HPS Group
Structures & Thermal Control for Space Applications

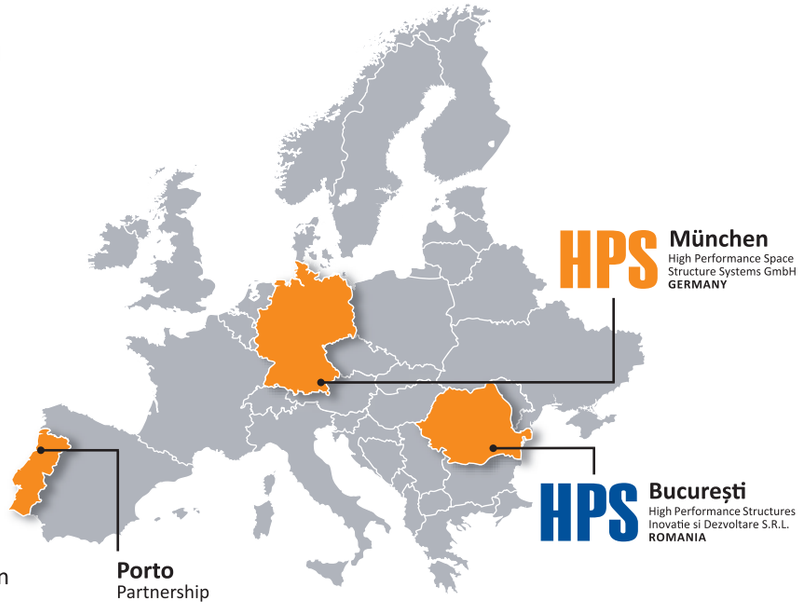
In the industrial space world the **HPS Group**, headed in Germany with a daughter company in Romania, keeps its own position right in the middle between the many small and the few large enterprises:
- self reliant and managed by owners
- strongly growing
- internationally present.

The portfolio of HPS Group offered to institutional and commercial customers from international space community is:
- reflector antennas
- large deployable reflector subsystems
- deployable dragsails or de-orbit
- lightweight CFRP & metal structures
- thermal hardware
- MGSE
- new materials & processes
- 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 assurance,
2) highly modern offices and extreme computing capacities & associated software in all HPS sites,
3) company-owned infrastructure for manufacturing, assembly and integration, including cleanroom and 350 m² integration area,
4) 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 Romania and international partners like in Portugal for e.g. MLI production.

Currently HPS's flight hardware is **onboard of 16 ESA- & German missions,** such as AlphaSat, ExoMars 2016, MTG, SENTINEL-4, EUCLID, JUICE, BIOMASS, eROSITA, EnMAP, Heinrich Hertz.



Product	HPS-DE	HPS-RO
Reflector Antenna Subsystems	●	○
Lightweight Portable Ground Antennas	●	○
Navigation Antennas	●	–
Large Deployable Reflector Subsystems	●	○
Deployable Arms	●	–
Deployable Sail Subsystems for De-Orbit	●	○
Lightweight Metal Parts & Assemblies	●	●
Composite Structure Assemblies	●	–
Radiation Protection	●	–
Optical Structure Assemblies	●	○
CFRP Electronic Housings	●	–
Thermal Hardware Subsystems	●	○
Multilayer Insulation MLI	●	○
Radiators	●	○
Ablators Engineering	●	–
MGSE	●	●
Engineering & Integration Services	●	●

● Turnkey delivery ○ Contribution via elements

CONTACTS

HPS GmbH (central contact)
Hofmannstr. 25-27
81379 Munich, Germany
Ernst K. Pfeiffer (CEO & Sales)
T: +49 89 452 0576 0
E: pfeiffer@hps-gmbh.com
www.hps-gmbh.com

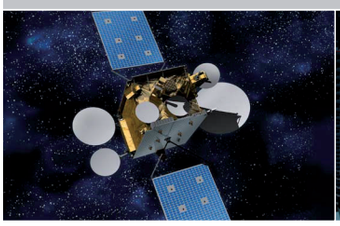
Large Depoyable Refector Subsystems:
Stephan Endler
E: endler@hps-gmbh.com

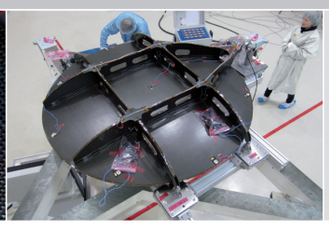
Deployable Dragsails for De-Orbit:
Thomas Sinn
E: sinn@hps-gmbh.com

HPS S.R.L.
Soseaua Pantelimon nr. 10-12
Bucharest, Sector 2, Romania
Astrid M. Draguleanu (COO)
T: +40 31 10 29 397
E: draguleanu@hps-srl.ro
www.hps-srl.ro

Main Product Portfolio

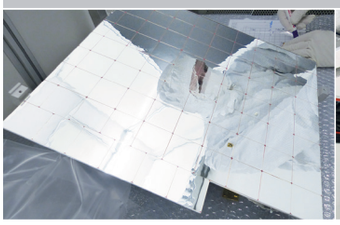
REFLECTOR ANTENNA SUBSYSTEMS





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

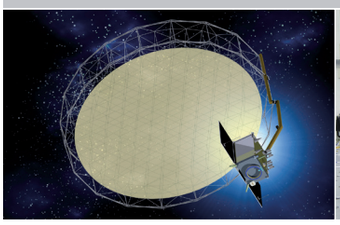
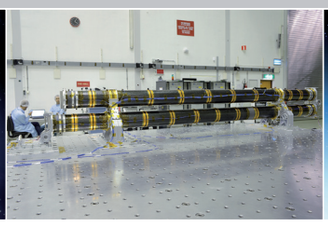
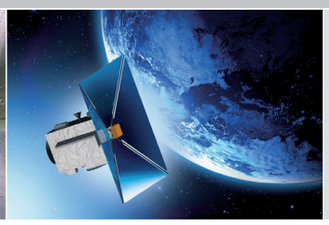
THERMAL HARDWARE





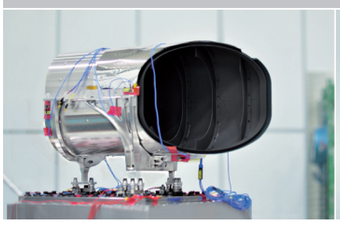
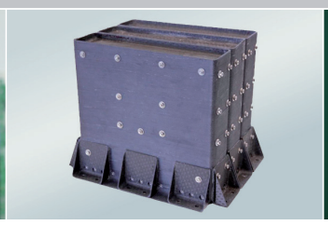
- Radiators
- Multilayer Insulation MLI
- High Temperature Insulation
- Ablators for Re-entry Missions
- Thermal Washers
- Thermal Straps

DEPLOYABLE REFLECTORS, ARMS, SAILS

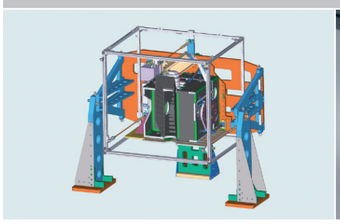
- Large Deployable Antennas
- Deployable Reflector Subsystems
- Deployable Arms
- RF-Reflecting Metal Mesh
- Dragsails for De-orbit of Sats up to 1,5 t
- Dragsails for De-orbit of Nano Satellites

LIGHTWEIGHT STRUCTURES


- Instrument Structures
- Radiation Shielding Structures
- CFRP Electronic Boxes
- Secondary/Tertiary Structures/Parts
- Composite Structures
- Nanotube Reinforced Materials

MECHANICAL GROUND SUPPORT EQUIPMENT





- Assembly & Integration Stands
- Lifting & Hoisting Devices
- Turning Devices (also for therm. vacuum)
- Multi Purpose Adapters
- Transport Containers
- Purging GSE