

CORE G500/i250

Mobile energy storage system

500 kWh Energy Capacity | 250 kW Inverter Output Power



Built around your application

The CORE G500/i250 is a mobile Battery Energy Storage System (BESS) designed for rental, temporary power, infrastructure and industrial applications.

Built by GTI and powered by proven European subsystem technologies, the system combines advanced energy storage, intelligent hybrid controls and industrial-grade power conversion within a compact transportable platform.

Designed around real-world deployment requirements, the G500/i250 provides operational flexibility, reduced fuel consumption and improved site efficiency while supporting modern hybrid power applications.

Powered by proven subsystems

Technology area	Partner
Energy storage technology	Volvo Penta
Power conversion & hybrid controls	Mecc Alte
System integration & validation	GTI Power Generation

Key features

500 kWh energy capacity

250 kW inverter output power

NCA battery technology

Grid forming & grid following

Peak shaving & load levelling

Generator integration

Black start capability

Integrated fire suppression

Remote monitoring ready

Built in the UK

Premium European technologies

Galvanic isolation & insulation monitoring

Typical applications

Rental power

Construction

Infrastructure

Utilities

Mining

Events

Telecommunications

Industrial facilities

Hybrid generator systems

Microgrids

Electrical specification

Energy Storage System

Parameter	Value
Energy capacity	500 kWh
Battery chemistry	NCA
Nominal battery voltage	650 VDC
Maximum DC input current	500 A

Power Conversion System

Parameter	Value
Inverter output power	250 kW
Ac output voltage	400 VAC (3W+N)
Rated inverter output current	360A
Frequency	50/60Hz
Protection class	Class I
Max generator input current	630A

Operating Modes

Grid forming

Grid following

Generator support

Peak shaving

Load levelling

Black start

Renewable integration

Energy flow control

Communications

CANBUS

Modbus RTU

Modbus TCP/IP

Ethernet

Remote monitoring ready

Safety Features

Integrated fire suppression system

Thermal management system

Battery protection system

Galvanic isolation monitoring

Emergency stop function

Fault monitoring

Alarm management

Current limited charging input

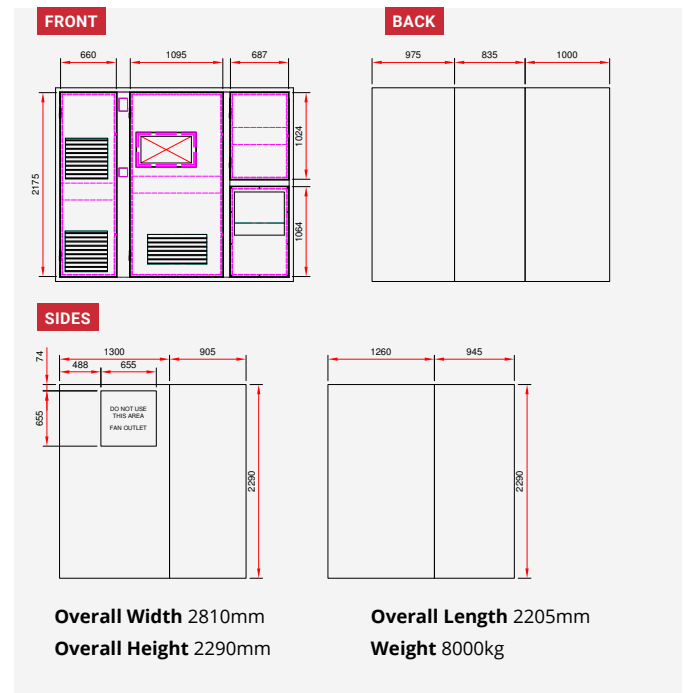
Oversized output port for generator + inverter power boosting

Mechanical data

Details

Parameter	Value
Container type	10ft ISO
Colour	RAL6026 Penta Green
Maximum weight	8,000 kg
Operating temperature	-20°C to +40°C
Fire suppression	Integrated
Forklift pockets	Yes
Lifting points	Yes

Dimensional drawing



Transport & deployment

The CORE G500/i250 has been developed as a compact mobile energy storage platform suitable for transport, rapid deployment and fleet operation.

Features include:

Compact 10ft footprint

Transport ready design

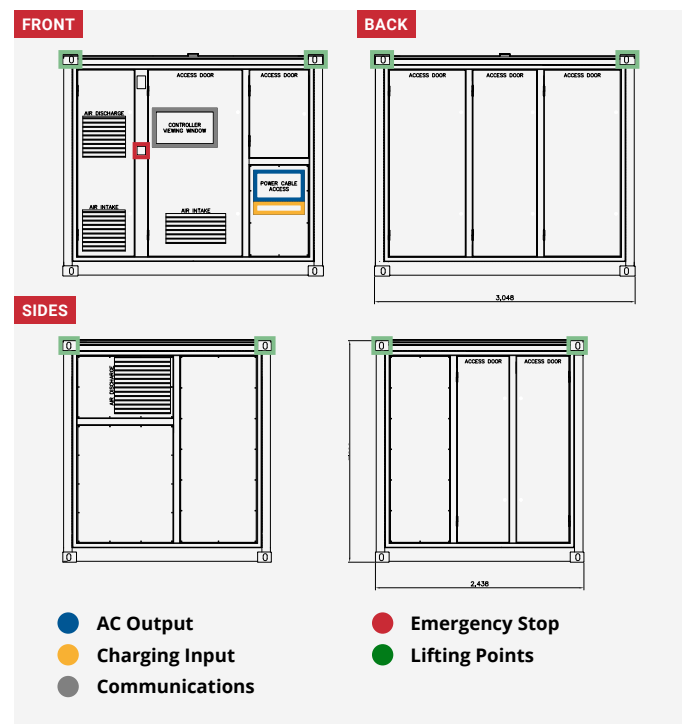
Certified lifting points

Forklift access

Fleet friendly architecture

Rapid site deployment

Simple Layout



Designed around your requirements

Configurable by design

No two applications are exactly alike. That's why we offer a wide range of customisation. Unlike many fixed-configuration energy storage products, CORE combines a proven architecture with configurable deployment options.

Systems can be adapted to suit specific application requirements including:

Charging strategies

Connector configurations

Monitoring solutions

Generator integration requirements

Site deployment requirements

Fleet management requirements

Rental ready architecture

Developed with rental operators and temporary power providers in mind, the CORE platform supports flexible deployment strategies and practical site operation.

Benefits include:

Mobile platform

Generator integration

Rapid deployment

Flexible charging strategy

Fleet optimisation

Service accessibility

Future expandability

Why core?

Built around your application

Powered by proven subsystems

Premium European technologies

Built in the UK

Mobile & scalable platform

Rental ready architecture

Global technical support

Future ready platform

Store | Control | Power

CORE industrial energy systems

Built by GTI Power Generation

Powered by proven subsystems

www.gtipowergeneration.com