

# MODEL SG-20KWHBT



Model	SG-20KWHBT
PV Input	
Recommended Max. input power [kW]	30.0
Start-up voltage [V]	135
Max. DC input voltage* [V]	1000*
Rated DC input voltage[V]	620
MPPT voltage range*[V]	200-950*
No. of MPP trackers	2
No. of DC inputs per MPPT	2/2
Max. input current [A]	30/30
Max. short-circuit current [A]	40/40
Battery Side	
Battery type	Lithium-ion (con BMS)
Battery voltage range [V]	135-750
Maximum charging/discharge current [A]	40/40
Grid Side	
Rated output power [kW]	20.0
Max. output apparent power [kVA]	22.0
Max. input apparent power** [kVA]	30.0
Max. charging power of battery [kW]	20.0
Rated AC voltage	3L/N/PE; 220/380V; 230/400V; 240/415V
Rated AC frequency [Hz]	50/60
Max. output current [A]	33.5
Power factor	0.8 leading 0.8 lagging
Max. total harmonic distortion	<3% @Rated output power
DCI	< 0.5% In
Backup	
Rated output power [kW]	20.0
Max. output apparent power [KVA]	22.0
Max. output current [A]	33.5
UPS switching time	<10ms
Rated output voltage	3L/N/PE; 220/380V; 230/400V; 240/415V
Rated output frequency [Hz]	50/60
Voltage harmonic distortion	<3% @Linear load
Efficiency	
Max. efficiency	98.4%
European efficiency	97.5%
Protection	
DC reverse polarity protection	Integrated
Battery input reverse connection protection	Integrated
Insulation resistance protection	Integrated
Surge protection	Integrated
Over-temperature protection	Integrated
Residual current protection	Integrated
Islanding protection	Integrated
AC over-voltage protection	Integrated
Overload protection	Integrated
AC short-circuit protection	Integrated
General Data	
Over voltage category	PV: II Main: III
Dimensions [LxAxP mm]	534x418x210
Weight [KG]	31.0
Protection degree	IP65
Standby self-consumption [W]	<15
Topology	Transformerless
Operating Temperature Range [°C]	-30~60
Relative Humidity [%]	0~100
Operating Altitude [m]	3000 (derating@>3000m)
Cooling	Smart fan
Noise Level [dB]	<40
Display	OLED & LED
Communication	CAN, RS485, WiFi/LAN (Optional)

\* PV Max. Input voltage is 950V without battery, or 850V with battery, otherwise inverter will be waiting;

\*\* Max apparent power from the grid means the maximum power imported from the utility grid used to satisfy the backup loads and charge the battery

1) G98 10.5KVA, 2) G98 16.00A, 3) AS 4777.2 15.0KVA, 4) AS 4777.2 21.7A, 5) CEI 0-21, 6) CEI 0-16

**Compatible battery range from SG/EBS-5150-7 to SG/EBS-5150-20**

*designed in Italy*