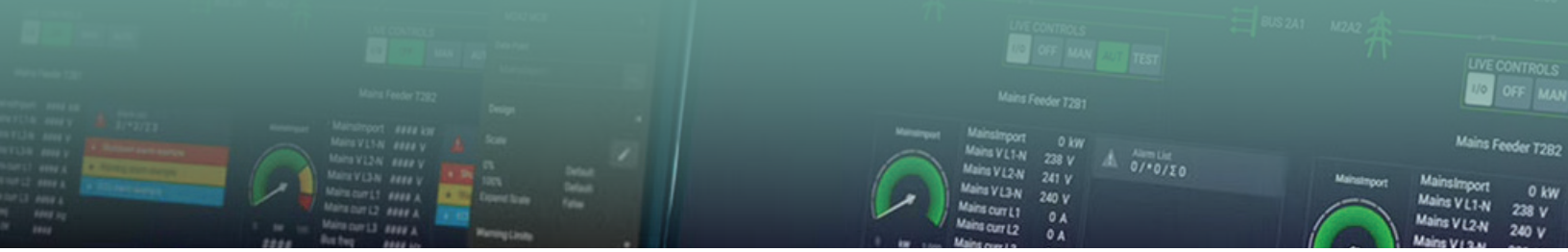

WHY SINEXCEL

With over 4GW+ PCS shipped globally, **Sinexcel** offers unmatched modularity, serviceability, and compliance for grid-tied, islanded, and hybrid environments. From 130 kVA rack systems to multi-megawatt outdoor solutions, Discover integrates these inverters to deliver:

- Black-start and VSG-capable systems
- High-throughput cabinet-based storage
- Fully modular, scalable designs from 130kW to >5MW

WHY ComAp

ComAp delivers intelligent control solutions that combine robust hardware, pre-programmed firmware, and intuitive software to simplify complex energy systems. Their controllers are modular, and integration-ready, making it easy to manage gensets, renewables, batteries, and grid connections.

- Supports scalability for multi-BESS and multi-PCS projects.
- Simplifies commissioning with a pre-engineered control layer.
- Ensures reliable, bankable performance for critical applications.

WHY CHOOSE THIS SOLUTION

Integration, Not Just Components

- Prevalidated communication via LYNK II (closed-loop CAN/Modbus between Cabinets and Sinexcel).
- Seamless PCS paralleling via ComAp MGC (grid, DER, genset integration).
- One SKU, one commissioning pathway.

Scalability & Flexibility

- Multi-MWh with modular cabinets.
- PCS scaling from 450 kW to 1.7 MW depending on AC voltage and module count.
- Parallel expansion on the AC bus without redesign.
- Choice of 480V, 600V, 690V AC backbone for flexibility.

Bankable Safety & Compliance

- **Cabinet:** UL9540, UL9540A, IEC62619, full fire suppression, thermal runaway mitigation.
- **Sinexcel PCS:** UL1741-SB, IEEE1547, global grid codes.
- **ComAp MGC:** Certified to international EMC and safety standards, hot-swap redundancy, black start capability.

Microgrid-Centric Control

- Grid-following & Grid-forming VSG capability.
- Black start & islanding support.
- Renewable-first dispatch logic.
- Coordinated BESS Operation.

Applications & Value Creation

- Peak Shaving, Demand Charge Reduction & TOU Shift
- Resiliency and Reliability, Backup Power & Critical Infrastructure.
- Renewable Integration, Self-consumption, EV Charging and Heavy Infrastructure Support.