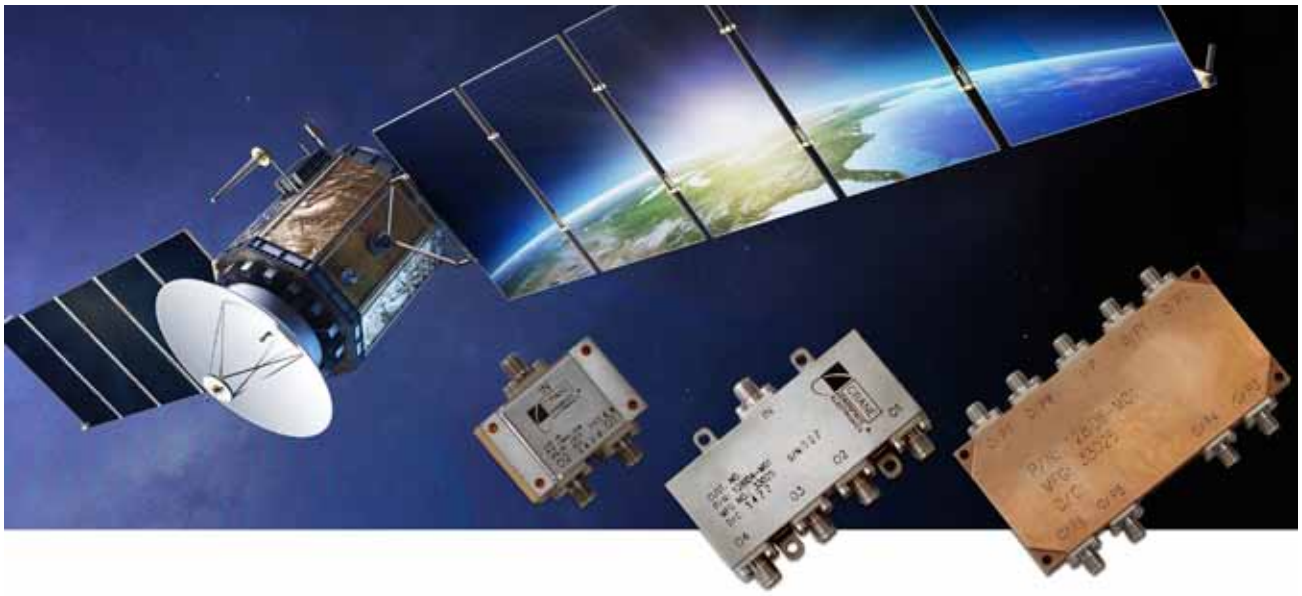
Ku-Band Iso-Dividers™

Your source for power dividers/combiners with ferrite isolators



- High performance combination of power dividers (or combiners) with ferrite isolators
- High port isolation while maintaining low insertion loss
- Integration of two functions into a single package with enhanced reliability and fewer external components

Crane Aerospace & Electronics designs and manufactures high performance millimeter-wave, microwave, RF and IF components, subsystems and systems for military, satellite and commercial end-use customers. Since 1954, Crane has continued to provide high performance power dividers and combiners for satellite applications.

By understanding the needs of the performance driven customer and utilizing Crane's technology available across its organization, Crane engineers designed and offered the Iso-Divider (also Iso-Combiners) integrated solution combining both parts into a single package; representing a marriage of passive and ferrite-based isolators.

Features

- Light weight and small size
- Broadband
- Low insertion loss
- Extremely high isolation
- Space qualified
- Also available as an Iso Combiner

Typical Applications

- Ideal for passive satellite redundancy in both receive and transmit applications

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The Iso-Divider is a higher isolation power divider that removes the need for additional components and connectors, which improves the reliability and allows for enhanced electrical performance. With all parts combined into a single package, the device can be made considerably smaller than as individual components and cables acquired separately. A typical 60% volume reduction is afforded with the Crane solution, along with reduced weight because extra cables or connectors are not required.

As satellites become smaller and more complex, internal space in "Space" is at a premium. Satellite and payload manufacturers need to be able to fit more functionality into a smaller volume. By combining the functionality of four or more components into one, the Iso-Divider helps meet the demands for reduced size footprint with increased functionality.

Available Models

Performance	2-way	4-way	8-way
Frequency	10.7 - 14.8 GHz	10.7 - 14.8 GHz	10.7 - 14.8 GHz
Return Loss (input & output)	20 dB min	20 dB min	20 dB min
Isolation between Outputs	36 dB min	38 dB min	38 dB min
Insertion Loss (above 3.0 dB theoretical)	1.8 dB max	1.2 dB max	2.2 dB max
Phase Balance	+5° max	+8° max	+/-12° max
Power Handling	2 W max	2 W max	2 W max
Magnetic Emission	0.5 Am^2 max	0.5 Am^2 max	0.5 Am^2 max
EMI Shielding	-80 dBi min	-80 dBi min	-80 dBi min
RF Connection Interface	SMA Female	SMA Female	SMA Female
Operating Temperature Range	-55 to +85° C	-55 to +85° C	-55 to +85° C
Weight	42 grams max	85 grams max	270 grams max
Package Size (not including connectors)	1.56" x 1.01" x 0.56"	2.64" x 1.52" x 0.56"	4.00" x 1.94" x 0.54"

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