



EFASOLAR 500/630/730/900

EFASOLAR 500/630/730/900 solar inverters are engineered for large scale power plants with centralized architecture and high reliability and availability requirements. These models are very competitive and represent a major step to assure the investment return.

EFASOLAR 500 EFASOLAR 630
EFASOLAR 730 EFASOLAR 900

Customer Benefits

- Flexible equipment for large scale projects
- Configurable DC inputs with current measurement
- High efficiency
- DC and AC protection
- Extend support through Efacec international structure

Key Benefits

- Designed for large scale project
- Reactive power compensation at night
- Grid dispatch integration
- Grid support capability
- All protective devices and features included

Main Features



Grid Support

- Q, P control inbuilt
- Grid support features
- Grid code compliance
- IEC 62116, BDEW standards
- LVRT capability



Compact Design

- Optimized for PVStation
- Front access for enhanced O&M
- Robust design
- 600mm depth
- Fast & easy field installation



PV Interface

- Wide MPPT range
- Input voltage up to 1000 V
- Configurable DC inputs
- Fuse protected
- Individual current measurements



Reliability Focus

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



Power Plant Controller

- Dynamic P, Q control modes
- Grid dispatch integration
- Open communication protocol
- HMI remote access
- 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

EFASOLAR 500

EFASOLAR 630

EFASOLAR 730

EFASOLAR 900

Electrical				
Input				
Maximum power	575 kW	725 kW	840 kW	1035 kW
Minimum voltage	450 V	480 V	530 V	620 V
Maximum voltage	1000 V			
MPPT range	475 V - 830 V	510 V - 830 V	555 V - 830 V	635 V - 830 V
Maximum current	1200 A	1300 A	1350 A	1485 A
Number of independent MPP inputs	1			
Number of DC inputs ¹	6 inputs equipped with fuses			
Output				
Rated power (25 °C / 50 °C)	550 kVA / 500 kVA	690 kVA / 630 kVA	790 kVA / 730 kVA	980 kVA / 900 kVA
Rated voltage ²	270 V	315 V	360 V	420 V
Rated current	1070 A	1155 A	1170 A	1237 A
Frequency	50 Hz / 60 Hz			
Maximum current	1260 A	1310 A	1310 A	1370 A
THD	< 3%			
Power factor ³ /Displacement power factor ⁴	1,0 / 0,8 inductive to 0,8 capacitive			
Required grid type	IT grid			
Isolation transformer	No			
Efficiency				
Maximum ⁵	98,4%	98,5%	98,6%	98,7%
Euro-efficiency ⁵	98,1%	98,3%	98,4%	98,5%
CEC efficiency ⁵	98,2%	98,4%	98,5%	98,6%

Protective devices	
DC disconnect device	Motor-drive switch disconnecter
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	•
Overvoltage	•
Undervoltage	•
Overfrequency	•
Underfrequency	•
Anti-islanding	•
Reverse polarization	•
Short circuit on the output	•
Overtemperature	•
Asymmetrical current	•

General data	
Ambient temperature	-10 °C ... +50 °C / +14 °F ... +122 °F
Max. permissible value for relative humidity (noncondensing)	15% ... 95%
Cooling concept	Air forced cooling
Auxiliaries power supply	230 V
Max. self-consumption (operation) / self-consumption (night)	1300 W / <85 W
Color	RAL 7035
Altitude for rated conditions / Maximum operating altitude above sea level ⁶	1000 m / 3000 m
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

Standards	
CE marking	Yes
Safety/EMC	EN 62109-1, EN 62109-2 / EN 61000-6-2, EN 61000-6-4
Grid interface	IEC 62116, BDEW, P.O.12.3, Arrêté 23-04-2008, ABNT NBR 16149, ABNT NBR 16150, South African Grid code, Chilean Grid Code

Interfaces	
Local Human Machine Interface	4.3" Color, touch screen
Remote interface	Web Virtual HMI
Communication protocols	Modbus TCP/RTU
Data storage	Datalogger

Optionals	
	Remote monitoring software
	Reactive energy compensation module
	Maintenance service
	Warranty extension

• Base feature
 (1) - Other configurations can be used.
 (2) - Other AC voltage, DC voltages and power classes can be configured.
 (3) - Power factor > 0,98 at rated output voltage and power load > 15%.
 (4) - The adjustable range can be extended and other values can be configured.
 (5) - Efficiency measured without auxiliary power supply consumption and at input and output rated voltage.
 (6) - Please consult Efacec with the specific operating conditions in order to characterize an eventual derate with altitude.

