CRITICAL RAW MATERIALS IN SATELLITES

Beryllium

It is an excellent material for making mirrors that are both light and strong, with outstanding thermal performance.

Silicon, Gallium, Lithium

The power system uses a solar generator, consisting of two silicon-based solar panels. The use of high-efficiency gallium arsenide cells provides greater electrical power and ensures greater solar radiation. The lithium-ion battery manages the distribution of energy to all of the satellite's equipment.

Aluminium

The satellite is wrapped in several insulating layers of kapton or mylar on an aluminium support. This blanket reflects infrared radiation and has low thermal conductivity.

Helium

The functioning of some scientific satellites (infrared telescopes, etc.) uses liquid helium for cooling, which, once consumed, causes the instrument to shut down.

Titanium

Its low magnetism and its high thermal resistance allows the fins to be used several times without maintenance.