DOUBLE CONVERSION THREE PHASE INVERTER

SUNZET CENTRAL

Modular three-phase central inverter utility scale solar plants



The SUNZET CENTRAL has been specially designed for improving the efficiency and utility scale of solar generation plants. This three-phase solar inverters range from 100 to 300 kW stand out by their efficiency of their MPPT, higher than 98,5%. The SUNZET CENTRAL inverters provide high reliability and guaranteed operation.

One of the features from Sunzet CENTRAL inverters to highlight is their unbeatable power density per volume, enabling a significant space reduction in medium-large size Solar Plants.

Another important feature is its automatic regulation of reactive power and communications tools between it and the centralised supervision and control system. All its parameters are configurable both locally and remotely. SUNZET inverters operate with an output voltage 3x400 V and are adapted to meet with international grid codes.



Features

- > Range of input DC voltage (590-1000 VDC)
- > Maximum power point tracking (MPPT)
- > High energy efficiency MPPT > 99%
- > Very low harmonic distortion THD < 3%
- > Selectable power factor
- > Unlimited parallel connection
- > Anti-islanding protection with automatic shut down
- > Monitoring from the unit with LCD
- > Strings currents monitoring (with option "Sunzet String Box")
- > IP21 protection level
- > Protection against: inverse polarity, short-circuits, over voltages, insulation failure with output to relay
- > Automatic reactive energy regulation
- > PC-based Web server programme for full access to inverter data
- > Maximum efficiency 98.5%
- > Modularity
- > DC and AC surge protections included
- > Compatible with thin film modules
- > ETHERNET communications ports
- > Easy access through any web browser

Connectivity and accessories

> Sunzet Web server integrated

PC-based Web server programme for full access to inverter data by Zigor to monitor and communicate with SUNZET CENTRAL inverters (integrated).

on-grid solar plants

mid voltage solar plants hybrid generation

energy saving







ELECTRICAL CHARACTERISTICS			
Model	Sunzet Central 100	Sunzet Central 150	Sunzet Central 300
Continuous output power	100 kW	150 kW	300 kW
Recommended PV power		+5% to +20%	
Nominal AC voltage		3x400 V	
Nominal frequency		50/60 Hz	
Power factor		1 adjustable ± 0,8	
Nominal line current AC	145 A	217 A	435 A
Current distortion AC (1)	< 3% THD of nominal power		
Maximum open circuit voltage DC (2)	1000 V		
Power tracking range (MPPT) DC	590 to 850 Vdc		
Maximum input current DC	137 A	260 A	521 A
Maximum efficiency	98,3%	98,5%	98,5%
European efficiency	97,5%	97,9%	98,2%
ENVIRONMENTAL AND MECHANICAL FEAT	URES		
Range of ambient temperatures	-10°C to +50°C		
Type and grade of environmental protection		IP21	
Approximate Weight kg	350	350	450
Dimensions (HxWxD) mm	1600x800x600	1600x800x600	2150x800x600
Operating height (3)		1000 m	
Relative humidity	0 to 95% without condensation		
GENERAL FEATURES			
Refrigerating method	Internal forced ventilation External fan control (6 Amax.)		
Protection functions	Inverse polarity, Over/Sub-voltage AC Over/Sub-frequency, Overvoltage DC		
User interface	LCD screen		
Breakers (AC and DC)	Integrated in the system		
Communication software	Web server through Ethernet connection		
Equipment supervision: self diagnostic	Yes		
STANDARDS			
Certificates	CE, VDE, ENEL		
Directives	2004/108/CE (UNE-EN 61000-6-2 / UNE-EN 61000-6-4) 2006/95/CE (IEC 62109-1 / IEC 62109-2)		
Standards	IEEE 1547		
Countries standards			
Spain	P.O. 12.3		
Germany	BDEWTG		
Italy	CEI 0-16		
UK	G83/1-1 +G59/2		

- (1) For THDV< 1% and Nominal Power.
- (2) This voltage must not be exceeded under any circumstances.
- (3) No power derating for ambient temperatures under 44 $^{\circ}$ C.

These specifications may be changed without notice.

