



## Battery Inverter 500/630/730/1000



### Overview

The Efacec Battery Inverter 500/630/730/1000 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
- 600 mm depth
- 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 500	Battery Inverter 630	Battery Inverter 730	Battery Inverter 1000
<b>Input</b>				
Minimum voltage	450 V	530 V	530 V	600 V
Maximum voltage <sup>(1)</sup>		920 V		1000 V
Maximum current	1200 A	1300 A	1350 A	1485 A
Number of DC inputs <sup>(2)</sup>	6 inputs equipped with fuses			
<b>Output</b>				
Rated power	500 kVA	630 kVA	730 kVA	1000 kVA
Rated voltage <sup>(3)</sup>	270 V	315 V	360 V	405 V
Rated current	1070 A	1020 A	1170 A	1426 A
Frequency	50 Hz/60 Hz			
Maximum current	1260 A	1310 A	1310 A	1570 A
THD	< 3%			
<b>Efficiency</b>				
Maximum <sup>(4)</sup>	98,4%	98,5%	98,6%	98,4%
<b>Protective devices</b>				
DC disconnect device	Motor-drive switch disconnector			
AC disconnect device	Circuit breaker			
DC overvoltage protection	Type II surge arrester			
AC overvoltage protection	Type I surge arrester			
Auxiliaries overvoltage protection	Type II surge arrester			
Ground fault monitoring	•			
Oversupply	•			
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			
<b>General data</b>				
Ambient temperature	-10 °C ... +50 °C / +14 °F ... +122 °F			
Max. Permissible value for relative humidity (noncondensing)	15% ... 95%			
Cooling concept	Air forced cooling			
Color	RAL 7035			
Dimensions (WxDxH)	2200 x 610 x 2000 mm / 86,6 x 24 x 78,7"			
Weight	1800 kg / 3968 lb			
Protection degree	IP20 / NEMA 2			
Protective class	I			
<b>Standards</b>				
CE marking	Yes			
Safety/EMC	EN 50178 / EN 61000-6-2, EN 61000-6-4			
Grid interface	IEC 62116, Flexible power and grid code control			
<b>Interfaces</b>				
Local Human Machine Interface	4.3" Color, touch screen			
Remote interface	Web Virtual HMI			
Communication protocols	Modbus TCP/RTU			
Data storage	Datalogger			
<b>Optionals</b>				
	Maintenance service			
	Warranty extension			

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

(2) - Other configurations can be used.

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

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

View the product on our website.  
Due to our policy of continuous development, specifications may change without notice. Not valid as a contractual item.



Efasec Energia, Máquinas e Equipamentos Eléctricos, S.A.

Rua Eng. Frederico Ulrich - Ap. 3078 | 4471-907 Moreira Maia | Portugal | Tel: +351 229 402 000 | Fax: +351 229 403 209 | inverters@efacec.com | solarinverters.efacec.com



mod. CS30211505B1