PV inverter System with HV battery storage	DLS 450 EVO	DLS 600 EVO
DC Inputs		
Maximum input power	6kW	8kW
Maximum input voltage	600V	
Minimum input voltage	115V	
Nominal input voltage	400V	
FV MPPT voltage range	100V - 550V	
Maximum power x MPPT	3kW	4kW
DC voltage range - MPPT @ Pdc max	230V - 550V @ 3kW	310V - 550V @ 4kW
Maximum input current x MPPT	20A	20A
Short-circuit current x MPPT	25A	25A
Number of MPPTs	2	
Maximum number of strings x MPPT	2+2	2+2
Battery charger		
Battery type	Litio	
Battery voltage range	40V - 65V	
Max battery current	100A	
Nominal battery voltage	50V	
Max charging power	5kW	
Max discharging power	5kW	
Communication interfaces	CAN	
AC output		
Grid connection	1P+N+PE	
Sn nominal power	4.5kVA	6kVA
P maximum active power	4.5kW	6kW
AC voltage range	230Vac ± 15% (*)	
Output nominal current	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)	4.5kVA	6kVA
Maximum Smax power (BATT)	4.5kVA	5kVA
AC voltage range	230Vac ± 15% (*)	
Output nominal current	19.6A	26.1A
Grid nominal frequency	50Hz	
Intervention time	< 5 sec (*)	
THD	< 3%	
Operating Performance		
Maximum Effciency	97%	
Weighted effciency (Euro)	96%	
Battery typical effciency	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, M25 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 classifcation	PD 3	
Installation environmental category	Indoor, unconditioned	
Physical		
Protection rating	IP 21	
Overvoltage category (IEC 62109-1)	II (DC, BATTERY inputs) III (AC output)	
Cooling concept	I-cool, forced cooling	
Dimensions (W x H x D) mm	710 x 650 x 150	
Weight	30Kg	
Fitting system	Wall bracket	
Safety		
Protection class	I	
DC to AC isolation	Transformerless	
BATTERY to AC and DC isolation	HF Transformer	
Certifcations	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 specifed range or functionality may vary according to the mains connection standard enforced in the country of installation