

# ZAT Quad-L Heavy



## Payloads

The ZAT Quad-L supports various payloads, including:

- EO-only camera
- EO/Thermal camera
- Communication Relay

## POWER, PAYLOAD, PERSISTENCE

Zenith Aerotech's (ZAT) Quad-L sUAS provides advanced power, payload and endurance over other systems on the market today. ZAT Quad-L is designed and built in the US and is NDAA compliant. The frame and support structures are fabricated from lightweight, high-strength carbon fiber. The design is durable, allows for flexible payloads, and offers an excellent strength-to-weight ratio.

The closed fuselage structure protects internal components from rain and dust. The motor arms and blades are field-replaceable, utilizing a quick release design. Due to its detachable arm design, the ZAT Quad-L allows for easier transport. Quad-L supports tethered operation and various payloads such as communication devices, EO/IR cameras or other custom devices up to 8 lbs.

The ZAT Quad-L platform delivers performance and reliability for mission critical applications.

Dimensions	
Flight Diameter (excluding props)	850 x 850 mm
Flight Diameter (including Props)	1400 x 1400 mm
Removed Arms Diameter	500 x 500 mm
Height	450 mm

Powerplant	
Number of Motors	4
Number of Arms	4
Motor Max Continuous Power Output	29.3 A (per Motor)
Motor Configuration	36N42P
Motor Ingress Protection	IP45
Equivalent KV	100 rpm/V



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**(540) 456-1147**

Propellers	
Dimensions	28.2 x 9.2 in
Material	Carbon fiber and Epoxy
Propeller Orientation	(2) CW and (2) CCW propellers
Propeller Options	Foldable, winglet tip - low vortex

Battery	
Nominal Battery Voltage and C	44.4V – 150C
Battery Capacity	3250 mAh
Backup Battery Flight Time	12-6 minutes (depends on payload)
Charge Rate	5C Fast Charge Capable

Weight	
Maximum Gross Weight	10.9 kg / 24 lb
No Payload Weight	7.3 kg / 16 lb
Maximum Payload weight	3.6 kg / 8 lb

Flight Operations	
Hovering Accuracy	Vertical: ±0.5 m (GPS) Horizontal: ±1.5 m (GPS enabled)
Max Pitch Angle	25°
Ascend and Descend Speed	Ascend: 0.7 m/s Descend : 0.5 m/s Descend (last 10m) : 0.3 m/s
Moving Radius	20 meters (geofence)
Environment	Max Wind Resistance 30 mph (gust) Operating Temperature -20°C to 50°C (-4°F - 122°F) Can fly in light and moderate rain up to 7.6 mm (0.30 in) per hour.
Supported GNSS	GPS/Glonass/Beidou/Galileo

Carry Case	
Case Exterior	26.50 x 26.50 x 25.25 in (67.3 x 67.3 x 64.1 cm)
Case Interior	24.00 x 24.00 x 24.00 in (61 x 61 x 61 cm)
Case Weight	32 lbs (14.5 kg)
Case Weight with drone	48 lbs (21.8 kg)

Payload Interface	
Communication	<ul style="list-style-type: none"> <li>• RJ45</li> <li>• HDMI (Optional)</li> <li>• Serial (Optional)</li> </ul>
Power	<ul style="list-style-type: none"> <li>• 5V (45W)</li> <li>• 12V (72W)</li> <li>• 24V – 48V or high power optional</li> </ul>



# ZAT GCS



## Key Features

The ZAT Ground Power Station offers:

- Automated reel system
- Voltage compensation
- Wind tension compensation
- Reliability

## GROUNDING SOLUTIONS

Zenith Our Tethered Aerial Vehicles (TAVs) utilize the Zenith Aerotech-designed Ground Power Unit to convert 120- or 240-volt AC power into high-voltage DC power. Power is then transmitted to the TAV through a high-strength, abrasion-resistant power supply cable, or tether.

The GPU houses interchangeable tether spools in varying lengths up to 400 feet and utilizes an automated tether management system, allowing the operator to focus their full attention on operating the TAV and sensors.

This unit supports any of Zenith Aerotech's TAVs, and can be paired with third-party unmanned aerial vehicles. This allows the user to get the most out of already purchased platforms by giving them an added long-endurance capability.

### Dimensions and Weight

Box Dimensions	31.3 x 20.4 x 15.5" / 79.5 x 51.8 x 39.4 cm
Weight	70 lbs (31.7 kg)

### Power

Input Voltage	180-264 VAC (with Quad8) 85-264 VAC (with QuadL)
Input Frequency	47-63 Hz
Input Power	3500W Quad 8 1800W Quad L Heavy 1500W Quad L Lite



Cable	
Cable Length	Up to 400 feet
Conductor Cables	2 x 22 AWG Mil-Spec M22759/19
Fiber Optic	1 x Singlemode
Voltage Rating	600V

Voltage	
Tether Voltage (ground side)	400-500V (Compansated)
Tether Voltage (drone side input)	400V (Regulated from ground)
Drone Voltage	50V

Operation	
Setup Time	Less than 5 minutes
Portability	Telescopic handle and wheels
Back Up Battery	12V 5Ah Back Up Battery
Reel	Auto tension reel mechanism

Interface	
Connectors	1x Rj45 for communication 1x USB for charging 1x USB for debut

