

# Multipurpose Athena moon lander

A six-legged moon lander called Athena, is carrying a payload of devices to the lunar surface, including two rovers and a hopper that investigates craters

## "ATHENA" NOVA-C CLASS LUNAR LANDER

### Solar panels:

Approximately **10 days** of light available before sun sets on lunar **South Pole**

### South Pole

### MAPP rover deployment mechanism:

First ever rover at lunar South Pole

### Carbon composite structure

### Helium tank

### 3D printed engine:

Must reduce ship's velocity by **1,800m per second** to land softly on moon



**Mons Mouton**  
landing site

### Navigation pod

### "Grace" Micro Nova Hopper:

Can travel up to **2km** from lander, taking detailed images and exploring craters

*Human to scale (lander is unmanned)*

**Aluminium crush core legs**

## OPERATIONS OVERVIEW

### "Grace" Hopper

**Athena lander:** Ice mining experiment

### YAOKI rover:

Takes photos within **50m** radius of lander

**Mar 14:** Will observe lunar eclipse of Earth

### MAPP Rover

### HOPPER

Altitude: **100m**

**2km**

### Detail