

## Metal mirrors and telescopes for Earth observation from UV to IR

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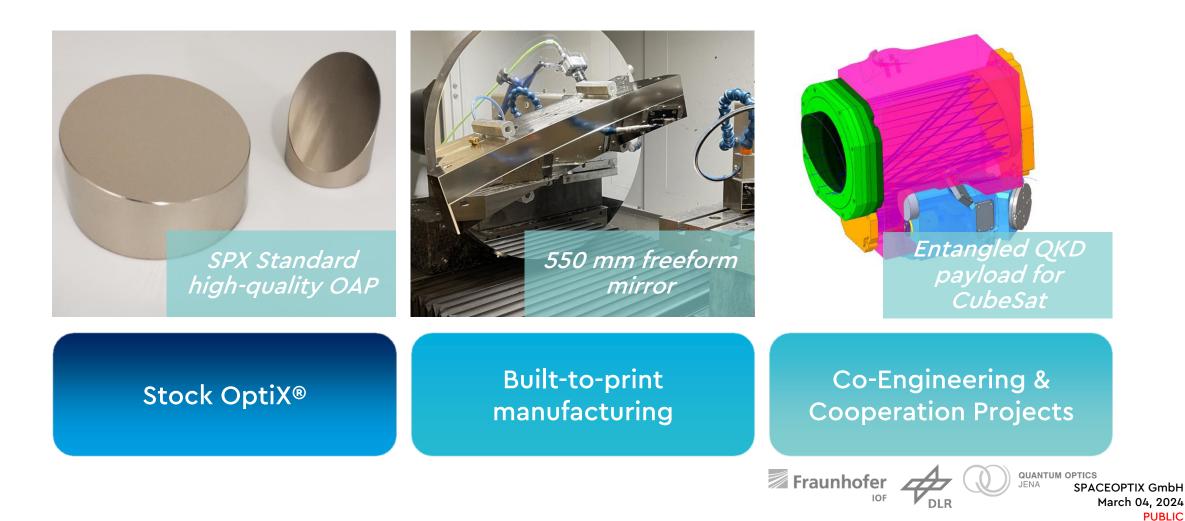
EPIC OTM on Photonics for Earth Observation, 04.03.2024

# S SPACEOPTIX KEY FACTS

- Spin-Off from Fraunhofer IOF, founded 03/2020
- Technology transfer from applied research to industrial production of high-quality metal optical components and systems
- 3200 m<sup>2</sup> manufacturing area, space-qualified process chain

Plenty		l research ic missions , Juice)	• CNC	, diamond	cal worksho machining n room,	
Research at FhG IOF			Pro	duction s SPX	tart at	Volume production capabilities at SPX
2002	•••	2020	2020	••••	2021	2022





## S IR FREEFORM TELESCOPE @ISS

- Aluminum optics for high-resolution temperature monitoring from small satellites
- In-Orbit demonstration for ConstellR's technology, launched in early 2022 to ISS
  - System engineering
  - Complete optics manufacturing
    - CNC machining + thermal treatment
    - Diamond machining
    - Qualified cleaning and coating
  - System assembly and testing









Fraunhofer

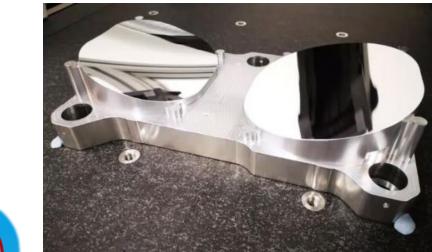


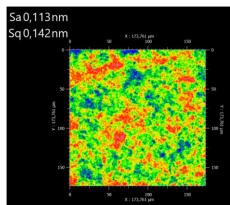
SPACEOPTIX March 04

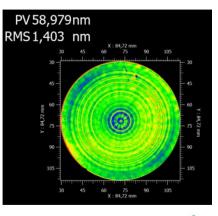


### / OPTICS FOR UV/VIS EARTH OBSERVATION

- Plated aluminum optics allow for polishing and figure correction after diamond turning
- Several mirrors and telescopes for highresolution imaging realized
  - System engineering
  - Complete optics manufacturing
    - CNC + diamond machining
    - Optics plating, polishing, correction
    - Qualified cleaning and coating
  - System assembly and testing







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#### Thanks for your interest! Contact us: info@spaceoptix.de





#### Ausgezeichnet mit dem



XXIII. Innovationspreis Thüringen 2020 🗌

