APM Facilitate Mooring UAV Test

Unmanned aerial vehicle (UAV) has been widely used in various fields due to its advantages of rapid deployment without human intervention. However, the short flight life of UAVs limits their large-scale application. Most drones use onboard rechargeable lithium batteries, which rarely last more than an hour. However, in some fields, such as emergency communications, on-site monitoring, on-site command and other fields, drones are required to be able to operate in the air for a long time. Therefore, drones powered by ground power through wires, that is, tethered drones, came into being. The tethered UAV system is generally divided into a ground part and an air part. The two parts are connected by cables. The ground part is generally composed of power supply and control parts, and the air part is generally composed of batteries, fuselage, sensors and other parts.

Compared with other types of UAVs, tethered UAVs can stay in the air for a long time without power limitation due to the existence of cables. It has obvious advantages in emergency communication, aerial monitoring, environmental monitoring and other scenarios. It can realize fixed installation or vehicle installation and can follow the movement of the vehicle. The cost of the tethered drone is high, and the application is more complicated. Once the power supply system fails, it is likely to cause damage to the precise sensing or flight control system on the aircraft, and in some cases, there is a risk of crashing the drone. In order to avoid the occurrence of high losses, engineers designing drones have put forward higher requirements on the quality of power supply. After multiple comparison tests, the engineer of a drone manufacturer finally chose the APM high-power DC sources.

APM high-power DC power supply has high power density, high reliability, high precision, perfect operation interface, and integrated powerful test function. It can more comprehensively cover the various test requirements of users, simulate various normal and abnormal working conditions of products, and measure important electrical parameters, providing high-quality guarantees for customers' products.