Power Generation / Hybrid Cube

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HYBRID CUBE

HYBRID CABINET

Website: www.EncounteringInnovation.com
HYBRID CUBE CAPABILITIES

- Pre-packaged, turn-key industrial energy solution
- Provides power up to 100kW; modular design to increase power
- Tower and racks for communication equipment
- Climate controlled space for weapons, equipment or soldiers
- Patented HYBRID integration of traditional and renewable energy
  - Battery Energy Storage
  - Solar
  - Wind
    - Generator w/Integrated Tank - Fuel agnostic - can use Mil. Spec. generator
- Mobile (Truck, Rail, Boat, Helicopter, Plane)
  - Easy to deploy, stackable on a ship
- Potable Water (optional)
- Durable ISO Container – can withstand hurricane force winds, marine grade paint
HYBRID CUBE SCALABILITY

standard packages

10’ Cube
single or multi-tenant

20’ Cube
single or multi-tenant

Cabinet
4 door

ZPM

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HYBRID CUBE INSTALLATIONS AND DEPLOYMENTS

- Clay County, MO – On Grid Public Safety Site
- Missouri National Guard – Earthquake Simulation
- T-Mobile – Off Grid location
- Canadian Pacific Railroad – Off Grid
- Bahamas Telecommunications Company – On and Off Grid
- Kansas City, Mo – On Grid, Public Safety
Contracting Vehicles And Relationships

- Missouri National Guard deployment
- 19.2 AFWERX SBIR Phase 1
- 19.3 AFWERX SBIR Phase 2
- 20.1 AFWERX SBIR Phase 1
- 20.4 Navy SBIR Phase 1
- Winner Air Force Base of the Future: Installation Resilience - Power
- Deployment with domestic and international telecom carriers
- Deployment with international railroads
- Deployment with public safety
- GSA contract FCC-GS-07F-202CA
- Sole Source contracting
HYBRID CUBE RELEVANCE TO COMBATANT COMMAND

1 **RESILIENT**: Provides continuous, clean power regardless of changes in external conditions. Can meet and exceed 2-Weeks/14-Days resiliency requirement.

2 **EFFICIENT**: Runtime of generator is minimized. Less noise, less refueling, less exposure to troops. - Up to 90% Fuel Savings

3 **HARDENED**: HCI utilizes structurally engineered ISO containers that come in various sizes. The Hybrid Cube can withstand hurricane winds.

4 **TRANSPORTABLE**: The Hybrid Cube is easy to transport with both military and commercial vehicles. Once on location, **power within minutes**.
5 **ANY GRID**: Applicable to any grid. Hybrid cube works on-grid, off-grid, pre-grid, dirty grid, and intermittent grid.

6 **DISTRIBUTED POWER**: Supports distributed power configurations making it difficult for the enemy to target. Interconnected or independent power production.

7 **LOW MAINTENANCE**: Maintenance free, long life batteries and minimized generator runtimes gives years of service with minimal maintenance required.

8 **RUN AUTONOMOUSLY**: Intelligent controls optimize and organize energy sources automatically. Can be monitored and controlled remotely supporting situational awareness.
HYBRID CUBE CONTROLS

Battery First Design

Zero-Glitch Power Modules (ZPM)

Remote monitoring:
- Batteries
- Solar Array
- Wind Turbine
- Generator
- Weather
HYBRID CUBE MATURITY AND SCALABILITY

**TRL = 9**

Military, Public Safety, Telecommunications
Fiber Networks, Railroad

**SCALABLE AND MODULAR**

- **20’ x 8’ Hybrid Cube:** 1kW - 100kW of power
- **10’ x 8’ Hybrid Cube:** 1kW - 60kW of power
- **6’ x 8’ Hybrid Cube:** 1kW – 6kW of power
HYBRID CUBE COST AND SCHEDULE

$35 K TO $450 K

45 - 150 DAYS TO BUILD

HCI has multiple supplier and fabricator relationships
HYBRID CUBE RELEVANCE TO THE WARFIGHTER

• **Soldier Safety**
  • Reduced soldier exposure during transport + refueling
  • Faster installation = Less exposure
  • Silent operation
  • Immediate power on demand

• **Saves Money**
  • Less fuel, Less refueling, Less transport, Less maintenance
  • Minimal civil work

• **Protects Equipment**
  • Battery first design
  • Clean, conditioned power, < 2% harmonics
  • Customizable space for gear, weapons, or additional equipment

• **Environmentally Friendly – Reduced Carbon Footprint**
Thank You