



ESEIAAT



Escola Superior d'Enginyeries Industrials,  
Aeroespacial i Audiovisual de Terrassa

UNIVERSITAT POLITÈCNICA DE CATALUNYA

# Cubesat Constellation Astrea

---

## Report

**Degree:** Aerospace Engineering

**Course:** Engineering Projects

**Group:** G4 EA-T2016

**Delivery date:** 22-12-2016

### Students:

Cebrián Galán, Joan

Foreman Campins, Lluís

Fuentes Muñoz, Óscar

Herrán Albelda, Fernando

Martínez Viol, Víctor

Pla Olea, Laura

Puig Ruiz, Josep

Tarroc Gil, Sergi

Urbano González, Eva María

Fontanes Molina, Pol

Fraixedas Lucea, Roger

González García, Sílvia

Kaloyanov Naydenov, Boyan

Morata Carranza, David

Pons Daza, Marina

Serra Moncunill, Josep Maria

Tió Malo, Xavier

**Customer:** Pérez Llera, Luís Manuel



# Contents

List of Tables	ii
List of Figures	iii
<b>1 Example</b>	<b>1</b>
1.1 Example . . . . .	1
1.1.1 Example . . . . .	1
1.1.1.1 Example . . . . .	1
<b>2 Satellite design</b>	<b>2</b>
2.1 Electrical Power System . . . . .	2
2.1.1 Market study . . . . .	2
2.2 Communication module . . . . .	2

## List of Tables

## List of Figures

# **1 Example**

Example

## **1.1 Example**

Example

### **1.1.1 Example**

Example

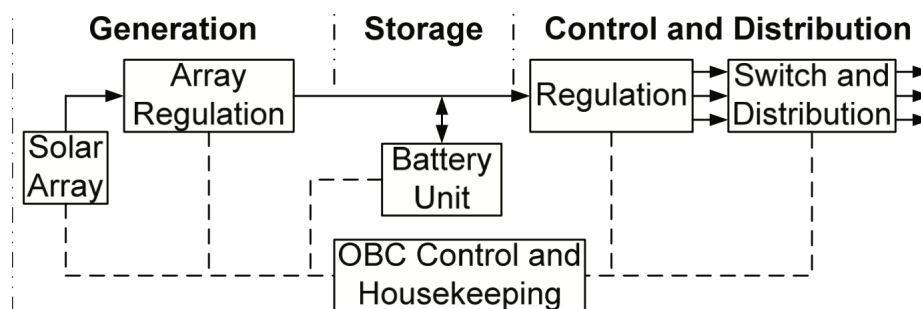
#### **1.1.1.1 Example**

Example

## 2 Satellite design

### 2.1 Electrical Power System

The Electric Power System of the satellite must provide and manage the energy generated efficiently in order to have all the systems operating under normal conditions. The Electrical Power System of a Cubesat is, probably, the most fundamental requirement of the satellite payload, since a failure of it results in a mission failure.



#### 2.1.1 Market study

Several commercial options have to be studied.

### 2.2 Communication module

<http://gomspace.com/index.php?p=products-s100>

Links interesantes universidades:

Convertir bad to mbps: