



**PRODUCT NAME :** A2212 1000Kv Brushless DC Motors for Quadcopter/Multicopter/Drone

**PRICE :** Rs 499.00

**SKU :** RM0789



## DESCRIPTION

**1000Kv Brushless Quadcopter Motors** is a Brushless DC electric motor (BLDC motors) also known as electronically commutated motors (ECMs, EC motors) are synchronous motors that are powered by a DC electric source via an integrated inverter switching power supply, which produces an AC electric signal to drive the motor. In this context, AC, alternating current, does not imply a sinusoidal waveform, but rather a bi-directional current with no restriction on waveform.

## WORKING PRINCIPLE:-

A **brushless dc motors for quadcopter** is constructed with a permanent magnet rotor and wire wound stator poles. Electrical energy is converted to mechanical energy by the magnetic attractive forces between the permanent magnet rotor and a rotating magnetic field induced in the wound stator poles. There are three electromagnetic circuits connected at a common point. Each electromagnetic circuit is split in the center, thereby permitting the permanent magnet rotor to move in the middle of the induced magnetic field. Most BLDC motors have a three-phase winding topology with star connection. A motor with this topology is driven by energizing 2 phases at a time. The static alignment is that which would be realized by creating an electric current flow from terminal A to B, noted as path 1 on the schematic in Figure 1. The rotor can be made to rotate clockwise 60 degrees from the A to B alignment by changing the current path to flow from terminal C to B, noted as path 2 on the schematic. The suggested magnetic alignment is used only for illustration purposes because it is easy to visualize. In practice, maximum torque is obtained when the permanent magnet rotor is 90 degrees away from alignment with the stator magnetic field.

## APPLICATIONS:-

- A number of electric bicycles use brushless motors that are sometimes built into the wheel hub itself, with the stator fixed solidly to the axle and the magnets attached to and rotating with the wheel.
- Fans use brushless motors also in order to increase overall system efficiency.
- Brushless motors are commonly used as pump, fan and spindle drives in adjustable or variable speed applications.
- This quadcopter motors are used in industrial positioning and actuation applications.

