

# MASS ENERGY INVERTER Three Phase Inverter

50000TL / 60000TL / 70000TL-HV



## Datasheet

SOFAR 50000TL

SOFAR 60000TL

SOFAR 70000TL-HV

### Input(DC)

Max.Input power	55000W	66000W	77000W
Max DC power for single MPPT	22000W(500V-800V)	22000W(530V-800V)	26000W(660V-800V)
Number of independent MPPT	3		
Number of DC inputs	4/3/3	4/4/4	
Max. input voltage	1000V		
Start-up input voltage	350V		
Rated input voltage	600V	600V	700V
MPPT voltage range	250V-960V		
Full load DC voltage range	500V-800V	530V-800V	660V-800V
Max. input MPPT current	40A/30A/30A	40A/40A/40A	40A/40A/40A
Max. input current per string	12A		

### Output(AC)

Rated power(@230V,50Hz)	50000W	60000W	70000W
Max. AC power	50000VA	60000VA	70000VA
Max. output current	80A	90A	90A
Nominal Grid Voltage	3/N/PE,3/PE,230/400Vac	3/N/PE,3/PE,230/400Vac	3/N/PE, 277/480Vac OR 3/PE, 277/480Vac
Grid Voltage Range	180Vac-270Vac	180Vac-270Vac	245Vac-305Vac
Nominal Frequency	50/60Hz		
Grid frequency range	47~53 / 57~63Hz (According to local standard)		
Active power adjustable range	0~100%		
THDi	<3%		
Power factor	1(Adjustable +/-0.8)		

### Performance

Max efficiency	98.5%	98.6%	98.6%
European weighted efficiency	98.3%	98.4%	98.4%
Self-consumption at night	<1W		
Feed-in start power	45W		
MPPT efficiency	>99.9%		

### Protection

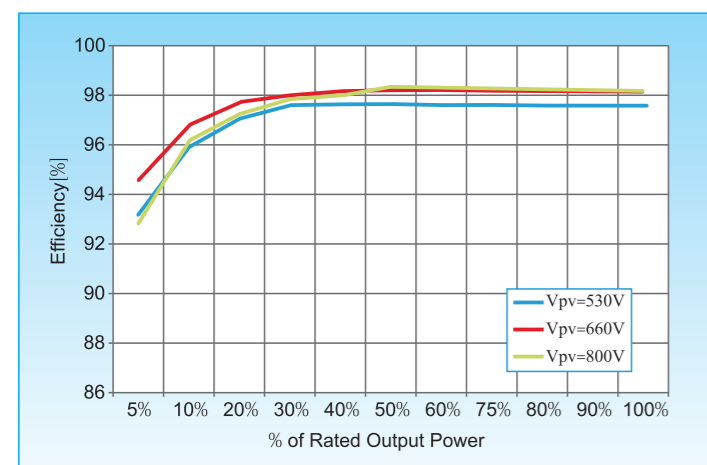
DC reverse polarity protection	Yes
DC switch	Yes
Protection class /overvoltage category	I/III
Input/output SPD(II)	Optional
Safety protection	Anti islanding, RCMU, Ground fault monitoring
Certification	IEC 62116,IEC 61727,IEC 61683,IEC 60068(1,2,14,30),IEC 62109-1/2 CE,CGC,ZVRT,AS4777,AS3100,VDE4105,C10-C11,G59(more available on request)
SPD	MOV : Type III standard / Type II optional
ARPC	Anti Reverse Power Controller(optional)

### Communication

Power management unit	According to certification and request
Standard Communication Mode	RS485, Wifi (optional), SD card, Multi-function relay
Operation Data Storage	25 years

### General data

Ambient temperature range	-25°C...+60°C
Topology	Transformerless
Degree of protection	IP65
Allowable relative humidity range	0...100% no condensing
Max.operating altitude	4000m
Noise	<60dB
Weight	68kg / 70kg
Cooling	Fan
Dimension	737*713*297mm
Display	LCD display
Warranty	5 years / 7 years / 10 years



Efficiency Curve

### High-yield

- Max 98.6% efficiency
- Real time precise MPPT algorithm for max harvest
- Wide input voltage operation range from 250V to 960V

### All in one,flexible and economical system solution

- DC switch
- DC surge protection device
- AC surge protection device (option)
- Built-in PV Combiner
- Power management unit
- Optimum selection for big PV plants, commercial buildings...

### Low maintenance cost

- Detachable cover for easy installation
- Rust-free aluminum covers
- Flexible monitoring solution
- Multi function relay can be configured to show various inverter information

### Intelligent grid management

- ZVRT support
- Reactive power adjustable
- Self power reducer when over frequency
- Remote active/reactive power limit control