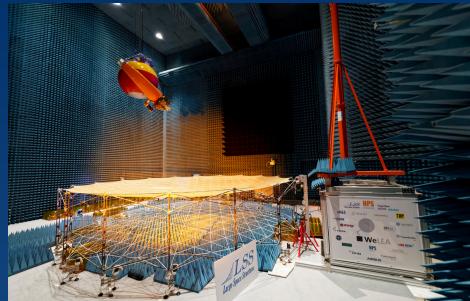


CIMR
LEA
LEOB



LARGE SPACE
STRUCTURES

CONTACT US:



+49 89 2441687 0



www.largespace.de
info@largespace.de



Parkring 6,
85748 Garching bei München



Large Deployable Reflectors (>5m aperture) for next-generation space missions – an IPR-protected design under development for ESA's Copernicus program. Scalable up to 20 meters, enabling advanced telecommunication, reconnaissance, and Earth observation.



CIMR

Parameter	Specification
Frequency Range	L-to Ka-band
Deployed Geometry	
Projected Diameter	7.127 m
Focal Length	6.1155 m
Center Offset	6.1185 m
Surface Accuracy (RMS)	< 0.32 mm
Stowed dimensions	
Height	1.59 m
Diameter (Along major axis)	0.54 m
Mass	
Stowed Reflector with HDRM	115 kg
Deployed Reflector	57 kg
Structural Stiffness	
In Stowed Configuration	> 55 Hz Lateral > 85 Hz Axial
In Deployed Configuration	> 1 Hz

LEA

Parameter	Specification
Frequency Range	S-to X-band
Deployed Geometry	
Projected Diameter	5.1 m
Focal Length	5.1 m
Center Offset	3.55 m
Surface Accuracy (RMS)	< 0.4 mm
Stowed dimensions	
Height	1.2 m
Diameter	0.42 m
Mass	
Stowed Reflector	38.5 kg
Deployed Reflector	24 kg
Structural Stiffness	
In Stowed Configuration	> 50 Hz Lateral and Axial
In Deployed Configuration	> 1.2 Hz

LARGE DEPLOYABLE REFLECTORS >5 M

Use Cases

- Earth observation and communications antennas for medium sized and large satellites
- Military reconnaissance programs in SAR, SigInt

Key Benefits

- Fully European sourced and managed
- High reliability demonstrated through ESA program
- ECSS conformity demonstrated in ESA project

Key Features

- Mesh antennas deployed by expandable, peripheral ring
- Frequency range up to Ka- band
- Flight model in manufacturing/ validation
- In orbit operation expected in 2029 (CIMR)