Hangar 9 P-51 Mustang 20cc

The 69.5" wingspan Hanger 9 P-51 kit weighs around 11-13 pounds. The electric power system called out in the manual references a 6-cell LiPo battery and a 16x8 prop to go with their electric motor, so it looks like we are safe with 16 inch props.

Looking at the prop chart for the BA-4520-470 motor, when running it on a 6-cell LiPo battery, one of our BadAss 16x8 wood props would work very well. At full throttle you can expect to get these performance numbers.

Volts - 22.2
Amps - 67.3
Watts - 1493
RPM - 8175
Thrust - 195 ounces (12 pounds 3 ounces)
Pitch Speed - 62 MPH

This motor will also take a 16x10 prop, if you want more speed with the same amount of thrust, or a 17x8 prop if you want more thrust at the same speed. The full prop chart data for this motor can be found on our website at the following link.

https://innov8tivedesigns.com/pub/propcharts/BA4520-470-Specs.htm

For a speed controller, our BadAss Rebel V2 100-amp ESC or the BadAss Renegade 105-amp ESC would be a good match for this motor. Both of these ESC's have a built-in BEC Circuit. If you would prefer to run a separate BEC or separate Receiver battery, we do have 2-cell LiFe packs in our BadAss brand and we also have a 10-amp continuous, 20-amp Peak external BEC circuit available in our Tempest Brand.

Looking at the manual for this kit, it does come with a plywood motor box for attaching to the front of the firewall when you use electric motors. The BadAss motors all come with a complete hardware kit including the cross mount, prop adapter, all mounting screws and a set of female bullet connectors that match the ones on the motor. All of the items that come in the hardware kit are pictured below.

For a battery, a 6-cell LiPo with a capacity between 5000 and 7000mah would work well, depending on how much flight time you want per charge. Under normal flying conditions, with decent throttle management, a 6S-5000 pack will get you about 7 minutes of flying time per charge and a 6S-7000 pack will get you about 10 minutes of flight time per charge.

Below are links to the items described above in the power system recommendation.

BA-4520-470 Motor: https://innov8tivedesigns.com/catalog/product/view/id/1887/s/badass-4520-470kv-brushless-motor/category/324/

BadAss Rebel V2 100-amp ESC: https://innov8tivedesigns.com/badass-rebel-v2-series-brushless-esc-80a.html

BadAss Renegade V2 105-amp ESC: https://innov8tivedesigns.com/badass-renegade-v2-series-brushless-esc-85a.html

BadAss 16x8 Wood Prop: https://innov8tivedesigns.com/badass-wood-electric-propeller-16x8.html

BadAss 6-cell 5000mah LiPo Battery: https://innov8tivedesigns.com/badass-45c-5000mah-6s-lipo-battery.html

BadAss 2-cell 2100mah LiFe Battery: https://innov8tivedesigns.com/badass-25c-2100mah-2s-life-battery.html

Tempest 20-amp Peak SBEC: https://innov8tivedesigns.com/tempest-switching-bec-3-12s-20a.html