

PV inverter System with HV battery storage	DLS 300C EVO	DLS 450C EVO	DLS 600C EVO
DC Inputs			
Maximum input power	4.5kW	6kW	8kW
Maximum input voltage	600V		
Minimum input voltage	115V		
Nominal input voltage	400V		
FV MPPT voltage range	100V - 550V		
Maximum power x MPPT	2.25kW	3kW	4kW
DC voltage range - MPPT @ Pdc max	175V - 550V @ 2.25kW	230V - 550V @ 3kW	310V - 550V @ 4kW
Maximum input current x MPPT	13A	20A	20A
Short-circuit current x MPPT	15A	25A	25A
Number of MPPTs	2		
Maximum number of strings x MPPT	1+1		
Battery charger			
Battery type	Litio		
Battery voltage range	40V - 65V		
Max battery current	50A		
Nominal battery voltage	50V		
Max charging power	2.5kW		
Max discharging power	2.5kW		
Communication interfaces	CAN		
AC output			
Grid connection	1P+N+PE		
Sn nominal power	3kVA	4.5kVA	6kVA
P maximum active power	3kW	4.5kW	6kW
AC voltage range	230Vac ± 15% (*)		
Output nominal current	13A	19.6A	26.1A
Grid nominal frequency	50Hz		
Frequency range	47Hz - 53Hz (*)		
Cos φ	1 (adj ± 0.80)		
THD	< 3%		
EPS output			
Maximum Smax power (PV + BATT)	3kVA	4.5kVA	6kVA
Maximum Smax power (BATT)	2.5kVA		
AC voltage range	230Vac ± 15% (*)		
Output nominal current	13A	19.6A	26.1A
Grid nominal frequency	50Hz		
Intervention time	< 5 sec (*)		
THD	< 3%		
Operating Performance			
Maximum Efficiency	97%		
Weighted efficiency (Euro)	96%		
Battery typical efficiency	94%		
Protective Devices			
DC polarity reversal	As standard		
BATTERY polarity reversal	As standard		
BATTERY overload protection	As standard		
AC short-circuit protection	As standard		
Isolation monitoring unit	As standard		
Interface protection and anti-islanding	In compliance with local legislation		
RCMU (Residual Current Monitoring Unit)	As standard		
DC Overvoltage protective device	As standard		
AC Overvoltage protective device	As standard		
BATTERY Overvoltage protection	As standard		
Accessories Supplied			
DC connectors	Quick connectors		
AC connectors	Screw contacts terminal strip, M25 cable gland		
BATTERY connection	Screw contacts terminal strip, PG9 cable gland		
DC switch	As standard		
BATTERY automatic switch	Built-in		
User Interface	Graphic Touch Screen 4.3" colour LCD		
Communication interfaces	USB/CAN Bus/RS485/Ethernet/WIFI		
External alarm signal	As standard		
Datalogger	Built-in		
Warranties	5 years (as standard)/10 year (optional)		
Environmental Conditions			
Ambient temperature	-20°C...+60°C		
Power derating temperature range	40°C...+60°C		
Storage temperature	-30°C...+70°C		
Relative humidity	5%...95% without condensation		
Noise levels	< 50 dB(A) @ 1m		
Maximum operating altitude without derating	2000m		
Pollution degree classification	PD 3		
Installation environmental category	Indoor, unconditioned		
Physical			
Protection rating	IP 21		
Overvoltage category (IEC 62109-1)	II (DC, BATTERY input) III (AC input & output)		
Cooling concept	I-cool, forced cooling		
Dimensions (W x H x D) mm	480 x 730 x 150		
Weight	21kg		
Fitting system	Wall bracket		
Safety			
Protection class	I		
DC to AC isolation	Transformerless		
BATTERY to AC and DC isolation	HF Transformer		
Certifications	CE		
EMC and Safety standards	EN61000-6-2 (EMC); EN61000-6-3 (EMC); EN 62109-1 (Safety); EN 62109-2 (Safety)		
Grid codes	CEI 0-21 (IT); VDE 0126-1-1 (DE); VDE AR-N 4105 (DE); G98/G99 (UK); C10-11 (BE)		
Other Features			
BACKUP/OFF-GRID mode operation	Yes, with internal interlock (*)		
ON-GRID/BACKUP/OFF-GRID selection mode	Yes, automatic		
Grid support (grid services)	Yes, if required by the applied grid code		
Residential loads management (OPTIONAL)	Yes, 1 dry contact 4A 250Vac		

(*) The specified range or functionality may vary according to the mains connection standard enforced in the country of installation