

Module 1: Description, Parts of drone & their Functions

Session 4:

- * Components of Agri. Drone
- * Motor layout & propeller direction



Dosage Control Unit(DCU)

- Controls pump and atomizer according to the PWM signal from Raspberry Pi
- Provides power (5v) to Raspberry Pi





Power Distribution Board(PDB)

- Distribute battery power to all ESCs and other modules
- Distribute PWM signal from autopilot to respective ESCs.





RC Transmitter

- Used to provide pilot command to vehicle
- Mainly used during loiter, land or RTL flight mode





RC Receiver

• Sends the RC transmitter command to autopilot





Telemetry Module

Sends commands & data between autopilot and ground control station





Battery

- 12s 27 Ah Li-ion battery
- Energy source of the drone





RS232- USB Converter

- Connected between raspberry Pi & DCU.
- Converts RS232 data to USB vice-versa.





Tank

• 15L tank to carry pesticide

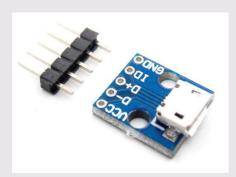




Buzzer & Micro USB Connector



 Buzzer : provides different sounds from vehicle



 Micro USB connecter: used to download data from vehicle for troubleshooting.



Different Types Of Connectors



 AS150 connector : power connector between battery and UAV



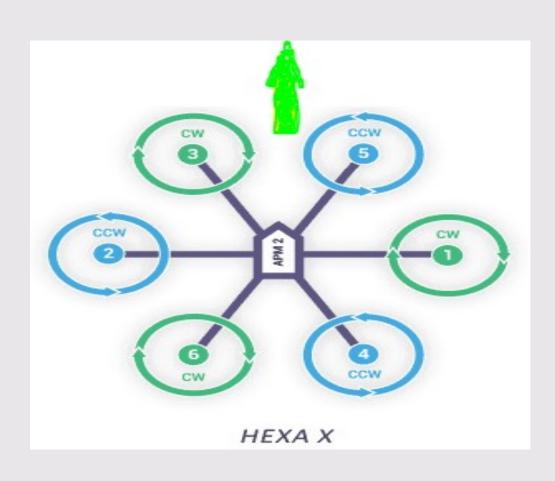
 XT90 connector : connector between PDB and ESCs



 MR30 Connector : connector between DCU and atomizer



Motor Layout & Propeller Directions





Thank you...