

Product Specifications¹

Model	TC-50-240
Electrical Specifications	
Battery Technology	Lithium-ion / LFP
C-Rate (charge/discharge)	0.5C / 0.5C
DC Current Rating	90A
Battery Efficiency	98%
Installed Capacity	240kWh
Usable Capacity	216 kWh
Rated Power	100kW
DC Voltage	665.6 V
DC Voltage Operation Range	582.4V - 759.2V
Cycle Life²	5000Cycles @ 80% EoL (0.5C/0.5C, 25°C)
Auxiliary AC Voltage	480V, 3 Phase
Nominal AC Frequency	60Hz
Mechanical Specifications	
Enclosure	NEMA 3R equivalent (10 FT Container)
Dimensions (W x D x H)³	2991 x 2438 x 2591mm
PCS Dimensions (W x D x H)	800*800*2160mm
Operating Temperature	-20°C to 45°C
System Weight	3000 kg
Fire Suppression System	Optional
HVAC	Yes
Thermal Runaway Protection	Yes
Enclosure Color	Customizable
Communications	
Integrated Microgrid Control Function	Solar + BESS + EV charger
Network	TCP/MODBUS/RS485
Certifications	
Safety and grid interface	UL1741, UL1642, UL1973, UN38.3



Picture shown is for illustration purposes only. Actual product may vary due to product or design enhancement.

Features



Modular Off-the-Shelf Approach

Scalable from 70kWh-5MWh+, with selections of over 300 power output designs starting from 30kW, offering great flexibility in C&I applications



IoT & Cloud-based Operation

Remote operation and prevention system reduces troubleshooting



Dynamic Rate Support

Charge/Discharge rate from 30 minutes to 10+ hours



Adaptable Solutions

Bidirectional AC/DC PCS with on, off, or on & off grid connected system within a flexible enclosure



Extended Operational Life

Retention of system's useable capacity after 10+ years with ability to augment the system



Leading Sustainability

Offerings include a Fire Suppression System with low/zero emissions

¹In the interests of continual product improvement, specifications are subject to change without notice. Please contact us for the latest specifications.

²Expected life is defined as the ability to provide the specified rated power. Actual life may vary and will depend on factors such as (but not limited to):

- (i) operating temperature
- (ii) quality of maintenance of the system
- (iii) frequency of use
- (iv) time duration spent at different battery states.

³An additional 0.9m clearance on all sides of the battery energy storage system should be provided for maintenance access.

⁴Actual grid input requirement will depend on factors such as (but not limited to):

- (i) actual equipment electrical requirements.
- (ii) utilization/duty cycle.
- (iii) daily duration of availability of input power supply.
- (iv) state-of-health and age of the BESS.
- (v) duration of daily construction site operations.