## Subsystems that integrates the Mexican nanosatellite PAINANI I

The Mexican nanosatellite PAINANI I is integrated by several subsystems and modules that are listed in Table 1

**Table 1. Subsystems and modules that integrates the nanosatellite PAINANI I.**

| Subsystem | Modules of the subsystem |
|---|---|
| Control | On Board Computer (OBC) |
| Power | Solar panels, Electric Power System (EPS), Battery banks |
| Telemetry and Control | Radio for Telemetry, Tracking and Control (RTTC), VHF y UHF antennas |
| Detumbling | Magnetorquer |
| Payload | Global Position System (GPS), Image acquisition module |

All these modules are interconnected through a CubeSat Kit Bus (CSK Bus) and have a specific order within the nanosatellite. Figure 1 shows the modules and its position within the nanosatellite.

1. VHF Antenna
2. On Board Computer (OBC)
3. Electric Power System (EPS)
4. Battery bank 1
5. Battery bank 2
6. Radio for Telemetry, Tracking and Control (RTTC)
7. EMI shield card
8. ADCS module
9. Global Positioning System (GPS)
10. GPS antenna
11. Image Acquisition Module with four CMOS sensors
12. UHF antenna

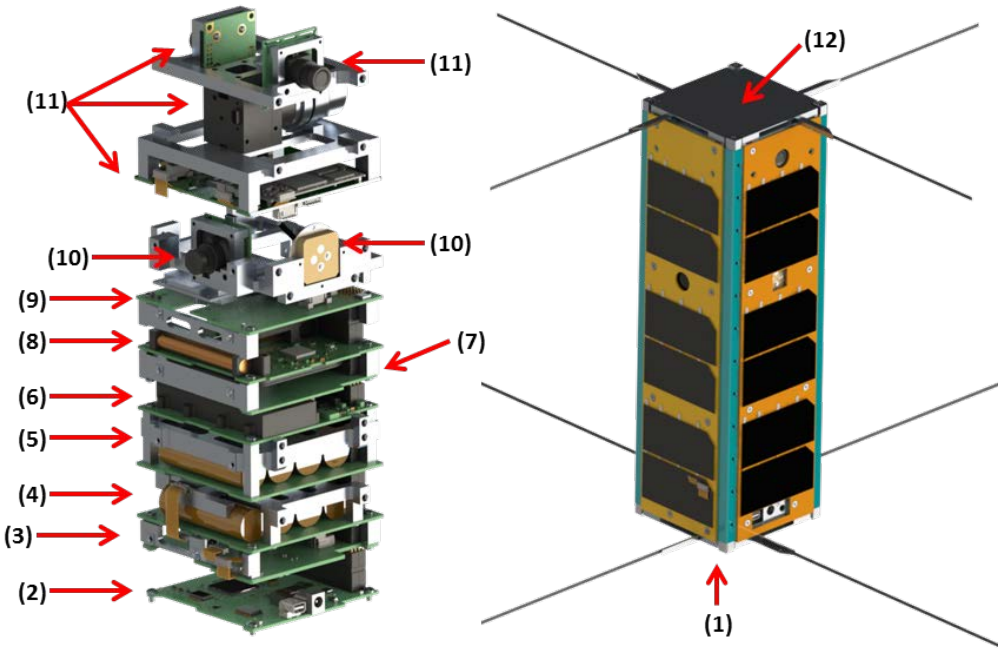


**Figure 1. Modules and its position within the nanosatellite PAINANI I.**