Heat shield MOSIF protects the Mercury Magnetospheric Orbiter during the journey.

When BepiColombo arrives at Mercury, it can experience temperatures in excess of 350°C. Spacecraft and instruments must be carefully shielded against the Sun’s radiation and the infrared heat from the planet to survive for the duration of the mission.

**High temperature multilayer insulation (MLI) on all sun-illuminated surfaces.**

**Infrared radiation**

20 x as intense as in low Earth orbit

**Solar heat flux**

10 x as intense as in orbits around the Earth

The solar array of the Mercury Planetary Orbiter mixes solar cells and optical solar reflectors.

The Mercury Transfer Module’s solar array temperature is regulated by tilting away from the Sun.

**Airbus**