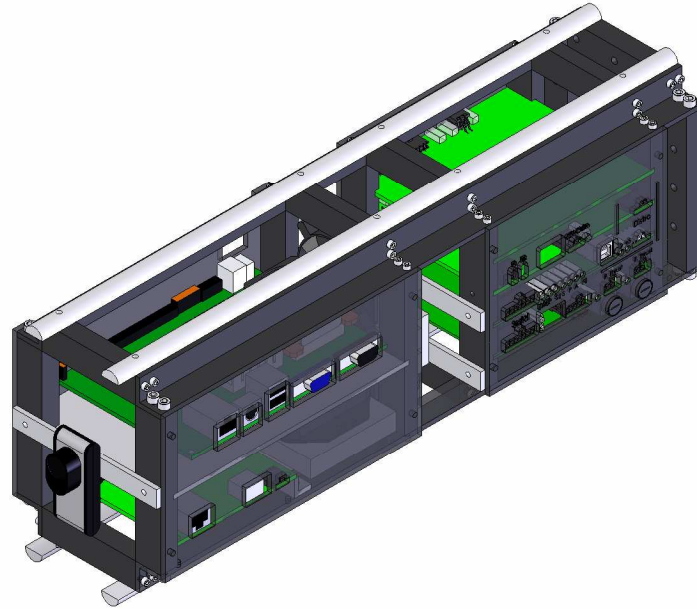


Data Sheet: Rack Structure



The main purpose of the Rack is to provide a convenient mounting environment for the onboard electronics, including vision and cooling components. This must also be done in such a way that the hull can be removed, and the electronics can be accessed without removing power from the computer.

Central Horizontal and Vertical Bulkheads:

- $\frac{3}{8}$ " x $\frac{3}{4}$ " aluminum stock
- 4-40 tapped holes for mounting to L-beams
- 4-40 tapped holes for side panels and other mounting

End Horizontal and Vertical Bulkheads:

- $\frac{1}{2}$ " x $\frac{3}{4}$ " aluminum stock
- 8-32 tapped holes for mounting to L-beams
- 4-40 tapped holes for side panels and other mounting

L-Beams:

- $\frac{3}{4}$ " x $\frac{3}{4}$ " aluminum L-beam stock

Upper Hull Acrylic Guides:

- $\frac{1}{2}$ " diameter acrylic half-rod

Upper Hull Side Panels:

- $\frac{1}{8}$ " thick plexi-glass sheet
- Laser cut holes for board connectors

Various Component Mounting:

- $\frac{1}{2}$ " x $\frac{1}{8}$ " aluminum stock
- $\frac{1}{2}$ " x $\frac{1}{2}$ " aluminum L-beam stock

Assembly:

- $\frac{7}{8}$ " long 8-32 screws
- $\frac{7}{8}$ " long 4-40 screws