



**L3HARRIS®**  
FAST. FORWARD.

# S-BAND RADIAL RIB REFLECTOR

High-accuracy, low-stowed volume reflector

L3Harris has developed a reliable, flexible, low-stowed volume mesh Radial Rib Reflector that can be used for a broad set of applications. The Radial Rib Reflector has the most flights logged over the last 40 years. The reflector features L3Harris’ patented, gold-plated mesh reflective surface that results in improved performance and is ideal for mobile media services and synthetic aperture radar missions. L3Harris’ proven Radial Rib Reflector is built on a low-cost, low-mass structure and offers a controlled, reliable deployment system. The reflectors are scalable up to 9 meters and are for satellite applications from UHF to S-band.

## PERFORMANCE PARAMETERS

PARAMETER	SPECIFICATION
Frequency Of Operation	S-band
<b>Deployed Geometry</b>	
Projected diameter	9 m
Focal length	9 m
Center offset	7.8 m
<b>Surface Accuracy Of Orbit</b>	
Root mean square	0.0016 m
<b>Stowed Dimensions</b>	
Height	5.65 m
Diameter	0.61 m
<b>Mass</b>	
Reflector	79 kg
Boom	46 kg
<b>Stiffness</b>	
Stowed	32 Hz long 26 Hz lat
Deployed	0.5 Hz



## KEY FEATURES

- > Accommodates applications from UHF to S-band
- > Provides a simple, low-cost structure
- > Folds compactly for launch
- > Is not subject to International Traffic in Arms Regulations controls

PARAMETER	SPECIFICATION
<b>Stowed Loads</b>	
Combined load case	9.5G longitudinal + 2.8G lateral
Combined load case	5.2G longitudinal + 6.5G lateral
Overall random vibe	3.69 grms protoflight and qual - 2.61 grms acceptance 60 sec/axis acceptance and protoflight 180 sec/axis qualification
<b>Electrical Interface</b>	
Deployment mechanism	DC motor
Motor count	Reflector: 1, boom: 2
Telemetry	Boom position Motor temperature Deployment complete Rib position

**S-Band Radial Rib Reflector**

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