

SUNZET 30/50/100 T & TL

*3 Phase solar
inverters range On-Grid*

The **SUNZET** range of solar **3 phase** inverters is designed to cover the needs of all mains-connected solar generation plants.

TECHNICAL DESCRIPTION

The **SUNZET range, from 20 to 100 KW**, combines design and versatility with ease of operation and modularity. An outstanding feature of **SUN ZET** inverters is their 96% efficiency with transformer (T model) and 98% (TL model) without one.

SUNZET inverters provide high reliability and guaranteed operation. Another outstanding function is the high-energy efficiency of its MPPT, which is over 99%.

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 comply with **R.D. 1578/2008**, obligation to support voltage sag not generating danger overvoltages in the disconnection from the electric line.

GENERAL TECHNICAL FEATURES

- Range of input voltage (300-700 VDC)
- Maximum power point tracking (MPPT)
- High energy efficiency MPPT > 99%
- Very low harmonic distortion, THD < 3%
- Selectable power factor
- Direct mains connection
- Possibility of unlimited parallel connection
- Anti-islanding protection with automatic shut down
- Monitoring from front of the unit
- Galvanic isolation through the transformer (T model)
- Current strings monitoring (with option "string monitor")
- IP21 protection level
- Protection against: inverse polarisation, short-circuits, overvoltages, insulation failure with output to relay
- Service life of more than 20 years
- Automatic reactive energy regulation
- PC-based Appletserver programme for displaying parameters, data records, etc.



ADVANTAGES

- Maximum efficiency
- Modularity
- MPPT efficiency > 99%
- Automatic reactive power
- Output voltage 400 V
- No Data logger is required for communicating equipment parameters
- Delta or star AC connection
- DC and AC protections included
- Works with thin layer modules
- ETHERNET and RS-485 communications ports for concentrating information with trackers



APPLICATIONS

- Mains connected solar generation plants

ELECTRICAL CHARACTERISTICS						
MODELS SUNZET (threephase) T/TL *	SUNZET 20 KVA	SUNZET 25 KVA	SUNZET 30 KVA	SUNZET 50 KVA	SUNZET 75 KVA	SUNZET 100 KVA
Continuous output power	20 KW AC	25 KW AC	30 KW AC	50 KW AC	75 KW AC	100 KW AC
Maximum recommended PV power	+5% a +20%					
Nominal DC power	21 KW DC	27 KW DC	31 KW DC	52 KW DC	78 KW DC	105 KW DC
Nominal AC voltage AC	T 380-400 V AC Threephase/ TL 400 V AC Threephase					
Nominal frequency	50 Hz					
Power factor	1 adjustable ± 0.8					
Maximum line current AC	36 A AC	45 A AC	54 A AC	89 A AC	135 A AC	180 A AC
Current distortion AC	< 3% THD of nominal power ⁽¹⁾					
Maximum open circuit voltage DC	800 V DC ⁽²⁾					
Power tracking range (MPPT) DC *	300 a 700 V DC					
Maximum input current DC	70 A DC	87 A DC	105 A DC	175 A DC	262 A DC	350 A DC
Maximum number of parallel units	Nx20 KW	Nx25 KW	Nx30 KW	Nx50 KW	Nx75 KW	Nx100 KW
Maximum efficiency	96% (with transformer) T model 98 % (without transformer) TL model					
European efficiency	T > 94.95% / TL 96,78%					
ENVIRONMENTAL AND MECHANICAL FEATURES						
Range of ambient temperatures	-10°C a +50°C ⁽³⁾					
Type and grade of environmental protection	IP21					
Cabinet	Zigor Standard					
Estimated weight	T 270 Kg/ TL 230 Kg	T 290 Kg/ TL 250 Kg	T 310 Kg/ TL 270 Kg	T 390 kg/ TL 320 Kg	T 1020 Kg/ TL 490 Kg	
Dimensions (Height x Width x Depth) ⁽⁴⁾	2150 X 800 x 600			2150 x 800 x 800	T 2150 x 1200 x 600 / TL 2150 x 800 x 600	
Operating height	<1000m without power loss					
Relative humidity	0 a 95% without condensation					
GENERAL FEATURES						
Refrigerating method	Internal forced ventilation					
	External fan control (6 Amax.)					
Protection functions	Polarity inverter					
	Over/Sub-voltage AC					
	Over/Sub-frequency					
	Overvoltage DC					
User screen	Standard LCD					
Breakers (AC and DC)	Integrated in the system					
Communication software	Software for communication					
Equipment supervision SELF DIAGNOSTIC	Yes					
Data acquisition	SNMP					
SWS interface (option)	Ethernet					
	GSM modem (option)					
	Data logger					
	Monitoring programme					
External measurements	2 analogue inputs for monitoring (option)					
	Digital Inputs/Outputs					
STANDARDS AND SAFETY						
Applicable European Standards	EN 61000-3-2					
Electromagnetic Compatibility Directive	UNE-EN 61277					
	EN 61000-6-2 (Immunity Standard)					
Anti-islanding protection	VDE 0126-1-1:2006					
Low Voltage Directive	UNE-EN 50178					

(1) For THDV< 1%

(2) This photovoltaic field voltage value must not exceed under any circumstances 880 VDC

(3) Under 40°C, the system operates with nominal values, at 50°C nominal values are maintained for two hours

(4) Estimated dimensions of the equipmet without packing

* Minimum voltage 250V working with thin film solar modules at nominal power

These specifications may be changed without notice. For any other technical need or modification of stocks, please contact us