HPS Group
Structures & Thermal Control for Space Applications

In the industrial space world the subsystems specialist HPS GmbH, Germany, keeps its own position right in the middle between the many small and the few large enterprises:
- self reliant and managed by owners
- strongly growing
- internationally present.

The portfolio of HPS Group offered to institutional and commercial customers from international space community is:
- reflector antennas
- deployable structures
- lightweight CFRP structures
- MGSE
- thermal hardware, MLI
- new materials
- engineering and integration services.

The capacities of the HPS Group are solidly rooted on four foundations:
1) acknowledged experts for project management, engineering, material science, MAIT and quality control,
2) highly modern offices and extreme computing capacities & associated software,
3) company-owned infrastructure for manufacturing, assembly and integration, including class 1,000/ISO6 cleanroom and 600sqm integration hall,
4) a large network of European partner companies for special developments, production of all kinds of mechanical parts, material- & subsystem-tests.

Depending on the customer’s technology needs, any HPS site may act as contractor. Large subsystem contracts are managed by the German site with specialized, high quality & cost efficient contributions from the sites in Portugal and Romania.

Currently HPS's flight hardware is onboard 12 ESA & German missions, such as AlphaSat, ExoMars, MTG, EUCLID, JUICE, eROSITA, CHEOPS, Heinrich Hertz.

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<td>Engineering &amp; Assembly Services</td>
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Main Product Portfolio

Antenna Subsystems

- Ka-Band Antennas (Telecom/Science)
- Q/V-Band Feeder Link Antennas
- Dual Gridded Reflectors
- Radar Reflector Antennas
- Navigation Antennas
- Mobile Ground Antennas

Multilayer Insulation, Radiators, Thermal Hardware

- Scientific Instrument MLI
- High Temperature MLI
- Optical Camera Equipment MLI
- Satellite MLI
- Metal & CFRP Radiators
- Ablators for Re-entry Missions

Deployable Structures

- Large Deployable Antennas
- Deployable Reflectors
- Deployable Sail/Boom Subsystems
- Deployable Masts
- Foldable Booms
- Deployable Structures

Lightweight Structures

- Instrument Structures
- CFRP Electronic Boxes
- Secondary Structures and Parts
- Composite Strutures
- Nanotube Reinforced Materials
- Radiation Shielding Equipment

Mechanical Ground Support Equipment

- Vertical Integration Stand
- Support Structures
- Lifting & Hoisting Devices
- Alignment Trolleys
- Multi Purpose Adapters
- Transport Containers