## MODEL SG-30KWHBT



Model	SG-30KWHBT
PV Input	
Recommended Max. input power [kW]	45.0
Start-up voltage [V]	135
Max. DC input voltage* [V]	1000*
Rated DC input voltage [V]	620
MPPT voltage range*[V]	200-850*
No. of MPP trackers	4
No. of DC inputs per MPPT	2
Max. input current [A]	30x4
Max. short-circuit current [A]	40x4
Battery Side	
Battery type	Lithium-ion (with BMS)
Battery voltage range [V]	135-750
Maximum charging/discharge current [A]	100/100
Grid Side	
Rated output power [kW]	30.0
Max. output apparent power [kVA]	33.0
Max. input apparent power** [kVA]	36.0
Max. charging power of battery [kW]	30.0
Rated AC voltage	3L/N/PE; 220/380V; 230/400V; 240/415V
Rated AC frequency [Hz]	50/60
Max. output current [A]	50.0
Power factor	0.8 leading 0.8 lagging
Max. total harmonic distortion	<3% @Rated output power
DCI	< 0.5% ln
Backup	
Rated output power [kW]	30.0
Max. output apparent power [KVA]	33.0
Max. output current [A]	50.0
UPS switching time	<20ms
Rated output voltage	3L/N/PE; 220/380V; 230/400V; 240/415V
Rated output frequency [Hz]	50/60
Voltage harmonic distortion	<3% @Linear load
Generator Side	
Max. intput apparent power** [KVA]	36.0
Max. charging power of battery[kW] Rated AC voltage	30.0 21 (NUDE: 220/2001/ 220/4001/ 240/41EV
Rated AC frequency	3L/N/PE; 220/380V; 230/400V; 240/415V 50/60
Efficiency	50/00
Max. efficiency	00.00/
European efficiency	98.8% 98.3%
Protection	90.3%
DC reverse polarity protection	Integrated
Battery input reverse connection protection	Integrated
	Integrated
Insulation resistance protection	Integrated Integrated
Surge protection	
Over-temperature protection Residual current protection	Integrated
nesiduai current protection	Integrated
Islanding protection	Integrated
Islanding protection	Integrated
AC over-voltage protection	Integrated Integrated
AC over-voltage protection Overload protection	Integrated Integrated Integrated
AC over-voltage protection Overload protection AC short-circuit protection	Integrated Integrated
AC over-voltage protection Overload protection AC short-circuit protection General Data	Integrated Integrated Integrated Integrated
AC over-voltage protection Overload protection AC short-circuit protection General Data Over voltage category	Integrated Integrated Integrated Integrated CC:II CA:III
AC over-voltage protection Overload protection AC short-circuit protection General Data Over voltage category Dimensions [LxAxP mm]	Integrated Integrated Integrated Integrated CC:II CA:III 800x620x300
AC over-voltage protection Overload protection AC short-circuit protection General Data Over voltage category Dimensions [LxAxP mm] Weight [KG]	Integrated Integrated Integrated Integrated CC:II CA:III 800x620x300 72.0
AC over-voltage protection Overload protection AC short-circuit protection General Data Over voltage category Dimensions [LxAxP mm] Weight [KG] Protection degree	Integrated Integrated Integrated CC:II CA:III 800x620x300 72.0 IP65
AC over-voltage protection Overload protection AC short-circuit protection General Data Over voltage category Dimensions [LxAxP mm] Weight [KG] Protection degree Standby self-consumption [W]	Integrated Integrated Integrated Integrated CC:II CA:III 800x620x300 72.0 IP65 < 15
AC over-voltage protection Overload protection AC short-circuit protection General Data Over voltage category Dimensions [LxAxP mm] Weight [KG] Protection degree Standby self-consumption [W] Topology	Integrated Integrated Integrated Integrated CC:II CA:III 800x620x300 72.0 IP65 <15 Transformerless
AC over-voltage protection Overload protection AC short-circuit protection General Data Over voltage category Dimensions [LxAxP mm] Weight [KG] Protection degree Standby self-consumption [W] Topology Operating Temperature Range [°C]	Integrated Integrated Integrated Integrated CC:II CA:III 800x620x300 72.0 IP65 <15 CTransformerless -30~60
AC over-voltage protection Overload protection AC short-circuit protection General Data Over voltage category Dimensions [LxAxP mm] Weight [KG] Protection degree Standby self-consumption [W] Topology Operating Temperature Range [°C] Relative Humidity [%]	Integrated Integrated Integrated Integrated CC:II CA:III 800x620x300 72.0 IP65 <15 Transformerless -30~60 0~100
AC over-voltage protection   Overload protection   AC short-circuit protection   General Data   Over voltage category   Dimensions [LxAxP mm]   Weight [KG]   Protection degree   Standby self-consumption [W]   Topology   Operating Temperature Range [°C]   Relative Humidity [%]   Operating Altitude [m]	Integrated   Integrated   Integrated   Integrated   CC:II CA:III   800x620x300   72.0   IP65   <15
AC over-voltage protectionOverload protectionAC short-circuit protectionGeneral DataOver voltage categoryDimensions [LxAxP mm]Weight [KG]Protection degreeStandby self-consumption [W]TopologyOperating Temperature Range [°C]Relative Humidity [%]Operating Altitude [m]Cooling	Integrated Integrated Integrated Integrated CC:II CA:III 800x620x300 72.0 IP65 (15 Transformerless -30~60 0~100 3000 (derating@>3000m) Smart fan
AC over-voltage protection   Overload protection   AC short-circuit protection   General Data   Over voltage category   Dimensions [LxAxP mm]   Weight [KG]   Protection degree   Standby self-consumption [W]   Topology   Operating Temperature Range [°C]   Relative Humidity [%]   Operating Altitude [m]	Integrated Integrated Integrated Integrated CC:II CA:III 800x620x300 72.0 IP65 <15 Transformerless -30~60 0~100 3000 (derating@>3000m)

\* 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) AS 4777.2, VDE-AR-N 4105 30.0kVA, 2) AS 4777.2, VDE-AR-N 4105 43.5A, 3) CEI 0-21, 4) CEI 0-16 Compatible with SG/H32148 batteries

designed in Haly