

ENERGYPACK · HYBRID POWER SERIES · WORKHORSE

KCG600E-POWER

Diesel and battery, at the same time. 600 kVA / 522 kWh true parallel hybrid.

Engineered for tower cranes, heavy plant and main-stage events. Sustained high power with significant low-load periods — battery absorbs the valleys, diesel handles the peaks. Single OEM-engineered machine, single-point lift, one HMI.

600 kVA

APPARENT POWER

522 kWh

LFP BATTERY

4.5 t

WEIGHT



Engineered for the field.

A factory-engineered hybrid genset — not a battery box bolted to a diesel. One vendor, one commissioning workflow, one operator interface.

01 True parallel hybrid output

Diesel module and LFP battery deliver power simultaneously on the same AC bus. EMS holds the diesel at optimal-efficiency RPM; battery fills load peaks and transients. 40–55 % measured diesel reduction (Hong Kong, full-shift).

02 Single-point lift, single-vendor commissioning

Whole machine — diesel module, battery, electronics — leaves the factory as one lifted, certified unit. One hook design, no spreader bar. One commissioning sequence, not three.

03 Operator-facing analogue panel

V / A / Hz analogue meters and an Acrel power module — what every diesel-genset operator already knows. The hybrid logic sits behind it; the workflow does not change. Branch training in one day.

04 Open control architecture

RS485 · Modbus RTU · Ethernet TCP/IP. In-house EMS integrates with existing fleet management systems and third-party diesel gensets. Secondary development supported.

Specifications.

All values measured at 25 °C ambient unless noted otherwise. Detailed test reports available on request under NDA.

ELECTRICAL

Apparent power	600 kVA
Rated voltage	320–460 Vac
Frequency	50 / 60 Hz
Phases	3-phase, 4-wire + PE

BATTERY

Chemistry	LFP (Lithium Iron Phosphate)
Capacity	2 × 261 kWh @ 1C
Operating temp.	–20 to +55 °C
Standard	IEC 62619

MECHANICAL

Weight	4.5 t
Dimensions (L×W×H)	2300 × 2000 × 2000 mm
Ingress protection	IP54
Lift	Single-point, certified

CONTROL & CONNECTIVITY

Control	In-house EMS · 1 HMI
Connectivity	RS485, Ethernet, 4G opt.
Protocol	Modbus RTU, TCP/IP
Engine emissions	Stage V

Applications.

Sites with sustained high power demand and significant low-load valleys.

Tower crane operations

High peak demand with extended low-load periods between lifts. Battery absorbs the valleys, diesel supports the peaks.

Heavy construction plant

Full-shift power for large sites. Night-time security, CCTV and lighting runs on battery alone — no diesel noise.

Main-stage events

High power for AV and lighting with battery priority during quiet changeovers. Stable AC for sensitive production gear.

COMPLIANCE

CE

Marking

Stage V

EU Emissions

IEC 62619

Battery Safety

IEC 62477

Power Electronics

UN38.3

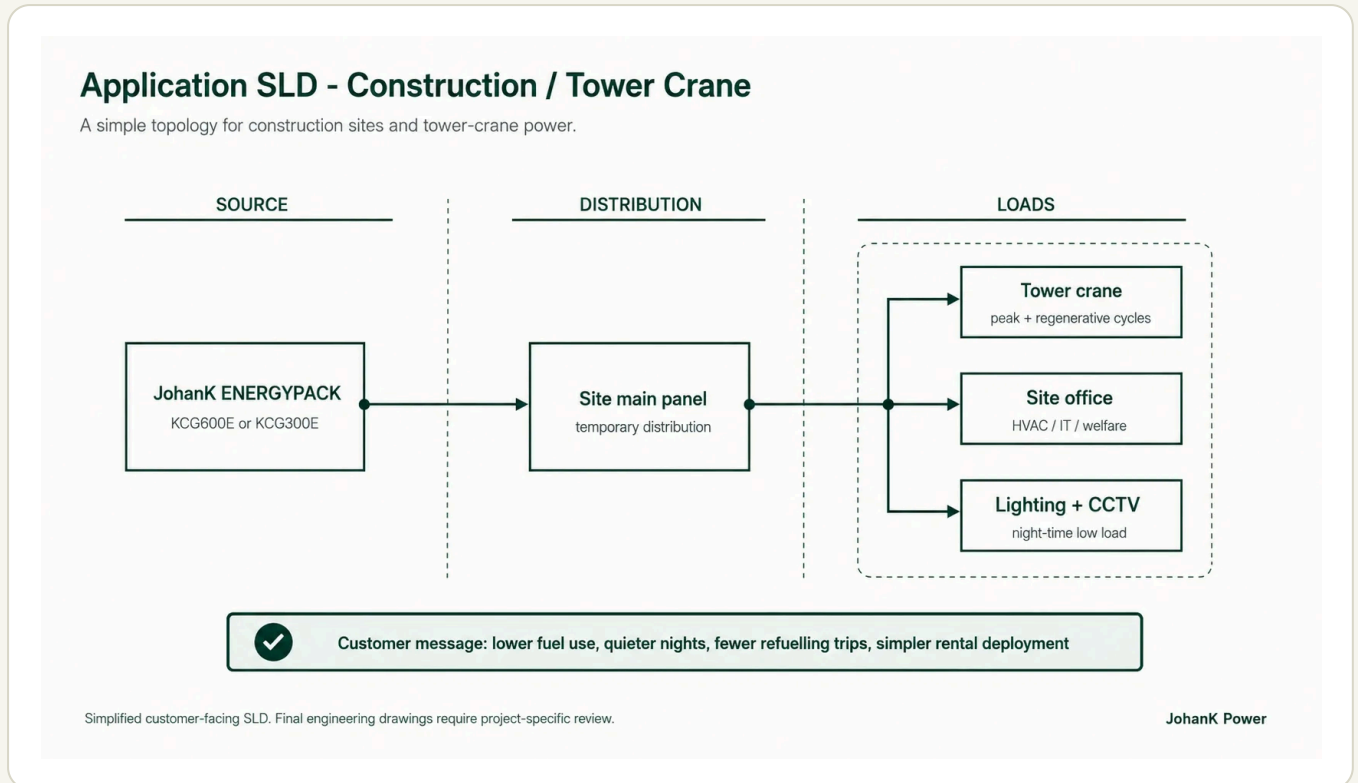
Transport Safety

IP54

Ingress

Single Line Diagram.

How the KCG600E connects to a tower-crane construction site — primary supply with battery-only night-shift operation.



Three conversations. No commitment required.

A 30-minute technical call walks through the architecture. A TCO model on your job profile shows fuel savings vs. your current diesel-only fleet. Hong Kong site visits available on request.

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40–55%

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