

Sofar Solar 20K Three Phase

Battery Input Data

Battery type	Lithium-ion, Lead-acid
No. of battery input	2
Battery voltage range	180-800V
Rated voltage	600V
Battery voltage range for full load	400-800V
Rated charging / discharging power	20000W(10000/10000)
Max. charging / discharging current	50A (25 / 25)
Peak charging / discharging current, duration	70A (35 / 35), 60s
BMS communication mode	CAN (RS485)

AC Output Data (On-grid)

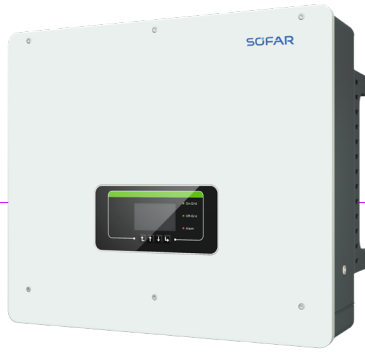
Rated AC power	20000W
Max. AC power output to utility grid	22000VA
Max. AC power from utility grid	40000VA
Rated output current	29A
Max. AC current output to utility grid	32A
Max. AC current from utility grid	58A
Rated grid voltage	3 / N / PE, 230 / 400 Vac
Grid voltage range	184 Vac~276 Vac
Rated grid frequency	50 / 60 Hz
Grid frequency range	45 Hz~55 Hz / 55 Hz~65 Hz
Output power factor	1 default (+/-0.8 adjustable)
Output THDi (@Nominal output)	< 3%

AC Output Data (EPS)

Rated output power	20000W
Max. output power	22000VA
Peak output power, duration	22000A, 60s
Max. output current	32A
Peak output current, duration	32A, 60s
Rated output voltage	3 / N / PE, 230 / 400 Vac
Rated output frequency	50 / 60 Hz
THDv	< 3%
Switch time	< 10 ms

Efficiency

Euro efficiency	97.7%
Max. efficiency	98.2%
Max. battery charge / discharge efficiency	97.8%



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Protection

DC switch	Yes
PV reverse polarity protection	Yes
Output overcurrent protection	Yes
Output overvoltage protection	Yes
Anti-islanding protection	Yes
Residual current detection	Yes
Insulation resistor detection	Yes
SPD	PV: Type II standard, AC: Type III standard
Battery reverse protection	Yes

Features

DC terminal	MC4
Grid AC terminal	5P Connector
Back-up AC terminal	5P Connector
Display	LCD & Bluetooth+APP
Communication	RS485, CAN2.0, WiFi, Optional: Ethernet, 4G
Parallel operation	Yes

General Data

Dimension (W*H*D)	571.4*515*264.1mm
Weight	37kg
Inverter topology	Transformerless
Standby self consumption	< 15W
Operating temperature range	-30°C ~ +60°C
Relative humidity	0~100%
Installation method	Wall
Maximum number of parallel units	10
Operating altitude	< 4000 m
Cooling	Forced airflow
Protection degree	IP65

Standard

EMC	EN 61000-6-1, EN61000-6-3
Safety standards	IEC 62109-1, IEC 62109-2, IEC 62040-1
Grid standards	VDE V 0124-100, V0126-1-1, VDE-AR-N 4105, CEI 0-16 / CEI 0-21, EN 50549, G98 / G99, UTE C15-712-1