



**Write down the list of topics below, each topic on a line,
then click on: DEVELOPER › Macros › BuildProgressBar ›
Run**

Introduction

Battery

Back-Plane

Pusher motor

Summary

Introduction

Battery

Back-Plane

Pusher
motor

Summary



SpyX Training

Battery and Backplane



Table Of Contents

- 1 Introduction
- 2 Battery
- 3 Back-Plane
- 4 Pusher motor
- 5 Summery



Introduction

The electrical system features:

Provides electrical power distribution
to all the components

Allows for quick connection of the
battery

Integral protection circuit

Reliable and stable life expectancy

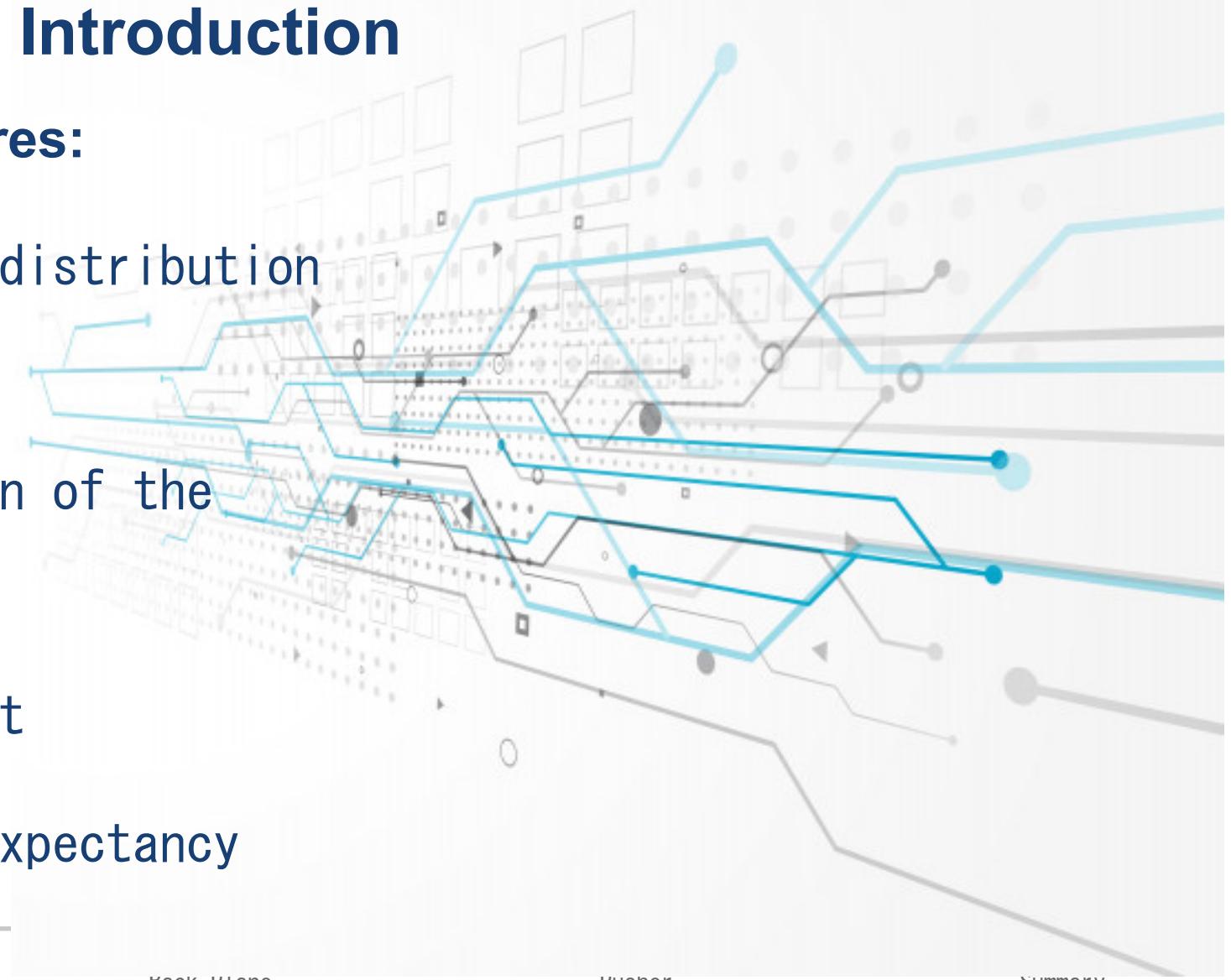
Introduction

Battery

Back-Plane

Pusher
motor

Summary

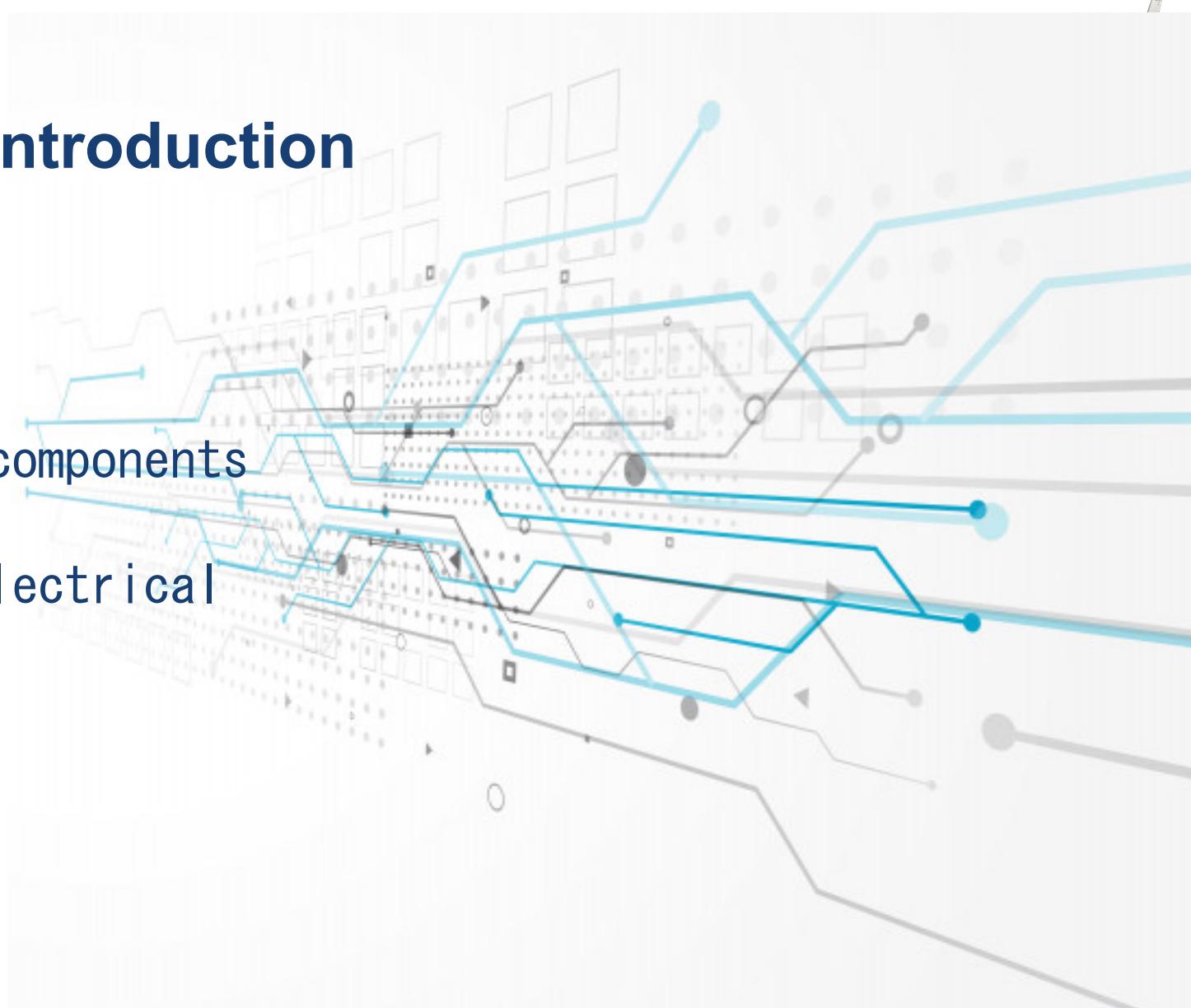


Introduction

Main goals

Overview of all electrical components

Full understanding of the electrical management system

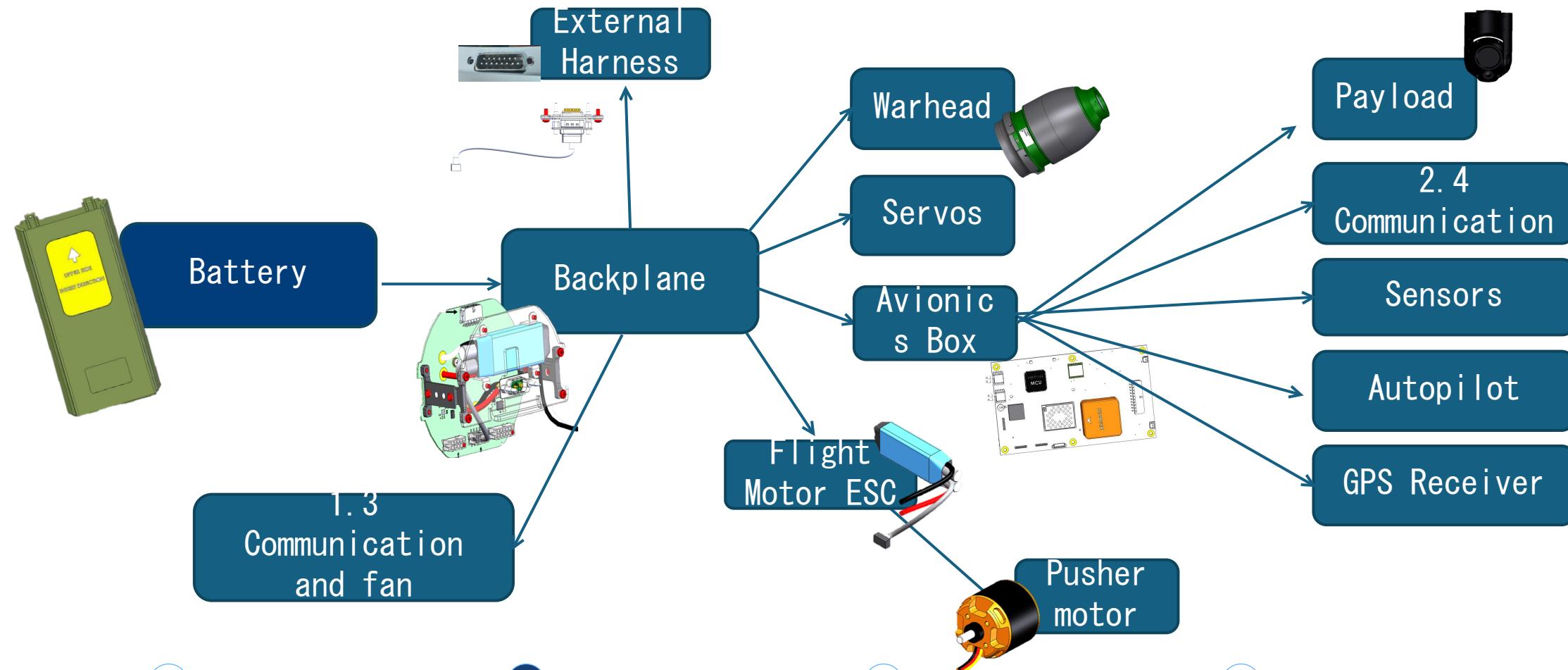




Battery



Electrical System Diagram- Power Suppliers





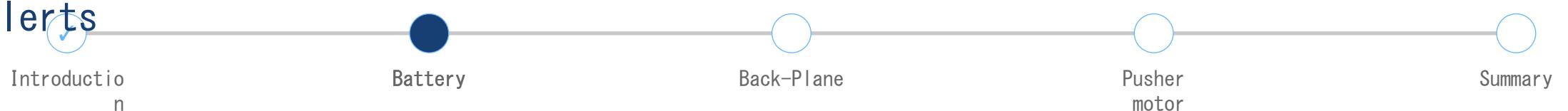
Battery System – Operation & Integration

The Battery is based on rechargeable Li-Ion technology

- **Configuration:** 9S5P
- **Voltage:** max - 37.8 V

provides mission-long power from launch to impact - up to 1.5 hours

Battery consumption and remaining energy are displayed on the GCS screen during flight, allowing real-time monitoring and malfunction alerts





Battery Insertion



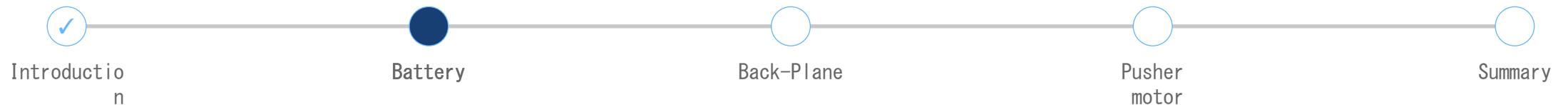
To activate the SpyX, insert the battery into the tail section and lock it in place

SpyX powers on automatically upon battery insertion and lock



Battery limitations

Description	Specification
	Li-On 9S5P
Maximum voltage	37.8 V
Nominal voltage	32.4 V
Minimum takeoff voltage	37 V
Minimum voltage for attack	29.5V (About 10 min. remains)
Motor cut voltage	27
NOTE:	
Minimum voltage for attack refers to the final attack that can be performed without ABORT	

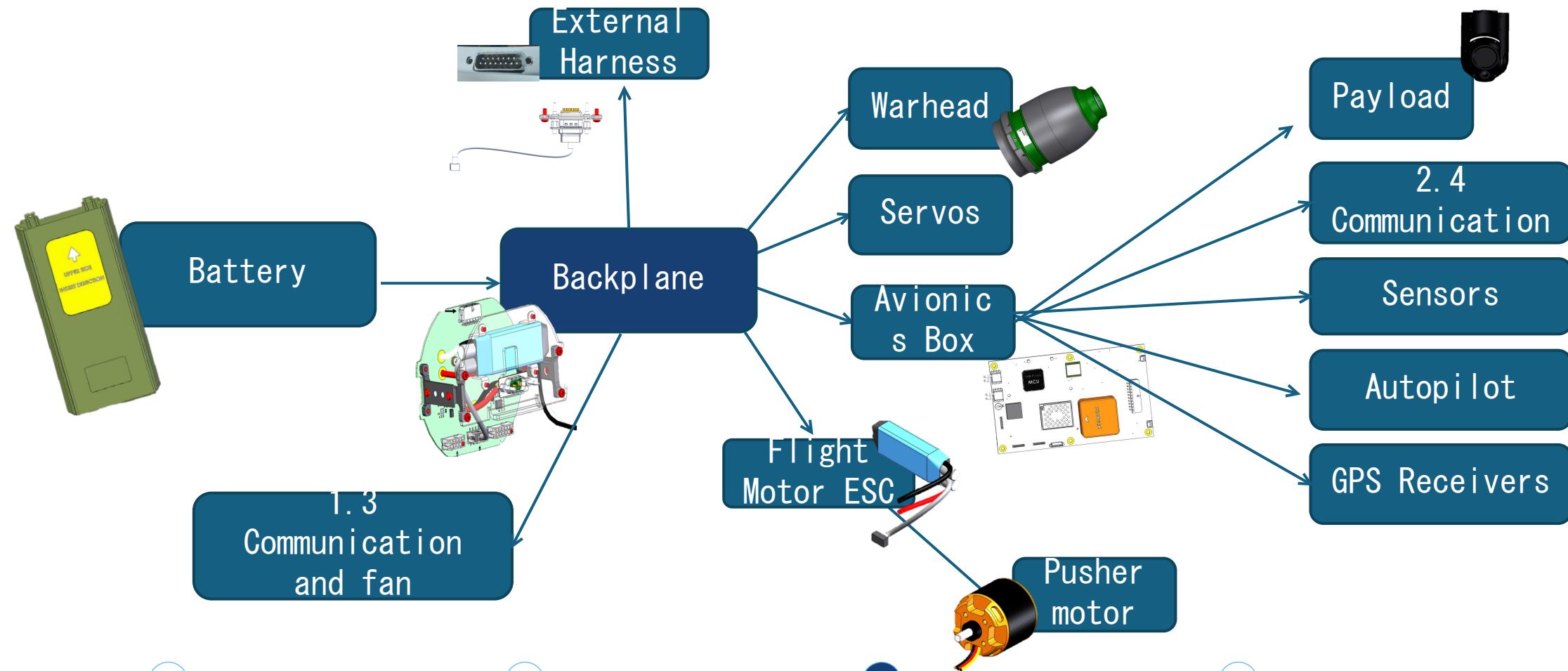




Back-Plane



Electrical System Diagram- Power Suppliers

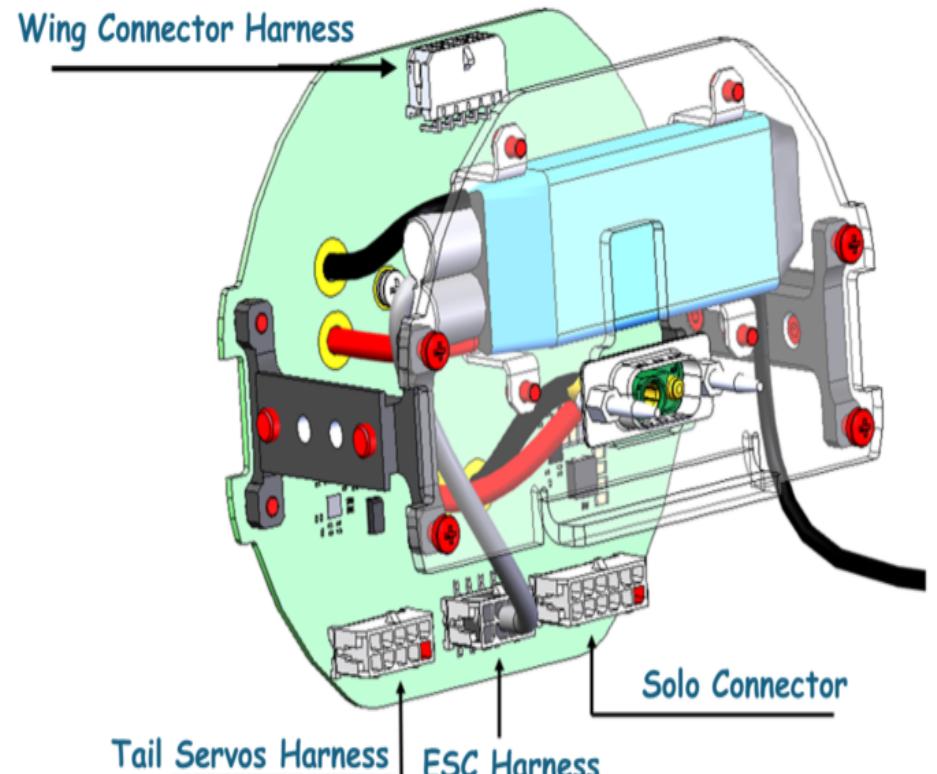




Back-Plane

Power distribution to all critical components such as Avionics, motor, Servos, External Harness, Communication components and warhead

Power management and monitoring

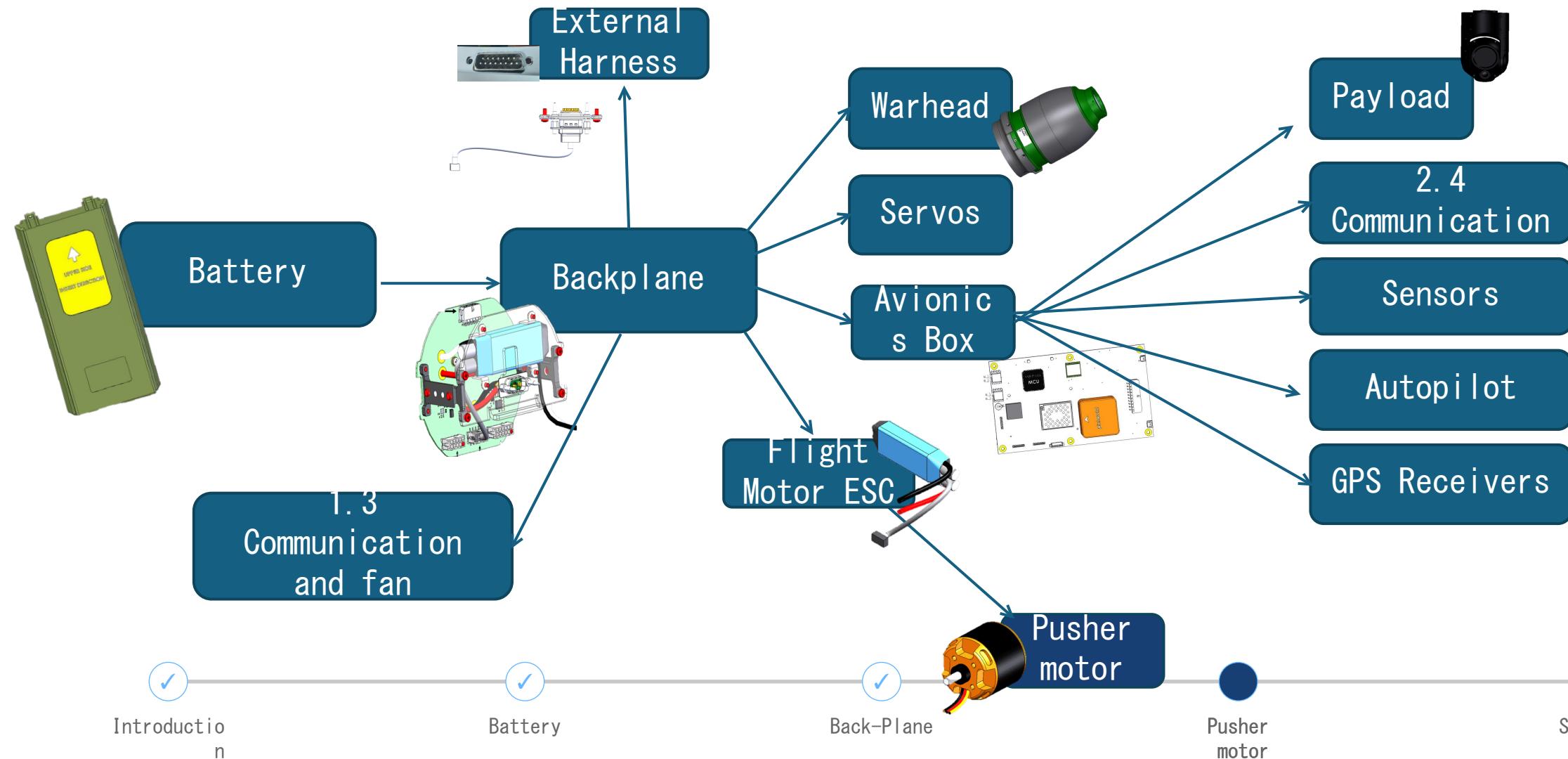




Pusher motor



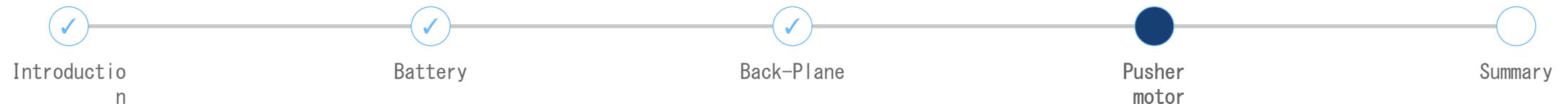
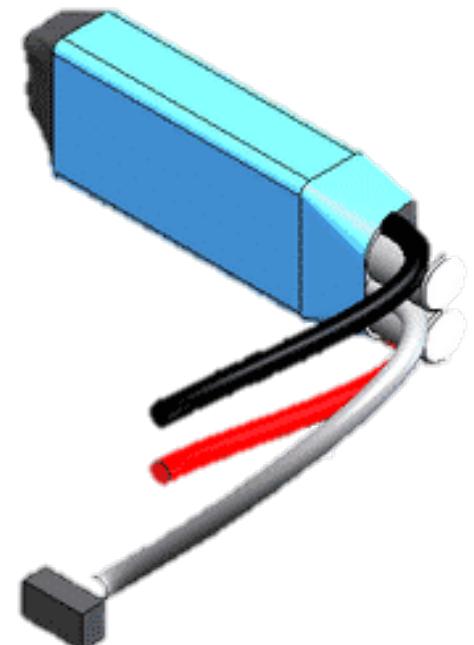
Electrical System Diagram- Power Suppliers





Flight Motor ESC

The speed controller translates the Autopilot's throttle command to motor RPM



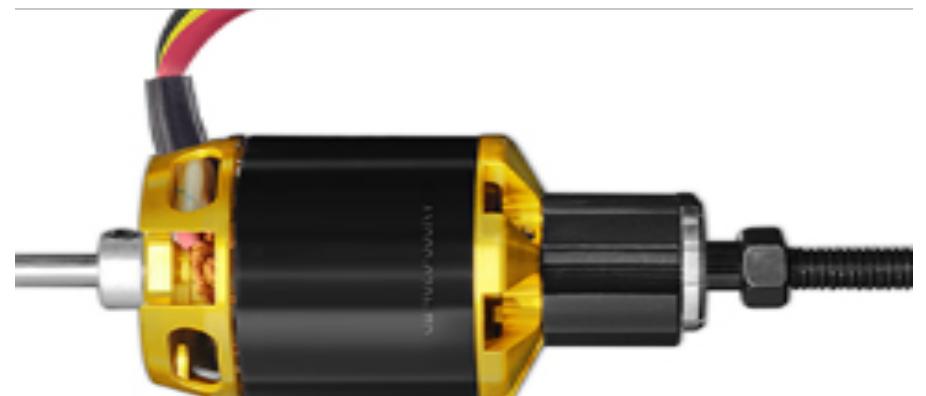


Electric pusher Motor

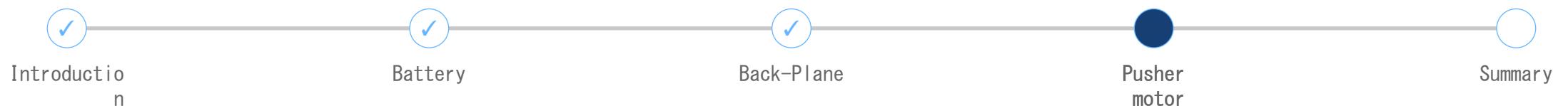
The UMS is powered by an electric flight motor

Electric motor advantages:

- Low acoustic signature for stealthy operation
- Reduced thermal signature
- High energy efficiency



The motor starts automatically after launch





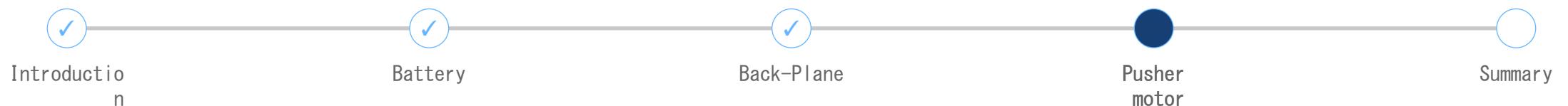
Propeller

Two carbon fiber blades

Folded at rest using a spring mechanism

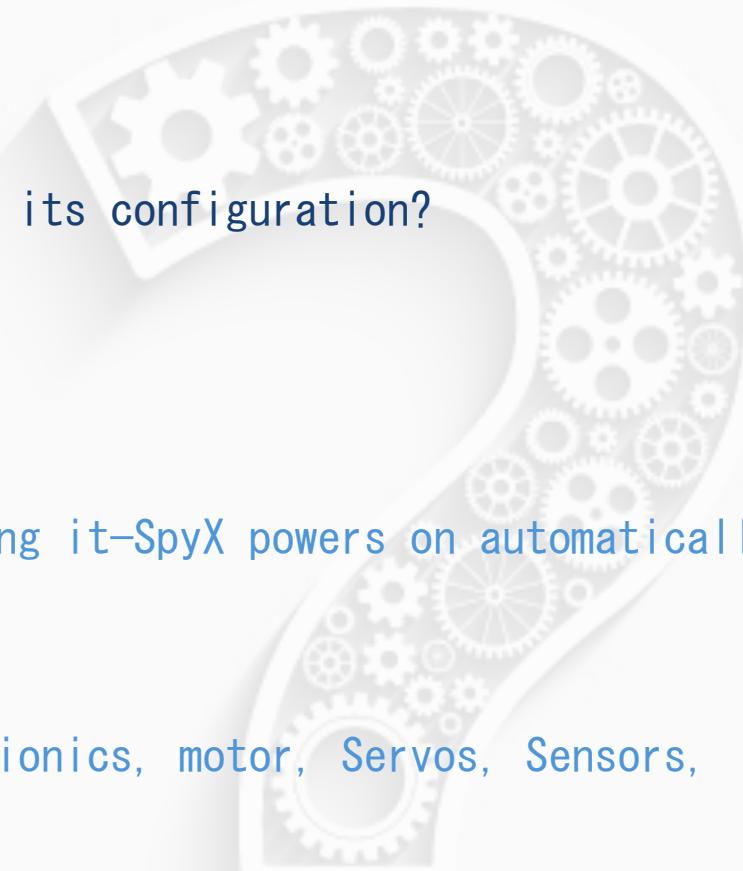
Automatically unfolds at launch by centrifugal force

Converts motor rotation into thrust





Summary



What type of battery is used in the SpyX system, and what is its configuration?

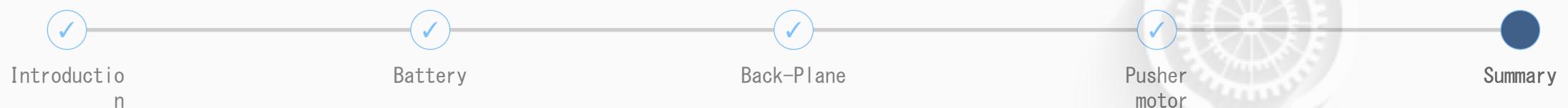
A rechargeable Li-Ion battery, with a 9S5P configuration

How is the SpyX turned on?

By inserting the battery into the rear section and locking it-SpyX powers on automatically

What are the roles of the Back-Plane

- Power distribution to all critical components such as Avionics, motor, Servos, Sensors, Communication components and warhead
- Power management and monitoring





SpyX Training

Questions?