

Battery Inverter 100/250

Overview

The Efacec **Battery Inverter 100/250** was engineered to assure the interaction between the storage system and grid, providing a set of features and controls that allow a smart energy management and may provide grid stability services, as well. This range of converters is the ideal selection to integrate energy storage systems in new or existing power plant.

Customer Benefits

- High efficiency
- Grid support capability
- Extended grid support functions
- Reactive compensation module
- Real time management

Key Benefits

- 4 quadrant operation
- Compatible with several battery technologies
- Flexible battery interface
- DC & AC protection
- Extended support using Efacec international structure

Main Features



Grid Support

- Off-grid and black-start capability
- Q, P control inbuilt
- Grid support features
- Grid code compliance
- IEC 62116, BDEW standards



Compact Design

- Optimized for Storage Station
- Fast & easy field installation
- Frontal access only
- Robust design



Battery Interface

- Wide DC input range
- Compatible with several battery technologies
- Fuse protected
- Individual current measurement



Reliability Focus

- High quality components
- Extended temperature range
- Fast & easy replacement
- Fast troubleshooting
- Kaizen manufacturing



Energy Management

- Open communication protocol
- Extended grid support functions
- Grid dispatch integration
- Real time management
- Integration in monitoring software solutions



After Sales

- Warranty extension options
- Service & availability contracts
- Customer service portal & hotline
- Extended support using Efacec international structure

Technical Data

Electrical	Battery Inverter 100		Battery Inverter 250	
Input				
Minimum voltage	420 V		480 V	
Maximum voltage ⁽¹⁾	850 V		880 V	
Maximum current	250 A		542 A	
Output				
Rated power	100 kVA		250 kVA	
Rated voltage ⁽²⁾	400 V		315 V	
Rated current	144 A		458 A	
Frequency			50 Hz/60 Hz	
Maximum current	160 A		509 A	
THD			< 3%	
Efficiency				
Maximum ⁽³⁾	96,1%		98,4%	
Protective devices				
DC disconnect device			•	
AC disconnect device			Circuit breaker	
DC overvoltage protection			•	
AC overvoltage protection			•	
Auxiliaries overvoltage protection			•	
Ground fault monitoring			•	
Overvoltage			•	
Undervoltage			•	
Overfrequency			•	
Underfrequency			•	
Anti-islanding			•	
Reverse polarization			•	
Short circuit on the output			•	
Overtemperature			•	
Asymmetrical current			•	
Grid Support	LVFRT, HVRT, P(f), Q(U), PQ setpoint, Off-grid and black-start			
General data				
Ambient temperature			-10 °C ... +50 °C	
Max. Permissible value for relative humidity (noncondensing)			15% ... 95%	
Cooling concept			Air forced cooling	
Color			RAL 7035	
Dimensions (WxDxH)	1200 x 600 x 1900 mm		1200 x 600 x 1900 mm	
Weight	700 kg		850 kg	
Protection degree			IP20	
Protective class			I	
Standards				
CE marking			Yes	
Safety/EMC			EN 50178 / EN 61000-6-2, EN 61000-6-4	
Grid interface			IEC 62116, Flexible grid code control mode	
Interfaces				
Local Human Machine Interface			4.3” Color, touch screen	
Remote interface			Web Virtual HMI	
Communication protocols			Modbus TCP/RTU	
Data storage			Datalogger	
Optionals				
			Maintenance service	
			Warranty extension	

(1) - The operation up to 1000 V is possible with limited current.

(2) - Other AC voltage, DC voltages and power classes can be configured.

(3) - Efficiency measured without auxiliary power supply consumption and at input and output rated voltage.



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