

LS 10-s and LS 10-st

The new uncompromising high performance sailplanes

- The **LS 10** is the latest development for the 15 m and 18 m classes:
- Wing profiles especially designed for the LS10 provide highest performance especially in the high speed range. Very important is that the low rain and bug sensitivity known from LS6 and LS8 could be maintained.
- Well proven components from the LS8 like fuselage and horizontal tailplane and the retractable powerplant will be used for the **LS 10** models.
- The **LS 10-s** is a sailplane which will be delivered already with an engine compartment for easy engine retrofit.
- The **LS 10-st** is a self-sustaining sailplane with retractable powerplant actuated by an electrically spindle drive. Engine data display and engine control are via the DEI-NT to meet the "DG ease of use standard".
- Wing parting at $y=7$ m is standard.
- Typical LS winglets are standard equipment for the 18m wingtip extensions.
- Wing tips with high latest technology winglets for 15 m span are optionally.
- The **LS 10** features a unique new waterballast system which has been especially designed for competition and record flying. The new waterballast system consists of two watertanks in the fin and three separate integral tanks in each wing (the two outer wingtanks are combined).

The unique feature of the new system is that the **LS 10** is equipped with two completely independent waterballast systems which can be drained separately. With both systems the respective fin tank compensates the C.G. shift due to the wing-ballast. The respective fin tank will be drained together with its wingtanks by operation of one handle only.

By dumping one of the systems you can adopt the glider to changing weather conditions but still fly with the same C.G..

- Preparation for integrated bug-wipers as standard equipment.
- Well proven spring mounted LS- main landing gear now with large 5 inch wheel and wheel brake connected to the airbrake handle.
- Special safety features as Röger-hook and Piggott-hook are standard equipment.
- For the **LS 10-st** a fuel tank with a capacity of 13 Litre is installed. Therefore a larger baggage compartment is possible (compared with the LS 8-st).
- NOAH emergency rescue aid is optionally available.
- Integrated solar panel (optional).
- Provisions for 3 batteries.
- Integrated transponder antenna in the vertical fin (optional).

Technical Data *LS 10-s* and *LS 10-st*

span	m	(ft)	15	(49.2)	18	(59.06)
wing area	m ²	(ft ²)	10.27	(110.5)	11.45	(123.3)
aspect ratio	/	/	21.9		28.3	
fuselage length	m	(ft)		6.763	(22.19)	
fuselage height	m	(ft)		1.374	(4.51)	
water-ballast wings	kg	(US.gal)		190	(50.2)	
water-ballast fin tanks	kg	(US.gal)		10	(2.64)	
max. weight	kg	(lbs)	540	(1190)	600	(1323)
max. wing loading	kg/m ²	(lbs/ft ²)	52.6	(10.8)	52.4	(10.7)
max. speed VNE	km/h	(kts)		280	(151)	
stall speed (W=420 kg, 926 lbs)	km/h	(kts)	71	(38)	67	(36)
best glide ratio (W=525kg)	/	/	1:45		1:50	
min. sink (W=420 kg, 926 lbs)	m/s	(ft/min)	0.61	(120)	0.51	(100)

LS 10-s

empty weight						
(with min. instrumentation) approx.	kg	(lbs)	288	(634)	295	(650)
wing loading with 80 kg payload	kg/m ²	(lbs/ft ²)	35,8	(7.33)	32,8	(6.69)

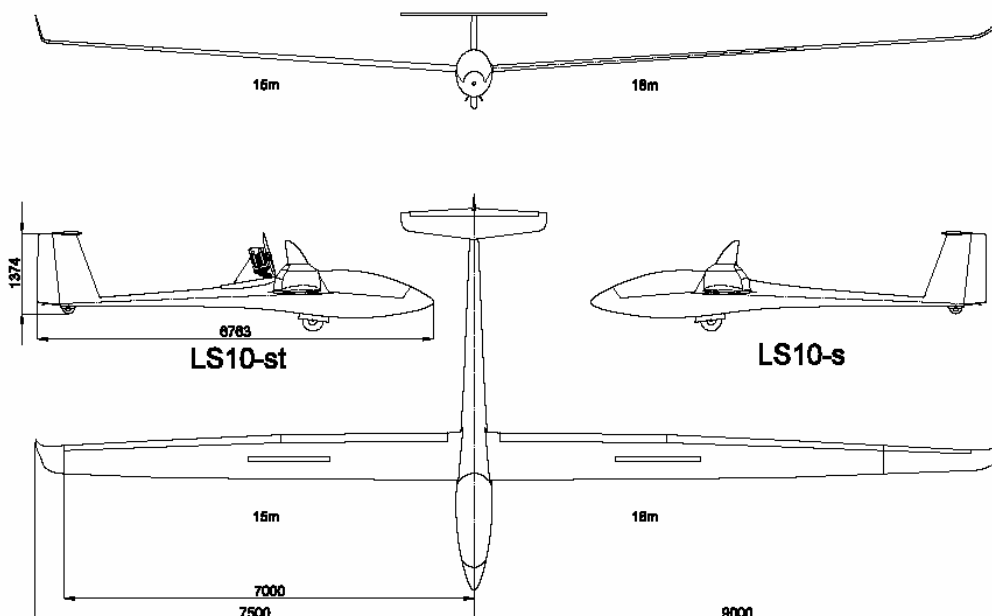
LS 10-st

empty weight						
(with min. instrumentation) approx.	kg	(lbs)	328	(723)	335	(739)
wing loading with 80 kg payload	kg/m ²	(lbs/ft ²)	39,7	(8.14)	36,2	(7.42)

engine			SOLO 2350		
power	kW/hp		15,4 kW / 21 hp at 5500 RPM		
fuel tank (fuselage)	litre	(US.gal)	13 (3.4)		
climb rate	m/s	(ft/min)	1.1 (220)	W= 420kg (926 lbs), 18 m span	

Data power on for MSL, 15°C

Optional equipment raises the empty mass accordingly



DG-Flugzeugbau GmbH

Otto-Lilienthal-Weg 2 / Am Flugplatz •

D 76646 Bruchsal • Germany

Tel: +49 (0) 7251 3020-100

Fax: +49 (0) 7251 3020-200

dg@dg-flugzeugbau.de

www.dg-flugzeugbau.de

