GERHANASAT SPACE VERSION

MISSION PROPOSAL

108 Constellation of GerhanaSAT in the Equator

# INTRODUCTION

Radio Communication is a very important in modern society. It ensures modern devices stay connected with each other or maintain within the system. Long range radio communication allows devices to communicate over a kilometres-wide distance at a low energy cost, but with limited bandwidth.

Satellite has been used to relay and deliver data for as long as it existed. some of the device that use satellite communication is GPS, satellite TV and military communication. Most of this application used big satellite with a lot of bandwidth to relay data with big bandwidth. The satellite used in this kind of application is expensive to build, run and operate. also they usually meant for entertainment media and visual communication.

Cube satellite is a relatively new kind of satellite which compared to conventional satellite, it is small, light and convey small bandwidth with limited payload.

## Summary

GerhanaSAT is a femto class satellite that will be launch on Lower Earth orbit at altitude of 500km. The objective of the launch is to provide continuous communication relay service between the satellite to ground station, Drone and IOT device on the ground.

GerhanaSAT sized at 30mm\*30mm\*30mm and weight at maximum of 50g per satellite. The total of 108 unit of satellite will be launch on the equator line. The distance between each satellite is 400km.

# TECHNICAL DESCRIPTION

## PROBLEM STATEMENT

## GERHANASAT

### Requirement

### Design

### Structure

### Electronics

## Constellation

# PROJECT MANAGEMENT

## GANTT CHART

## PERSONNEL