

LAK-17BFES-18-21m

(Front Electric Sustainer)



LAK-17B is a new version of **LAK17A**. Regarding A version, B has wings with modified geometry and wing profile, which allow even higher wing loadings than competitors. Fuselage and cockpit is the same like A version. LAK-17B can be produced with 15-18 and 21m. wing tips.

Front Electric Sustainer is a highly effective propulsion system with a light but powerful brushless electrical motor and small and foldable propeller at the front part of fuselage.

An electric motor with a foldable propeller can be safely started at low altitude as on a downwind leg which gives you an edge on days with weak thermals.



VERSION	LAK17B	LAK17B	LAK17B	LAK17B FES	LAK17B FES	LAK17B FES
Wing span	15 m	18 m	21 m	15 m	18 m	21 m
Wing area	9.18 m ²	10.32 m ²	11.58 m ²	9.18 m ²	10.32 m ²	11.58 m ²
Fuselage length	6.53 m	6.53 m	6.53 m	6.53 m	6.53 m	6.53 m
Fuselage height	1.32 m	1.32 m	1.32 m	1.32 m	1.32 m	1.32 m
Aspect ratio	24.5	31.4	38,1	24.5	31.4	38,1
Empty weight	260 kg	280 kg	292 kg	305 kg	320 kg	332 kg
Max TOW	550 kg	600 kg	600 kg	550 kg	600 kg	600 kg
Water ballast in wings	180 kg	200 kg	220 kg	180 kg	180 kg	200 kg
Water ballast in fuselage (optional)	30 kg	30 kg	30kg	batteries	batteries	batteries
Batteries weight	/	/		30 kg	30 kg	30 kg
Min. wing loading	35,9 kg/m ²	33,9 kg/m ²	31,2 kg/m ²	40,8 kg/m ²	37,8 kg/m ²	34,7 kg/m ²
Max. wing loading	60 kg/m ²	58 kg/m ²	51,8 kg/m ²	60 kg/m ²	58 kg/m ²	51,8 kg/m ²
Vne	270 km/h	270 km/h	270 km/h	270 km/h	270 km/h	270 km/h

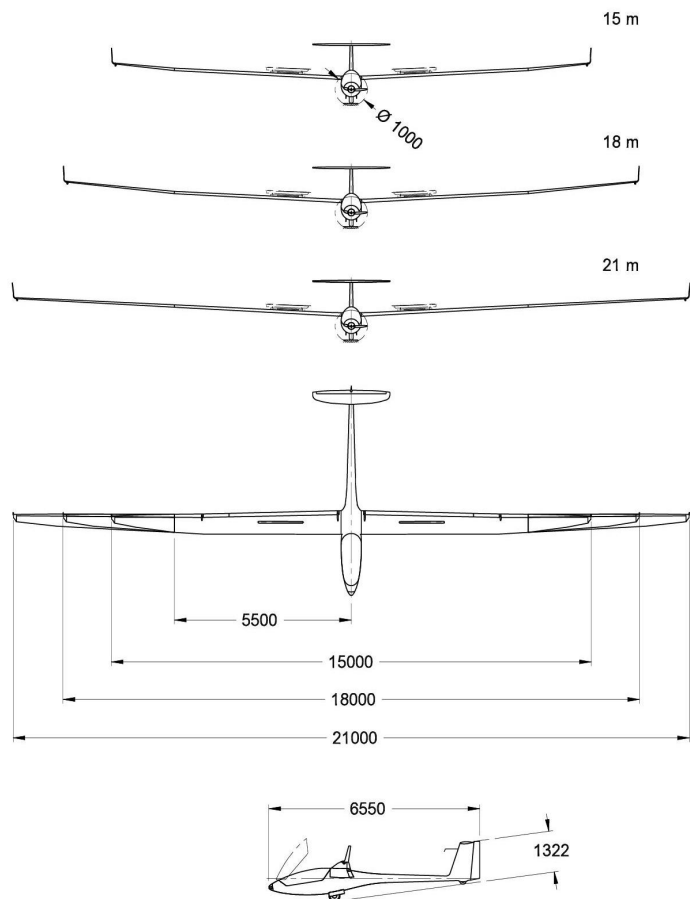


FRONT ELECTRIC SUSTAHER

- overall system weight - 50 kg

MOTOR

- specially designed for FES, outrunner BLDC brushless synchronous permanent magnet motor with electronically controlled commutation system 3 phase
- 20 kW continuous power; length 100 mm; diameter 180 mm; weight: only 7 kg



PROPELLER

- carbon fibre foldable propeller
- blades shaped to the front surface of the fuselage
- diameter: 1 m
- automatically opens when motor starts
- folded blades are aligned even closer to the fuselage

BATTERIES

- 28 lithium polymer cells
- capacity of each cell: 43 Ah
- available energy: 4.2 kWh
- 2 battery boxes, each weighting 15 kg
- life expectancy: more than 10 years
- charger: Special Li-Po with active BMS
- charging time: 3 hours each box, if fully discharged (6h total) - with standard 1000W charger
- with optional 3000W charger in 2h both packs
- supplies power for all instrumentation on board