



## Press release

### Maiden Flight of the LS10-st on May 18th, 2007

Contrary to the maiden flight of the prototype in the past, the maiden flight of the LS10-st took place without being noticed by the public on May 18th, 2007. The plane is already equipped with the approved SOLO-2350 of the LS8-st and hence from the very first available as a glider or motor-glider. The LS10-st is the first type completely manufactured by DG in Bruchsal.

An eye-catcher are the integrated bug wipers with an aluminium-carbon (visible) design. In combination with the integrated solar panel, the end plates at the flaperons in aluminium-carbon design as well and the premium cloth interior, the LS10 states itself as a high-tech glider.

Further innovative and technical details are the integrated NOAH or the 2-chamber system of the water tail tank for an optimal placement of the centre of gravity. Considering the low empty weight of only 324kg including the complete propulsion system (fuel tank + engine) as well as all accessories, the LS10-st can call oneself a lightweight.

When flying the LS10-st the smooth-running steering as well as only little counter-steering is necessary during circling and the somewhat more softer wings are observable compared to the prototype, besides this the "new" is still the "old" - pure LS feeling!

"The LS10 will set standards in the competitions of the next months and years", sales manager Volker Halbe is sure.

With the LS product line DG aims especially at top pilots flying at competitions and cross-country within the 15m and 18m class. DG already win some of the known and successful pilots over as customers. Just now two of the LS10 successfully make one's debut in the German gliding championships of the 18m class with the pilots Claus Triebel and Holger Back achieving the final places of 4 and 5.

#### Attachments:

product description, technical details and technical innovations  
Holger Back's flight report from the German Nationals in Zwickau  
3-side view, several pictures



# ***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 50 cm 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 two separate integral tanks in each wing. 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** you may chose between a large fuel tank (17 Litre) same as for the LS 8-st) or a smaller (13 Litre) tank which increases the baggage compartment size.
- NOAH emergency rescue aid is optionally available.
- An additional baggage compartment accessible from the engine compartment is optionally available.



*Passion, Power + Performance*

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

span	m	(ft)	15	(49.2)	18	(59.06)
wing area	m <sup>2</sup>	(ft <sup>2</sup> )	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 <sup>2</sup>	(lbs/ft <sup>2</sup> )	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)	268	(591)	275	(606)
wing loading with 80 kg payload	kg/m <sup>2</sup>	(lbs/ft <sup>2</sup> )	33.9	(6.94)	31.0	(6.35)

### *LS 10-st*

empty weight (with min. instrumentation)

approx.	kg	(lbs)	313	(690)	320	(705)
wing loading with 80 kg payload	kg/m <sup>2</sup>	(lbs/ft <sup>2</sup> )	38.3	(8.17)	34.9	(7.46)

engine		SOLO 2350 b
power	kW/hp	31/23
fuel tank (fuselage)	litre (US.gal)	17 (4.5) or 13 (3.4) on choice
climb rate	m/s (ft/min)	1.3 (256) W= 420kg (926 lbs), 18 m span

Data power on for MSL, 15°C  
 Optional equipment raises the empty mass accordingly