**MODULE FOR CUPOLA**

Authors: Justin Cabacungan, Alexander Tang, Nick Ribeiro

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**INTRODUCTION**

The cupola is a small module designed for the observation of operations outside the station such as robotic activities, the approach of vehicles, and spacewalks. The European-built Cupola was added to the ISS in 2010 and continues to provide the best room with a view anywhere. Its six side windows and a direct viewing window providing spectacular views of Earth and celestial objects. The windows are equipped with shutters to protect them from contamination and collisions with orbital debris or micrometeorites. The Cupola was provided by the European Space Agency to NASA in exchange for the transport of 5 external payloads (barter agreement).

Components of the Cupola were initially fabricated in California, and the windows in New York in the late 1980’s, but as budgets were cut, the Cupola was a favorite target for manufacturers. Several times it was fought back into the program only to be cut again as not technically required. More than once the responsibilities for fabrication were bartered to one international partner and then another in exchange for Shuttle launch services and resources that the United States would provide on board the station in orbit. The Cupola made the rounds to Brazil and then finally wound up with ESA and the Italians in 1998, who completed it in 2003. Even then, the launch of the Cupola was repeatedly delayed until it finally made it into orbit in February, 2010.

The Cupola is the part of the ISS (International Space Station) that is mostly visited by astronauts where they take amazing, and out of this world photos.

**QUICK FACTS**

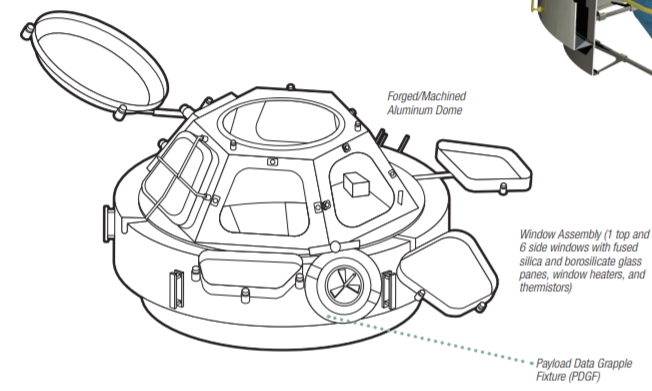
* The cupola houses the robotic workstation that controls the Canadarm2.
* The cupola controls the ISS’s remote manipulator arm.
* It can accommodate two crewmembers simultaneously.
* The cupola was named after the raised observation deck on a railroad caboose.
* Provides spectacular views of Earth, and celestial objects.
* Exterior design, and parts of the Cupola:

Image source: <https://www.nasa.gov/sites/default/files/atoms/files/np-2015-05-022-jsc-iss-guide-2015-update-111015-508c.pdf>

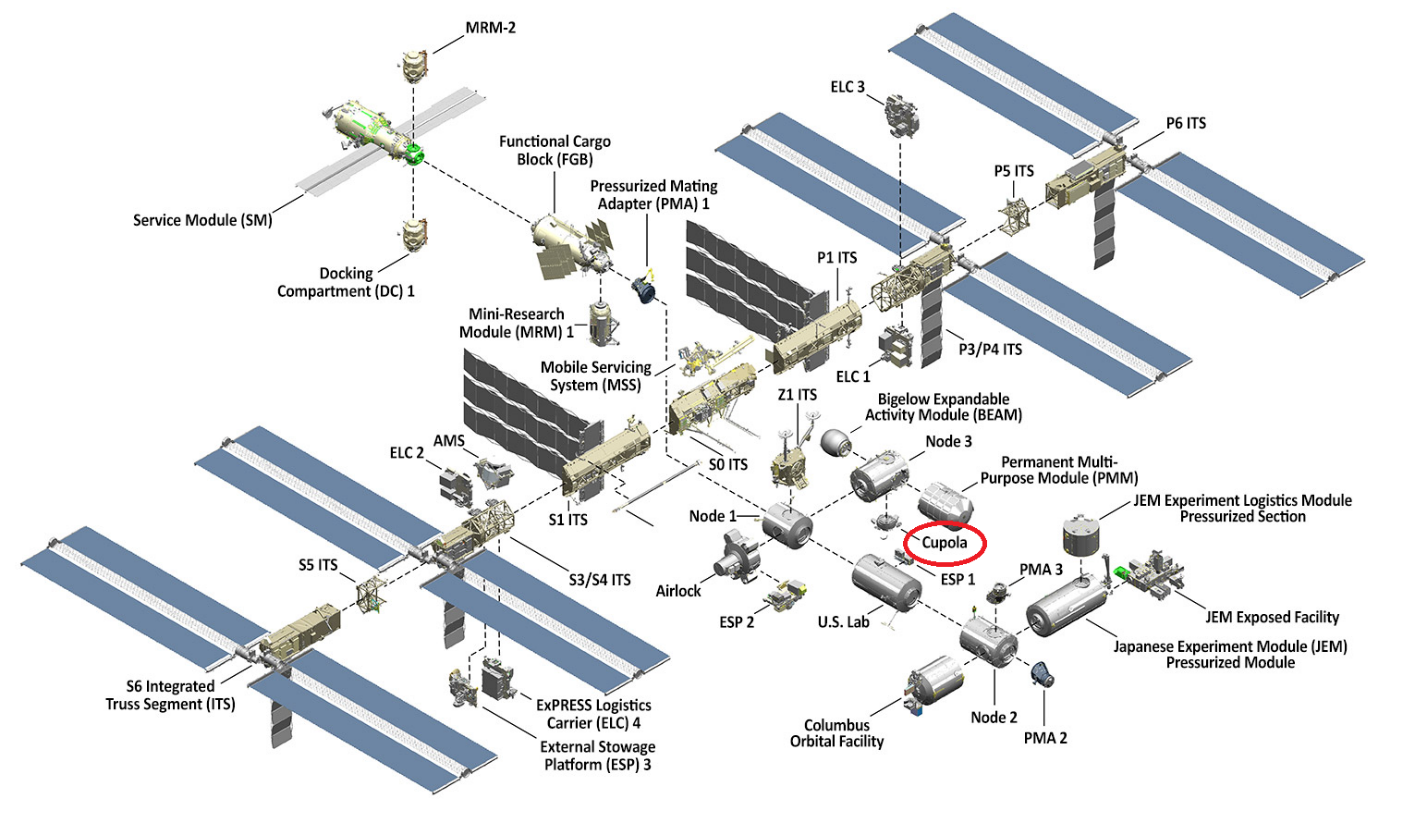
* Location of the cupola in the ISS (International Space Station):

Image source: <https://www.nasa.gov/feature/facts-and-figures>

* Mission Overview of Cupola

**Technical Name:** Cupola

**Launch Date:** February. 8, 2010

**Mission:** Assembling and maintaining the space station, and capturing unpiloted resupply vehicles.

**Ownership:** European Space Agency

**Built by:** MacDonald, Dettwiler, and Associates Ltd. in Brampton, Ontario

**Length:** 1.5 m (4.7 ft.)

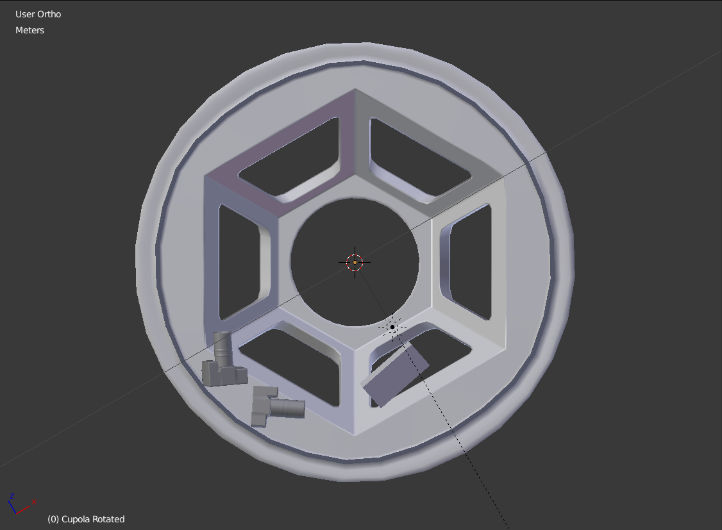
**Maximum Diameter:** 3m (9.8 ft.)

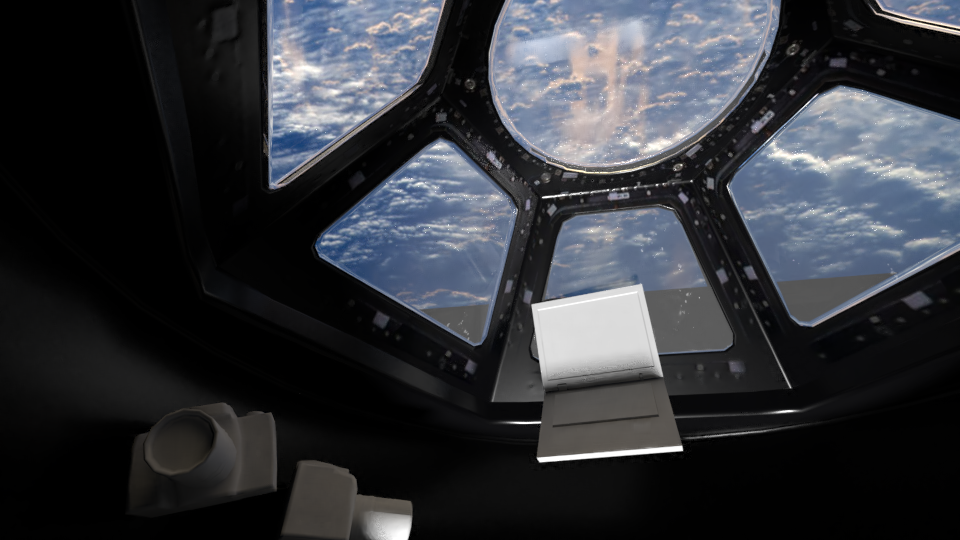
Source: <https://directory.eoportal.org/web/eoportal/satellite-missions/i/iss-cupola>

**IMAGES (BLENDER)**

Images provided by: Nick Ribeiro







**REFERENCES**

* <https://www.nasa.gov/>
* <https://www.nasa.gov/sites/default/files/atoms/files/np-2015-05-022-jsc-iss-guide-2015-update-111015-508c.pdf>
* <https://directory.eoportal.org/web/eoportal/satellite-missions/i/iss-cupola>