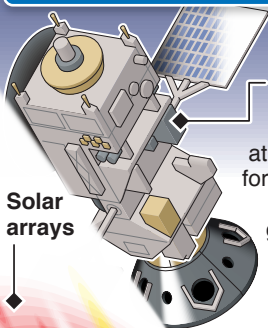


ExoMars missions to search for life

The European Space Agency's two-part Mars mission culminates in landing a rover capable of drilling underground in search of life.

The first sub-mission will land on the Red Planet on October 19

2016 MISSION



Trace Gas Orbiter: Analyses Martian atmosphere for signature biological/geological gases

Solar arrays

Entry, Descent and Landing Demonstrator Module (EDM): Will test controlled landing capability ahead of rover mission



Ejected when orbiter is three days from Mars orbit

Schiaparelli Science Package: Deploys on surface to study Martian weather

Pulse engine

Lifespan: 2-8 days

2018 MISSION

Arrival: Will reach Mars using similar system to EDM

Communication: 2016 orbiter will relay instructions from **Rover Operations Control Centre** in Turin, Italy, to rover on Mars

"BRIDGET" ROVER

Lifespan: At least seven months

PanCam: Provides stereo 3D images of surrounding terrain

Solar arrays

Deployable mast

Travel: 100m per sol*

Cost: €1.2bn (\$1.3bn)

Drill: First Mars rover able to bore deep into surface and extract core samples for analysis

2 metres

2.4 metres