Please read the entire instruction before starting the build.
For general information and more tips on how to print my airplanes, also read the „How To…" documet, which goes into more detail on the basics.
If you have questions, recommendations or problems, please write me an E-Mail:
emde.modeldevelopment@gmail.com

Specs:

Wingspan: 1000mm

Lengh: 775mm

Flying Weight: 500 gramms

1. Print settings and requirements:

Min. print volume: 200mm x 200mm x 200mm

Material: LW PLA / PLA

Nozzle: 0.4mm

Slicer: Cura

Part	Surface Mode	Mateial	Infill / Walls / Top-Bottom	Brim	Mirror	Number
fuselage_x	Surface	LW PLA		No	No	1
canopy_x	Surface	(LW) PLA		No	No	1
wing_x	Surface	LW PLA		Yes	Yes	2
aileron_x	Surface	LW PLA		Yes	Yes	2
vtail_x	Surface	LW PLA		Yes	Yes	2
servo_cover	Normal	LW PLA	10% / 3 / 3	No	Yes	2
wing_spar	Normal	PLA	10% / 3 / 3	No	No	1
landing_gear_x	Normal	PLA	5% / 2 / 3	No	Yes	2
wheel	Normal	PLA	5% / 2 / 3	No	No	2
rim	Normal	PLA	5% / 2 / 3	No	No	2
tire	Normal	LW TPU	5% / 2 / 4	No	No	2
motor_mount	Normal	PLA / ABS	10% / 3 / 3	No	No	1
pin	Normal	LW PLA	10% / 3 / 3	No	No	60
aileron_pushrod	Normal	PLA	10% / 3 / 3	No	No	2
pushrodend	Normal	PLA	10% / 3 / 3	No	No	4
shock_absorber	Normal	PLA / TPU	10% / 3 / 3	No	No	1

Some parts (for example wing parts) must be printed twice, one time normally, and one time mirrored.

The model is designed specifically for LW-PLA. If you print it completely out of normal PLA, it will fly, but not very well. If this is your first 3D printed airplane, use LW-PLA!

2. Electronics and Parts:

No carbon fiber reinforcements are needet for this build!
1 x brushless Motor ~2205 2200kv
1 x 20A ESC
2S-3S 1200+mAh LiPo Battery
4 x 9 gramm Servos
1 x 5 inch Prop
Min. 4ch Reciever
1mm steel wire.
Velcro for Battery

This plane can take a wide range of motors and batteries. It does not need a lot of power to fly and can cruise just fine at 2S with small motors. The most important thing is to select the right props and KV for your motors. Motors for 3"-5" Multirotors work just fine, but here they should spin a steeper prop.

3. Build:

Before starting the build, center your servos, check servo and Motor direction and make sure all your cables are long enough! Make sure that all parts printed well and all stringing / blobs are removed. Test fit the pieces before glueing.

Glue the parts together using the pins and the rectangular holes. Use **medium** CA glue and accellerator. Please make sure that no glue gets accidently on moving parts. Glue the wing spar in before glueing fuselage 2 and fuselage 3. Put the control surfaces in before glueing the wing parts together.
The plane is designed in a way that you can install the electronics after everything else is finished. Srew the servos in, cut the wire to length and bend it to Z – bends or use the screwable pushrodends.
Paint you plane if you want.

CG: 55mm behind the leading edge of the wing.

Control Surface deflection: 20°-30°

5. Disclaimer:

Caution! This is not a toy, but a remote-controlled flight model, which requires responsible thinking and acting by the pilot. Be sure to check the safety regulations for the necessary RC components and be aware of the dangers of rotating propellers or accidentally short-circuited batteries.
Of course, we do not have any influence over what you, the user of this product, do with the product and associated RC components and can not be made liable for damages, injuries or violations of the law in association with our product.