

Reference: TD-DE-1074



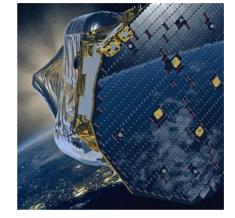
TECHNOLOGY DESCRIPTION

Whether on Earth or in space, photovoltaics require technical solar glass for protection from harsh environments and to sustain high transmittance in the visible spectrum of light up to the near-infrared region. This increases the efficiency of the cell while shielding against harmful radiation. Decades of experience and expertise in glass manufacturing allows the so-called Solar Cell Cover Glass to be produced in different thicknesses directly drawn from the melting tank. This includes flexible and ultra-thin glass (UTG) available down to thicknesses below 70 µm as cut-to-size substrates. Design opportunities are further enhanced by the availability of different coatings.



INNOVATIVE ASPECTS

- · Protection against radiation
- · High surface quality
- High light transmission across the entire radiation spectrum, from UV-A to NIR, allowing the solar cell cover glasses to achieve superior transmission levels
- Stability of solarisation due to a special material composition designed to prevent solarisation and discolouration of the glass, ensuring stable optical performance over the lifetime of the mission





TECHNOLOGY READINESS (in space application)

TRL 9 (2024)

COUNTRY OF ORIGIN

Germany

LATEST UPDATE

06/2024

TAGS #solar cell #cover glass #radiation #protection #ultra-thin #light transm.

APPLICATION AREAS

Aviation Energy

Construction & Construction Civil Engineering

Electrical & Electronic Engineering

Health

Safety & Security

Space technologies



TECH CARD

