

# Commercial Series

POWER THE FUTURE

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**DOWELLESS**

# Overview

At Dowell, we're committed to shaping a sustainable future for heavy industries.

Dowell iCube , a revolutionary, compact, and smart battery energy storage system (BESS) designed to transform the way we power construction sites, mining plants, oil fields, oil wells, tunnels, and more.

Dowell iCube is a powerful solution that replaces the conventional reliance on dirty, noisy, and hazardous diesel generators. Crafted to meet the diverse demands of these challenging environments, it comes in various sizes to adapt seamlessly to the specific needs of construction sites, mining operations, oil fields, wells, tunneling projects, and beyond.



## Commercial



### Operating Expense Reduction

Eliminate costly diesel generators and unpredictable fuel expenses.



### Cost Reduction

Reduced downtime and maintenance expenses, including those associated with managing fuel additives and tank maintenance.



### Energy Cost Optimization

Apply for smaller grid connections, employ thinner cables, shift energy usage to off-peak hours, and minimize demand charges.

## ESG



### 90% Lower CO2 Emissions

Compared to diesel generators, the iCube produces 90% fewer CO2 emissions.



### Enhanced Safety

Eliminates all diesel-related hazards, creating a safer workplace for workers.



### Zero Ground Contamination

The absence of diesel means zero risk of spills and ground pollution.

## Operational



### Near Silent

Eliminate noise concerns and enable operations during noise-sensitive timeframes.



### Automated Operation

Employ a fully automated recharging system to reduce the need for manual labor.



### 4G-Enabled IoT

Diagnose issues and analyze data remotely. Monitor energy consumption and track CO2 emissions. Receive continuous software updates.



### Time Savings

Reduce grid connection time and complexity by utilizing a low-voltage network, expediting project completion.



## Powering large plants where the grid supply is limited or delayed

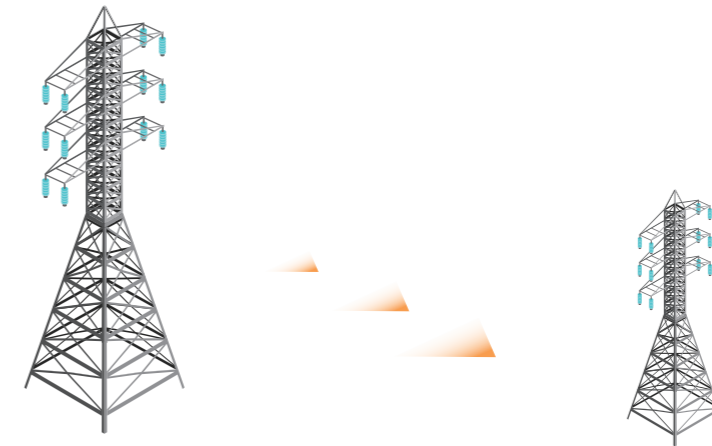
Replace Diesel Generators for Your Heavy Machinery



- Eliminate the need for diesel generators or substantially reduce their size.
- Achieve a substantial reduction in CO2 emissions.
- Attain a completely emissions-free operation, eliminating tailpipe emissions.
- Realize overall OPEX cost savings compared to using diesel generators.

## Minimize Grid Connectivity Requirements

Apply for a Smaller Grid Connection, potentially shifting from High Voltage to Low Voltage.



- Accelerate power acquisition process.
- Decrease initial grid connection costs.
- Lower demand charges.
- Shift energy consumption from peak to off-peak hours.
- Reduce expenses associated with cabling.
- Achieve a rapid payback period.



## Product Features

- All in one Integrated design with high protection level, to meet the installation and use in different environments;
- iCube is designed with independent battery and electrical spaces to enhance fire safety and reliability of the system;
- New BMS control concept to optimize BMS control method and improve DC-side output efficiency;
- Built-in local/remote EMS control logic to meet the operation strategy customization of local operation and remote scheduling;
- Professional multi-platform access to provide multi-dimensional after-sales and operation & maintenance services.

Model	iCube-30-100	iCube-60-100	iCube-100-215
<b>System Technical Specifications</b>			
<b>AC (Grid tied)</b>			
Apparent Power	33kVA	66kVA	110kVA
Rated Power	30kW	60kW	100kW
Rated Voltage		400V	
Rated Current	43A	87A	144A
Voltage Range		360V~440V	
Rated Frequency		50/60Hz	
THDI		<3%	
Power Factor		0.8 leading~ 0.8 lagging	
AC mode		3 / N / PE	
Overload Capability		110% 10minutes, 120% 1min	
<b>DC</b>			
Battery Voltage Range	313V~403V	313V~403V	672V~864V
Battery Capacity	100.35kWh	100.35kWh	215.04kWh
Max. Charging Power Max.	30kW	60kW	100kW
Discharging Power Max.	30kW	60kW	100kW
Charging Current Max.	100A	140A	140A
Discharging Current Basic parameters	100A	140A	140A
Noise		<65dB(A)@1m	
IP protection level		IP54	
Fire protection		CF3CHFCF3	
Cooling		Forced air+ Smart AC	
Operating Temperature		-25°C ~ +55°C	
Relative Humidity		0~95%, without condensation	
Max. Altitude		4000m (>2000m derating)	
Dimensions (W*D*H)	1000mm x 1000mm x 2200mm	1000mm x 1000mm x 2200mm	1545mm x 1000mm x 2350mm
Weight	1350Kg	1380Kg	2450Kg
Display Communication		Touch Screen	RS485 / LAN



Designed to the highest specifications and safety standards, the iCube is compliant with the strict commercial environments.

