

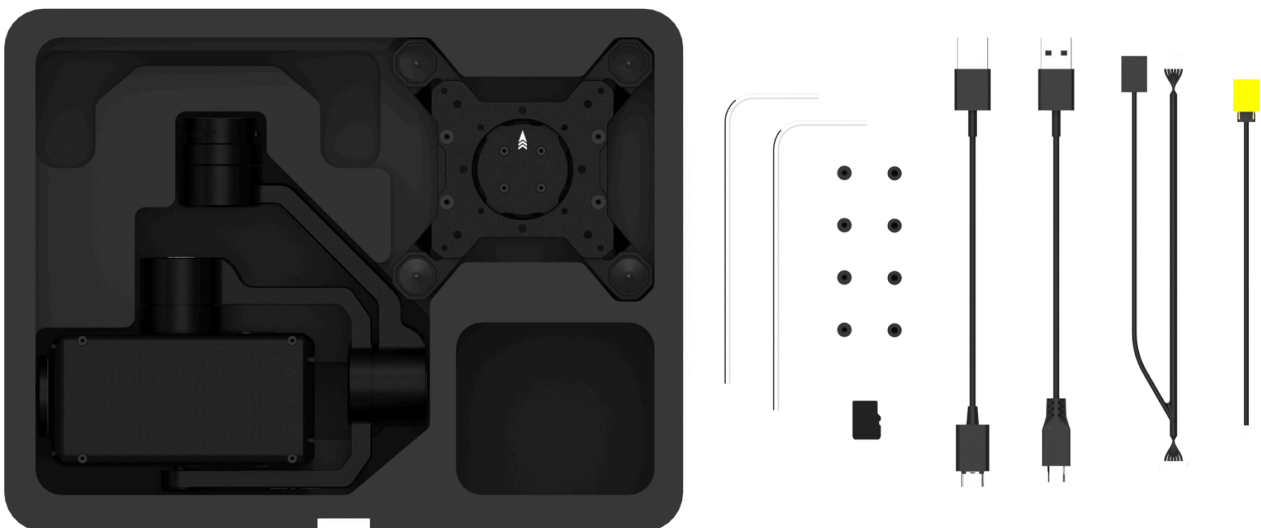
# GENERAL

## Zio Payloads

### Overview

Zio is a high-resolution zoom payload that combines a Sony sensor with high-stabilized three-axis gimbal technology. It enables industrial inspectors and surveyors to zoom into objects of interest and effortlessly transmit video at 4K resolution, ready to be utilized for a variety of different inspection, surveying, and public safety jobs.

### In the box



No.	Item	Quantity
1	Zio Payload	1
2	Zio Damping	1
3	Zio Quick Release	1
4	Allen key 2mm	1
5	Allen key 2.5mm	1
6	M3 × 6 Hexagon Screw Bolt Cut Head	4
7	M3 × 6 Hexagon Screw Flat Head	4
8	USB Type A to USB Type C Cable	1
9	Micro USB Cable	1
10	Zio Control Cable	1
11	Zio Power Cable	2
12	Micro SD Card SDXC I, 64GB	1

## Components



1. Zio Quick Release
2. Gimbal connector
3. Pan Motor
4. Lens
5. Camera
6. USB type C port
7. Roll Motor
8. Micro SD Card Slot
9. Tilt Motor

## Overview Diagram



# Specification

## General

Payload Dimensions (DxWxH)	145mm x 90mm x 148mm
Weight	480g (1.06 lbs)
Input Voltage	14.5V - 52V
Power Consumption	12W-48W
Connections	USB 2.0, UART, Ethernet, Micro HDMI
Remote Software	QGroundControl
Streaming Video	<ul style="list-style-type: none"><li>• HDMI output: 1080p60 (1920×1080   60fps)</li><li>• Ethernet output: 720p60 (1280×720   30fps)</li></ul> Video Bit Rate is adjustable
Storage Temperature	32° F ~ 122° F (0° C ~ 50° C)
Operating Temperature	32° F ~ 122° F (0° C ~ 50° C)
Compatible Drones	Drone supported by PX4 and Ardupilot <ul style="list-style-type: none"><li>• Recommended FC: Cube</li></ul>

## Gimbal

Angular Vibration Range	±0.01°
Gimbal Mount	Bottom mount (Detachable)
Controllable Range	<ul style="list-style-type: none"> <li>• Tilt: ±120°</li> <li>• Pan: ±320°</li> </ul>
Mechanical Range	<ul style="list-style-type: none"> <li>• Tilt: +138° to -198°</li> <li>• Pan: ±335°</li> <li>• Roll: +75° to -265°</li> </ul>
Max Controllable Speed	<ul style="list-style-type: none"> <li>• Tilt: 100°/s</li> <li>• Pan: 100°/s</li> </ul>
Working Current:	<ul style="list-style-type: none"> <li>• Static current: 1.0A (@12V)</li> <li>• Dynamic current: 1.5A (@12V)</li> <li>• Locked motor current: Max 4.0A (@12V)</li> </ul>

## Camera

Sensor	1/2.5" Exmor R CMOS
Effective Pixels	8.51 MP
Zoom	<ul style="list-style-type: none"> <li>• Optical: 20x</li> <li>• Digital: 12x</li> <li>• Super Resolution: 30x</li> <li>• Combine: 240x (recommend for photography only)</li> </ul>
Camera Lens	f/2.0 to f/3.8 (4.4 to 88.4mm Equivalent)
FOV	<ul style="list-style-type: none"> <li>• Wide: 72°</li> <li>• Telephoto: 4.1°</li> </ul>
Resolution	<ul style="list-style-type: none"> <li>• Photo: 3840 × 2160</li> <li>• Video: 3840 × 2160 @ 30 fps   1920 × 1080 @ 30fps</li> </ul>
Aspect Ratio	Photo: 16:9
Format	<ul style="list-style-type: none"> <li>• Photo: JPEG</li> <li>• Video: MP4</li> </ul>
Defog mode	On/Off (Low, Mid, High)
White Balance	Auto, Indoor, Outdoor
Shutter Speed	1/30 to 1/2000s
Exposure mode	Auto, Shutter speed, Iris, Bright, Manual
Zoom mode	Combine, Separate, Super Resolution
Storage	MicroSDXC I (a 64GB SD card included)