



Large Mount Solutions - Unique Concepts

The STX-21 Stabilized Mount provides an unparalleled option for large format sensors. The mount is essentially an electromechanical system based on the principle that the streaming data from an IMU, that has become essential for capturing and processing airborne sensor data, can easily drive the unit to a nadir position. Proper Nadir or "most vertical" positioning is essential to the best processing of vertically captured imagery for the positioning, rectification or ortho-rectification of the data.

This IMU data which is streaming constant positional information to the computer (as much as 100 times per second) is processed and then used to drive the electrical motors to continuously position the mechanical gimbal mount.

Open Gimbal Design

The image to the right shows the mount without sensors or IMU. The open design allows the sensor and IMU to be mounted in different configurations for varied applications.



Contrary to other mount designs, the STX open circular gimbal allows the sensor system to be fixed to the mount so as to be as low as possible above the airplane hole. As the center of rotation is also located as low as possible, the sensor can take full advantage of the +/-14 degrees full range of correction in pitch and roll and +/-29 degrees of drift correction.

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The NEW Micro STX Controller contains all the electronics necessary for the operation of the mount in flight. The controller must be connected to an IMU, like an Applanix, Novatel or other compatible device.

If required the STX controller can be expanded at will by adding a number of modules such as the Track'Air Flight Management module, an Applanix AP IMU module, a Riegl Lidar control module, etc.



Micro STX Controller

With a size of only 5" x 5" x 3.5" the controller can conveniently be positioned in any aircraft.

The mount is self-calibrated within seconds and can be installed in any of four directions. This means that it can be installed to best fit the shape and layout of any aircraft, whether this is along, against, or even perpendicular to the direction of flight. As a result, relocating the mount to other aircraft is easy.

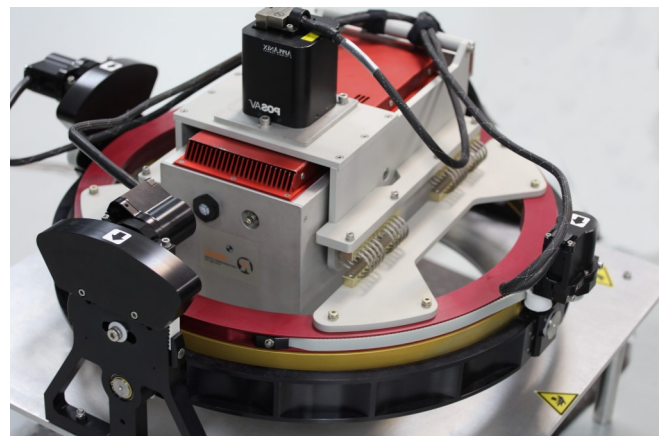
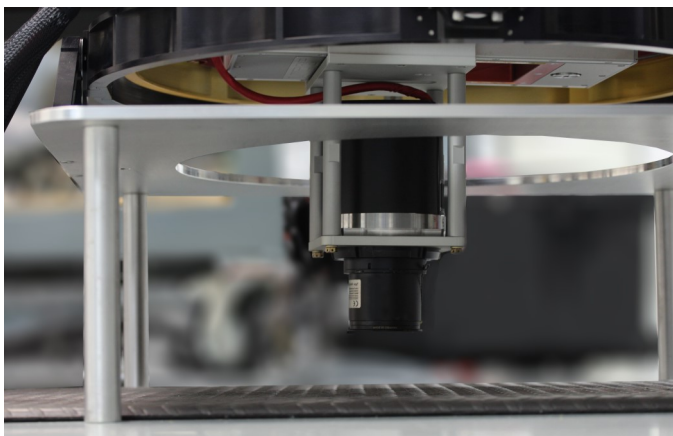


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***Mount shown with Riegl Q1560
and coiled vibration mounts***



The mount can be configured so that it is limited to a lesser degree if it is viewing the fuselage or confronted with an obstacle such as the side of a narrow hole. For example, of the 14° of available pitch, the mount can be limited to 8° to prevent touching the obstacle.

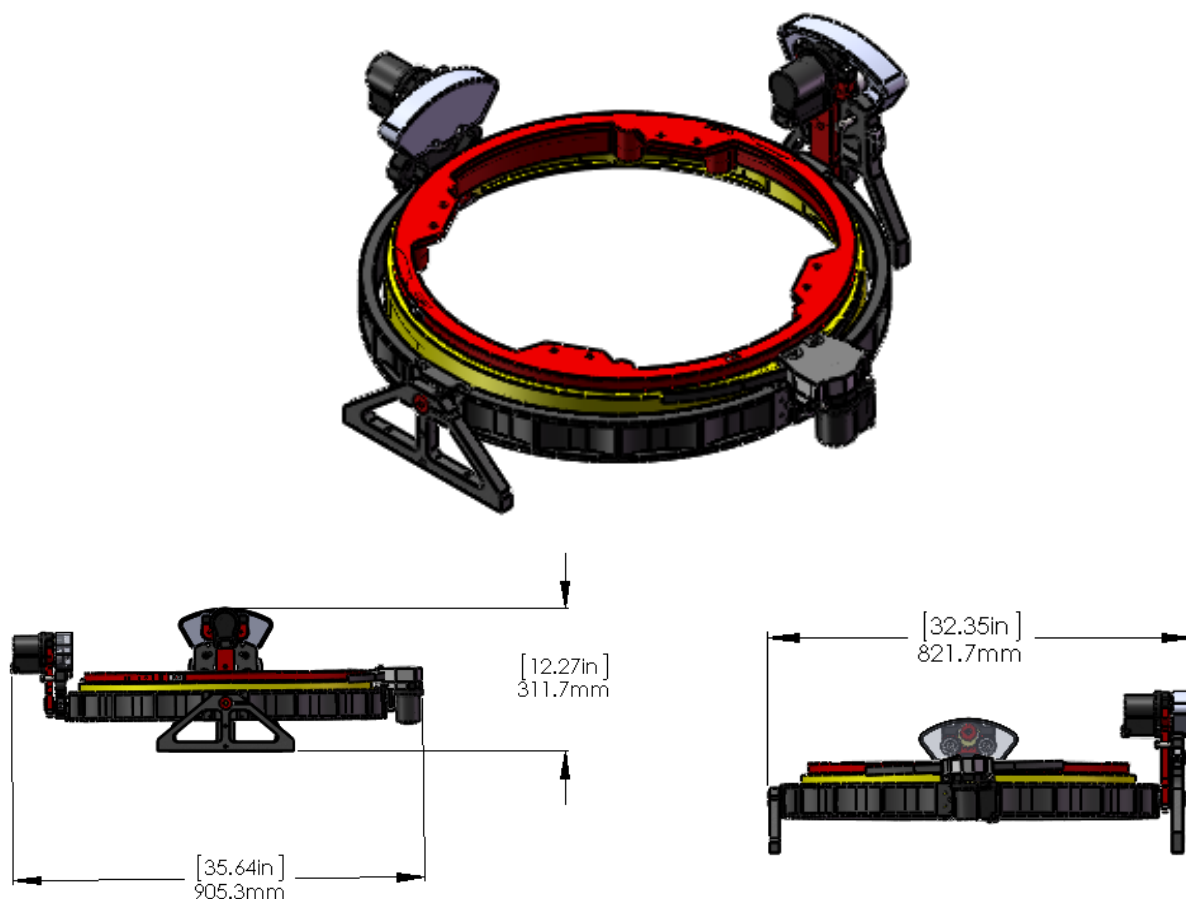


Mount with Leica RCD30 and Riegl 680i



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Mount Dimensions



SPECIFICATIONS :

Stabilization Ranges

Roll: +/- 10°

Pitch: +/- 10°

Yaw / Drift: +/- 29°

Payload: Up to 114kg (250 LBS)

Operational Voltage: 28 VDC

Power Consumption: 120W Max

Operational Temperature: 0°C to 70°C

Maximum Sensor Diameter: 485mm (19")

Sensor Mount Weight: 21.5 kg (48 LBS)

SteadyTrack Controller Weight: 1-3 lbs.

905mm W x 822mm L x 312mm H

36" W x 33" L x 12" H

