

Tethered Power for Drone

User Manual

Model.MP35 MP50 MP65 MP90 MP120

Read The Rating plate

- It is recommended to read the rating plate and read the Safety Guidelines before first time use. Prepare for your first flight by reviewing the User Manual for more details.

General use

MP series power are powerful and stable output for multi-rotor drones. This heavy-load and robust solution enables the transmission of power from an external ground power supply unit to the drone through the micro-tether to ensure the drone remains attached to the base station providing a safe phase of flight.

Connection of Air-power module

There are indications on the housing to show the socket use.


Vin: input socket to base station

Vout: output socket to drone


Vbat: battery pack input

Operation

- Vin should be connected to tether base station for power input.

 Please notice the output voltage and max. power of the tethered base station and make sure the voltage is suitable for the air power module. Or damage to the air power module may occur.

- Vout should be connected to drone to power the drone.

 Please make sure the socket is firmly connected to drone. And the hook on the tether cable should be properly hooked up with the drone. If not, the drone may take off and unplug the socket or damage the tether cable.

- **Vbat** should be connected to battery pack for back-up power. Even if the main power is off, the battery pack can take over the power for drone immediately and prevent drop-off.

 *Charge the battery full always before flying or the power module will charge the battery pack and cannot supply full power to drone.*

**The socket may vary according to the current but the functions are as above.*



Transportation

No bumping and water entering during the transportation of this equipment. It must be packed in aviation aluminum box during transportation or take damping treatment, or the warranty does not cover.

Operation warnings

1. This device cannot work on rainy days, otherwise the cable will conduct electricity and may be broken.
2. Put the base station in open flat ground and leave at least 10m distance away from the aircraft.
3. The cable pulling speed is controlled by winch control. When releasing/pulling the cable, you must keep the cable in a suitable tension to prevent winching and pulling the aircraft.
4. No touching the cable directly when the power is on.
5. No touching the cable directly when it is moving.
6. Blocking air outlet is strictly prohibited. The observation window can be opened for heat dissipation when hot.
7. The aircraft should be equipped with battery in case of power-off.
8. When the overheating warning is ignited, please withdraw the aircraft and shut down the system in minutes.
9. Do not change the system components/software settings. Any risk caused by unauthorized change will be covered by yourself.

Technical data

MP15



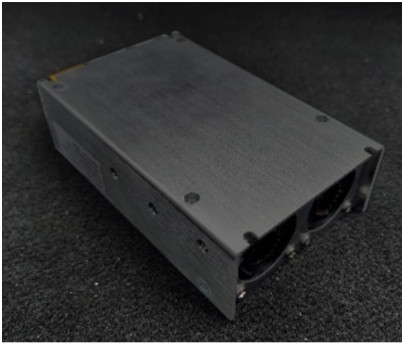
		Parameters
• Weight	•	0.9Kg
• Measurement	•	15.3 x 4.5 x 9.5cm
• Power	•	1500W
• Input	•	400V d.c.
• Output voltage	•	6S Stable Output
• Output current	•	60A
• Auto balance	•	±5%
• Efficiency	•	95%

MP35



		Parameters
• Weight	•	1.15Kg
• Measurement	•	18 x 4.5 x 11cm
• Power	•	3500W
• Input	•	400V d.c.
• Output voltage	•	50V d.c. Stable Output
• Output current	•	70A
• Auto balance	•	±1.5%
• Efficiency	•	96%

MP50



Parameters	
• Weight	• 1.8Kg
• Measurement	• 21 x 13 x 6.7cm
• Power	• 5000W
• Input	• 400V d.c.
• Output voltage	• 50V d.c. Stable Output
• Output current	• 100A
• Auto balance	• ±1.5%
• Efficiency	• 96%

MP65



Parameters	
• Weight	• 3.2Kg
• Measurement	• 25 x 6.7 x 22cm
• Power	• 6500W
• Input	• 400V d.c.
• Output voltage	• 50V d.c. Stable Output
• Output current	• 130A
• Auto balance	• ±1.5%
• Efficiency	• 96%

MP90



		Parameters
• Weight	•	3.1Kg
• Measurement	•	24*18*11cm
• Power	•	8.5kw/9kW
• Input	•	750V d.c.
• Output voltage	•	12S/14S.
• Output current	•	170A
• Auto balance	•	±1.5%
• Efficiency	•	96%

MP120



		Parameters
• Weight	•	6.36Kg
• Measurement	•	31x24x11cm
• Power	•	12kW
• Input	•	750V d.c.
• Output voltage	•	12S. 14S. 18S
• Output current	•	240A
• Auto balance	•	±1.5%
• Efficiency	•	96%

MP150



		Parameters
• Weight	•	6.9Kg
• Measurement	•	39x29x10cm
• Power	•	15kW
• Input	•	1000V d.c.
• Output voltage	•	14S. 16S. 18S
• Output current	•	300A
• Auto balance	•	±1.5%
• Efficiency	•	96%

MP200



		Parameters
• Weight	•	7.5Kg
• Measurement	•	39×29×10cm
• Power	•	20kW
• Input	•	1000V d.c.
• Output voltage	•	14S. 16S. 18S
• Output current	•	360A
• Auto balance	•	±1.5%
• Efficiency	•	96%