



katoni
ENGINEERING

Engineering Critical Power for Data Centres

From early power strategy to deliverable
electrical design.

Power availability is only part of the challenge.
Making the complete system work *reliably* is the
engineering problem.

Katoni Engineering brings experience from safety-critical, uptime-dependent energy infrastructure into data centre power systems - supporting projects from early power strategy and system definition through studies, engineering and detailed design.

DEFINE

Set the electrical strategy early.

- Power architecture and distribution philosophy
- Grid / private-wire integration
- Resilience, redundancy and operating philosophy
- UPS / BESS / standby generation strategy
- Equipment definition and design basis

ANALYSE

Understand how the system behaves.

- Load flow and short circuit studies
- Protection coordination
- Motor starting and dynamic operating cases
- Harmonics and power quality
- Arc-flash assessment and resilience scenarios

DESIGN

Turn the strategy into deliverables.

- HV / LV distribution and switchgear
- Cable sizing, routing and containment
- Protection, control and earthing
- Equipment specification and selection
- Drawings, schedules and engineering deliverables

Transferable critical-infrastructure experience

Katoni Engineering routinely engineers power systems where loss of supply has significant operational and safety consequences. This capability is already being transferred into renewable infrastructure, including electrical studies, equipment selection and detailed design support for offshore substations.

Where do we add value?

Independent engineering resource for developers, OEMs, integrators and delivery teams - either as a discrete study/design package or as an extension of an existing project team.

From Engineering to Uptime

Engineering backed by specialist critical-power capability

Katoni can provide front-end studies, detailed electrical design and integration support as discrete work packages or additional engineering resource within an existing project team. Working alongside established specialist partners, we can extend that support into equipment supply, commissioning and through-life support.

UPS & Stored Energy

Supported by specialist critical-power partner



- UPS and stored-energy solutions
- Battery systems and resilience support
- System integration
- Commissioning and testing
- Maintenance and through-life support

Electrical Equipment & Materials

Supported by established local supply-chain partners

- Switchgear and distribution equipment
- Transformers
- Cabling and containment
- Protection and control equipment
- Local procurement and stockholding support

Uptime & Resilience

UPS / Battery

Critical stored energy support and continuity of supply.

Standby Power

Standby and temporary generation for resilience and programme support.

Microgrid

Integration of grid, generation, storage and alternative energy sources.

Maintainability

Maintenance and bypass philosophies designed around continued operation.

Expansion

Engineering for future capacity increases and system modification.

Integration

A joined-up view of protection, controls, distribution and equipment interfaces.

Integrated Support - From Concept to Critical Power

Front-end studies | Power system analysis | Electrical design | UPS & stored energy

Equipment integration | Uptime support