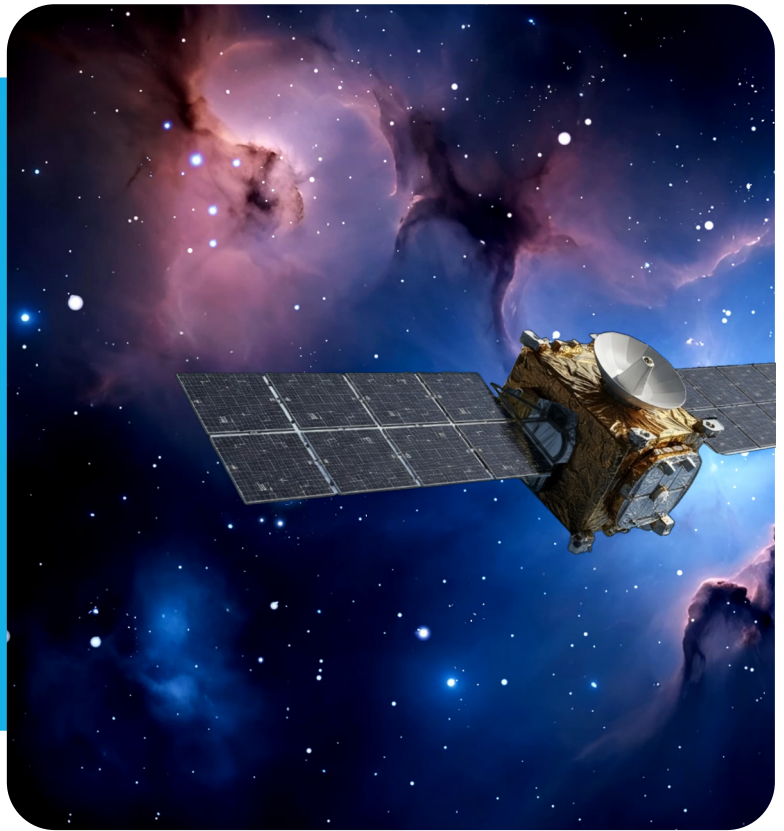




ORBIX: THE NEW SPACE RANGE

SPECIALLY DEVELOPED FOR
LEO CONSTELLATIONS, SMALL
SATELLITES & LAUNCHERS



Over the past years, the space market has undergone significant transformation. Launch activity has surged, driven by the rapid expansion of low-Earth orbit constellation programs. In response to this fast-paced and evolving space landscape, Radiall has developed a competitive alternative to our traditional space-grade products, dedicated to satellite and launcher manufacturers.

“Combining space-proven reliability with cost-effective design — without compromise.”



Scan for the Orbix landing page

ORBIX RANGE

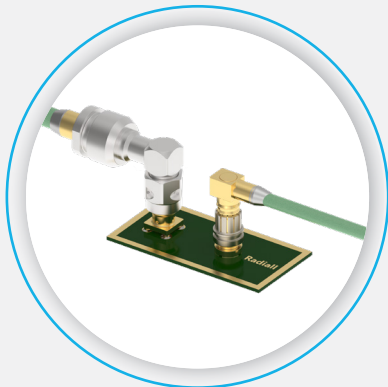
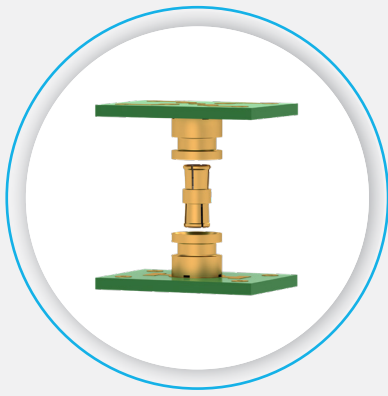
The perfect solution when space-proven and cost-effective solutions are required at the same time

FEATURES & BENEFITS

- Up to 65 GHz
- Cost-effective solutions
- Competitive lead times
- Customization on demand with our space-dedicated engineering team
- Large-scale production
- Multiple options for production sites

APPLICATIONS

- LEO constellations
- Small satellites
- MEO satellites
- Launchers
- Ground segment applications



Below are the key technical characteristics of the Orbix New Space range of connectors and cable assemblies, and how they differ from our traditional space range.

RF CONNECTORS

	SPACE GRADE	ORBIX NEW SPACE
Qualification	ESA-ESCC Qualification	
Design	Space Design	
Assembly Workshop	ISO 9 Room	Standard Workshop
Assembly Process	Same Assembly Process	
Assembly Controls	100% Testing with Cleaning after each Mounting Operation	Controls via Sampling, after each Mounting Operation
Final Screening Test	Yes	N/A
Packaging	Individually Packaged (Anti-Static Bags)	
Marking	On Connector or on Packaging	

RF CABLE ASSEMBLIES

	SPACE GRADE	ORBIX NEW SPACE
Qualification	ESA-ESCC for TNC-VHP ESA-ESCC as a Guideline for others ^[1]	ESA-ESCC as a Guideline ^[1]
Design	Space Design	Space & Enhanced MIL Design
Assembly Workshop	ISO 8 Room	Standard Workshop
Assembly Process	Same Assembly Process (Soldering)	
Assembly Controls	100% Testing (X-Ray, Mating Records, etc...)	Lightened Test Procedure ^[1]
Final Screening Test	Yes	Yes

The Orbix new space offer includes solutions that cover typical needs for new space applications:

- Quick, easy and secure integration into final systems
- Ultra compact size for highly constrained and densely packed architectures
- Lightweight solutions for the new generation of satellites where every gram counts

PRODUCT	TYPE	MAX FREQUENCY ^[2]								CONNECTORS					
		8 GHz	12 GHz	18 GHz	20 GHz	26 GHz	32 GHz	40 GHz	65 GHz	SMA	SMA 2.9	SMP	SMPM	SMP ^[2]	SMPM ^[2]
		C	X	Ku	Ku	K	Ka	Ka	V						
Cable Assemblies	0.047														
	SHF 2.4M														
	SHF 3M														
	SHF 4.6M														
	SHF 5M														
Connectors	Board-to-Board	SMP													
		SMPM													
	Connectors for Equipment	SMA													
		SMA 2.9													
		SMP ^[3]													
		SMPM ^[3]													
	Adapters	SMP to SMA													

Notes

1. Contact us for details

2. Coaxial transmission line frequency

3. SMP & SMPM connectors are also available with Radiall robust locking mechanism option: SMP-LOCK® & SMPM-LOCK®