



**STORAGE**

**SUN NEVER SETS**

**YOUR  
ENERGY  
WHEN YOU  
NEED IT!**

Made in Italy  CE

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	DLS-300L / DLS-300	DLS-450	DLS-600
<b>Input (PV)</b>			
Max. DC power	3.1kW	4.7kW	6.3kW
Max. DC voltage	600V		
PV-voltage range, MPPT	100V - 550V	100V - 550V	100V - 550V
PV-voltage range, MPPT - Independent Operation	100V - 550V @ 2kW	100V - 550V @ 3kW	100V - 550V @ 4kW
PV-voltage range, MPPT - Parallel Operation	100V - 550V @ 3.1kW	100V - 550V @ 4.7kW	100V - 550V @ 6.3kW
DC nominal voltage	400V		
Max DC power x MPPT	2kW	3kW	4kW
Max DC power x MPPT - Unbalanced operation	2kW @ MPPT1 + 1.1kW @ MPPT2	3kW @ MPPT1 + 1.7kW @ MPPT2	4kW @ MPPT1 + 2.3kW @ MPPT2
Min. DC voltage	115V		
Max. input current x MPPT	10A	15A	20A
Number of MPP trackers (DLS I-Track)	2		
Max. number of strings (paralle)	1+1	2+2	2+2
<b>Battery (BATT)</b>			
Battery type	Lead Acid or LI-Ion		
Battery voltage range	40V - 65V		
Battery current	35A / 66A (adjustable)	66A (adjustable)	100A (adjustable)
Charging management (Lead Acid)	3-stage adaptative with maintenance		
Battery temperature compensation	◆		
Battery voltage sense	◆		
<b>Input (AC GRID)</b>			
AC input voltage	230Vac ± 15%		
AC input frequency	50/60Hz		
AC connection	1 ph		
AC overload & short-circuit protection	Miniature Circuit Breaker		
PV/BATT/GEN SET to AC commutation time (NORMAL OPERATION)	0s		
PV/BATT/GEN SET to AC commutation time (BACKUP MODE)	< 5s		
<b>Input (AC GEN SET) ** OPTIONAL **</b>			
AC input voltage	230Vac ± 15%		
AC input frequency	50/60Hz		
AC connection	1 ph		
AC overload & short-circuit protection	Miniature Circuit Breaker		
GEN SET enable contact (NO - programmable)	◆		
<b>Output (AC)</b>			
Output AC power - (PV + BATT)	3kVA	4.5kVA	6kVA
Max Output AC power - (BATT)	1.8kVA / 3.0kVA	3.0kVA	4.5kVA
Nominal output current (RMS)	13A	19.6A	26.1A
AC output voltage	230Vac		
AC output frequency	50/60Hz		
THD	< 3%		
AC connection	1 ph		
<b>System Operating Mode</b>			
OFF GRID operation	automatic		
ON GRID operation	automatic		
BACKUP MODE operation	automatic		
<b>Home appliance &amp; external device remote control ** OPTIONAL **</b>			
Programmable home appliance control contacts	4 contacts - NO		
Auxiliary signalling & control contacts	2 contacts - NO		
<b>Efficiency (PV - AC output)</b>			
Max. efficiency	97%		
Euro-eta	96%		
<b>Efficiency (BATT - AC output)</b>			
Max. efficiency	94%		
<b>Protection devices</b>			
PV DC reverse polarity protection	◆		
PV DC load-disconnecting switch	◆		
Pb-Acid BATT DC overload protection (INTERNAL FUSE)	◆		
Pb-Acid BATT DC reverse polarity protection	◆		
Pb-Acid BATT DC load-disconnecting switch (AUTOMATIC)	◆		
AC input overload & short-circuit protection	◆		
AC output short-circuit protection	◆		
AC safety interlock system	◆		
Manual AC GRID BY-PASS switch	◆		
Ground fault monitoring	◆		
Grid monitoring & synchronization	◆		
BATT DC Galvanically isolated	◆		
Integrated RCMU (Residual Current Monitoring Unit)	◆		
<b>General Data</b>			
Dimensions (W / H / D) in mm	710 / 650 / 150		
Weight	< 30kg		
Operating temperature range	-25°C...+60°C		
Power derating temperature range	40°C...+60°C		
Storage temperature range	-30°C...+70°C		
Relative humidity range	5%...95% - Not condensing		
Acoustic noise emission	< 37 dB(A) @ 1m		
Environmental pollution degree	PD 3		
Ingress protection class	IP 21		
Installation	Indoors - Unconditioned		
Protection class	I		
Overvoltage category (IEC 62109-1)	III (AC output)		
Stand-by Consumption	< 4W		
Topology PV-AC	Transformless		
Topology BATT-AC	HF transformer		
Cooling concept	I-cool (Fan on demand)		
<b>Features</b>			
PV DC connection	MC4 quick connector		
DC BAT connection	screw terminal block		
AC connection	screw terminal block		
Graphic display touch screen	◆		
Interfaces: RS485/RS232/CAN/ USB/ Ethernet / WiFi	◆/◆/◆/◆/◆		
Warranty: 5 / 10 / 15 / 20 / 25 years	◆/◇/◇/◇		
Certificates	CE		
Product standards	IEC 62109-1 (Safety) IEC 62109-2 (Safety) IEC 61000-6-2 (EMC) IEC 61000-6-3 (EMC)		
National connection standards	CEI 0-21 (IT) - VDE 0-126-1-1 (DE) VDE AR-N 4105 (DE)		
<b>Legenda:</b>	◆ Standard feature ◇ Optional feature *** Under request - Not available		

(\* Delios S.r.l. reserves the right to change products and specifications at any time without prior notice