LS series inverter

The LS series storage inverter is designed for residential hybrid system.The inverter can work with Dyness low-voltage lithium battery DL5.0C/Powerbox Pro/PowerBrick series to maximize self-consumption and provide backup power if the grid fails and there is not enough pv power to cover load demand.The inverter can automatically switch to back-up mode in less than 4ms

IP66

Colorful touch LCD , IP66 protection

CT phase sequence self-correcting

UPS

Max.16pcs parallel for on-grid and off-grid operation

Support multiple batteries parallel and generator charging

BMS

Automatic communica-tion with battery BMS without manual setup

High precision zero export control

Model	D3.0K-LS	D3.6K-LS	D5.0K-LS	D6.0K-LS	D8.0K-LS
Battery Input Data					
Battery Type	Lead-acid/Li-Ion				
Battery Voltage Range（V）	40-60				
Nominal Battery Voltage (V)	48	48	48	48	48
Max.Charge/Discharge Current(A)	70	90	120	140	160
Max.Charge/Discharge Power(W)	3000/3300	3600/3960	5000/5500	6000/6600	8000/8800
PV String Input Data					
Max.PV Input Power（W）	6000	7200	10000	12000	16000
Max.PV Input Voltage（V）	600				
Working Voltage Range(V)	50~550				
First Feed-in Voltage（V）	60				
MPPT Range For Nominal Power（V）	100~500	120~500	150~500	180~500	180~500
Nominal PV Input Voltage（V）	380				
Max.Input Currrent(A)	20/20	20/20	20/20	20/20	20/40
Max.Short Currrent(A)	27/27	27/27	27/27	27/27	27/54
No.of MPP Trackers	2	2	2	2	2
Strings per MPP Tracker	1	1	1	1	1+2
AC Output Data（On-grid Port）					
Nominal Power Output To Grid（VA）	3000	3600	5000	6000	8000
Max.Power Output To Grid（VA）*	3300	3960	5500	6600	8800
Max.Power From Grid (VA)	8400	8400	10000	12000	12000
Nominal Output Voltage（V）	220/230/240,L/N/PE				
Nominal Output Frequency（Hz）	50/60				
Nominal AC Current To Grid（A）	13.7/13.1/12.5	16.4/15.7/15	22.8/21.8/20.9	27.3/26.1/25	36.4/34.8/33.4
Max.AC Current To Grid（A）	15	18	25	30	40
Max.AC Current From Grid（A）	35	35	40	50	50
Output Power Factor	Adjustable from 0.8 leading to 0.8 lagging				
Output THDi (Nominal Power)	<3%				
AC Output Data (Back-up Port)					
Max.Continous Output Power(VA)	3300	3960	5500	6600	8800
Peak Output Power(VA)**	6000 @10s	72000 @10s	10000 @10s	12000 @10s	16000 @10s
Max.Output Current (A)	15	18	25	30	40
Nominal Output Voltage（Vac）	220/230/240,L/N/PE				
Nominal Output Frequency（Hz）	50/60				
Output THDv (@Linear Load)	<3%				
Switch time	<4ms				
AC Input Data (Generator Port/Load Control Port)					
Nominal Input Apparent Power(VA)	3000	3600	5000	6000	8000
Max. Input Apparent Power(VA)	8400	8400	10000	12000	12000
Max. AC Input Current(A)	35	35	40	50	50
Nominal Input Voltage(V)	220/230/240,L/N/PE				
Nominal AC Generator Frequency(Hz)	50/60				
Efficiency					
Max.efficiency	97.60%				
Euro.efficiency	96.50%				
Protection					
Anti-island Protection	Integrated				
PV Insulation Resistance Detection	Integrated				
PV Reverse Protection	Integrated				
Residual Current Monitoring Unit	Integrated				
AC Over Current/Voltage Protection	Integrated				
DC Switch(PV)	Integrated				
Surge Protection	DC TypeIII/AC TypeIII				
Communication Interface					
Battery BMS	CAN				
EMS（Modbus）	RS485				
Meter(Outside)	RS485				
RCR/DRED	YES(DI)				
Remote Shut Down	YES(DI)				
Dry-Point	YES(DO)				
Cloud	Wi-Fi,LAN				
Display/User Interface	LED/LCD/APP				
General Data					
Operating Temperature Range(℃)	-30-60				
Relative Humidity(%)	0-100%				
Operating Altitude(m)	≤3000				
Cooling	Natural Convection				Intelligent Air Cooling
Noise(dB)	<30				40
Weight(kg)	17				
Size(W/H/D)(mm)	501*586*193				
Installation	Wall-Mounted				
Protection Degree	IP66				
Certifications&Standards					
Grid Regulation	EN50549, NRS097, G98, G99, IEC61727, IEC62116				
Safety Regulation	IEC/EN62109-1&2				
EMC	IEC/EN61000-6-1/2/3/4				