END-TO-END ENERGY INFRASTRUCTURE

PORT & TERMINAL ENERGY SOLUTION

Powering continuous port operations through intelligent energy infrastructure.



UNINTERRUPTED OPERATION

Ensure stable power availability for mission-critical port equipment and uninterrupted terminal operations.

PEAK DEMAND OPTIMIZATION

Smooth High-Power loads from cranes, shore power and charging systems, and improve energy utilization.

MODULAR & FLEXIBLE DEPLOYMENT

Containerized ESS, split-type chargers, and prefabricated all-in-one energy units enable plug-and-play deployment and rapid relocation as terminal layouts change.

99.9%
Power Availability

15-30%
Reduced Grid Dependency

10-25%
Energy Cost Savings

WHY ZO POWER

- Backed by ZO FUTURE
- Fleet Synergy with ZO MOTORS
- FULL-SCENARIO SOLUTIONS
- Zo Power EnergyOS
- Global Delivery Network

CHALLENGES

01 Massive Peak Power Demand

Electrification of cranes, terminal tractors, and support equipment places growing pressure on port power infrastructure.

02 Mission-Critical Operations

Any interruption to power supply can directly impact vessel schedules, terminal productivity, and overall throughput.

03 Growing Decarbonization Pressure

Increasing pressure to reduce emissions and meet global sustainability targets.

04 Inflexible Infrastructure

Frequent changes in berth and yard layouts make fixed charging infrastructure costly to relocate, risking stranded assets and repeated investment.

OUR SOLUTIONS

Shore Power Integration

Provide clean electricity to berthed vessels, allowing auxiliary engines to be shut down and significantly reducing emissions.

Optimization

Modular Deployment

Deploy containerized ESS, split-type chargers, and prefabricated energy units for changing terminal layouts.

Flexibility

STS & RTG Cranes Peak Demand Management

Support STS and RTG crane operations through ESS-assisted peak shaving and intelligent load management.

Optimization

Intelligent EMS Platform

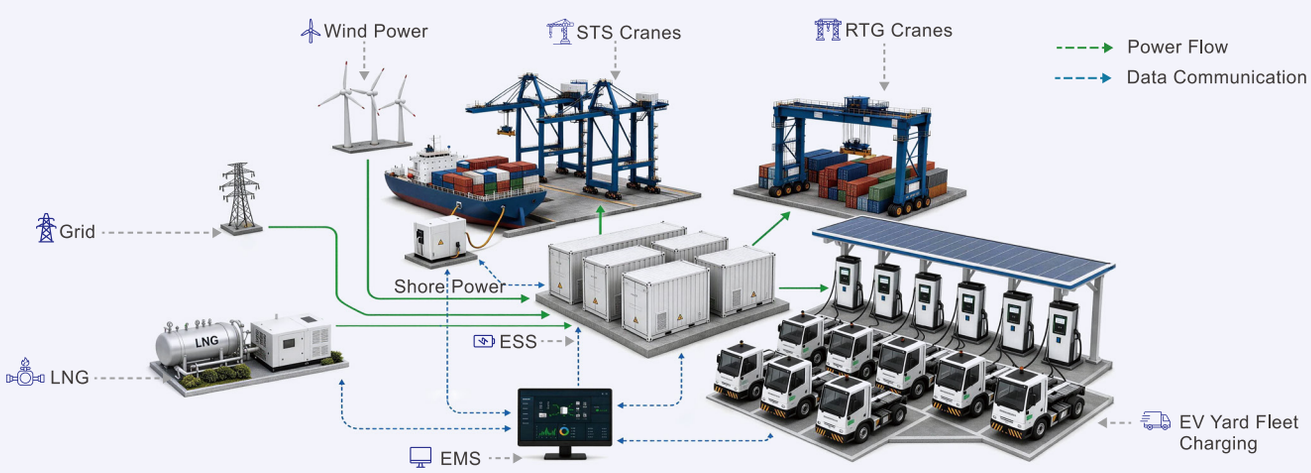
Coordinate solar generation, ESS, and utility power with critical loads through real-time optimization.

EMS

IDEAL APPLICATIONS

- Container Terminals
- Port Expansion Projects
- Industrial Parks
- Commercial Complexes

SOLUTION ARCHITECTURE



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