

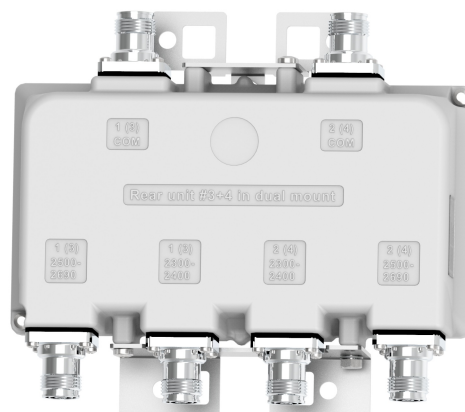
MI-513

DIPLEXER 2300/2600

The Kaelus MI-513 is a bi-directional Diplexer, designed to combine or split 2300 and 2600 MHz bands. The MI-513 provides low insertion loss and high return loss with excellent passive inter-modulation performance in an extremely small and lightweight IP67 capable package

FEATURES

- Enables antenna & coax sharing for 2300 and 2600 MHz bands systems
- Compact & lightweight - perfect for Small Cell applications
- Low insertion loss & high return loss
- Low passive IM performance
- Single twin and dual twin models available
- 7/16 (F) or 4.3-10 (F) connectors
- Hard Wired and DC Autosense versions available
- Provisions for wall or mast mounting



TECHNICAL SPECIFICATIONS

PORT NAME	LOW BAND	HIGH BAND
Passband	2300 - 2400MHz	2496 - 2690MHz
Insertion loss	0.15dB typical, 0.3dB maximum	0.15dB typical, 0.25dB maximum
Return loss	18dB minimum	
Maximum input power	250W (average)	250W (average)
Intermodulation products	N.A	-160dBc with 2 x 20W carriers
Rejection	50dB minimum in 2496 - 2690MHz band	50dB minimum in 2300 - 2400MHz band

ELECTRICAL

Impedance	50Ohms
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DC / AISG

For hardwired versions, DC/AISG can be fully connected (DC all) or a specific connection can be ordered (DC custom). For DC autosense versions, the DC/AISG path is automatically selected. In bottom of the tower applications (combiner mode), each RF channel port is sequentially checked for the presence of DC voltage. If more than one port has voltage, the port that has the highest (programmed) priority is passed to the common port. If a short circuit is detected on the common port DC/AISG is disabled. In top-of-tower applications (splitter mode), DC/AISG is passed to all ports that do not present a short circuit. If a short circuit is detected, the shorted RF port will be disabled for DC/AISG while other RF ports remain connected.

Feature	DC-FIXED	AUTOSENSE
Insertion loss, single DC/AISG pass	1dB maximum	
Return loss, single DC/AISG pass	12dB minimum	
Input voltage range	8 – 30V DC, 0.3W	
DC current rating	3A	2A, drop max 2.4V

ENVIRONMENTAL

For further details of environmental compliance, please contact Kaelus.

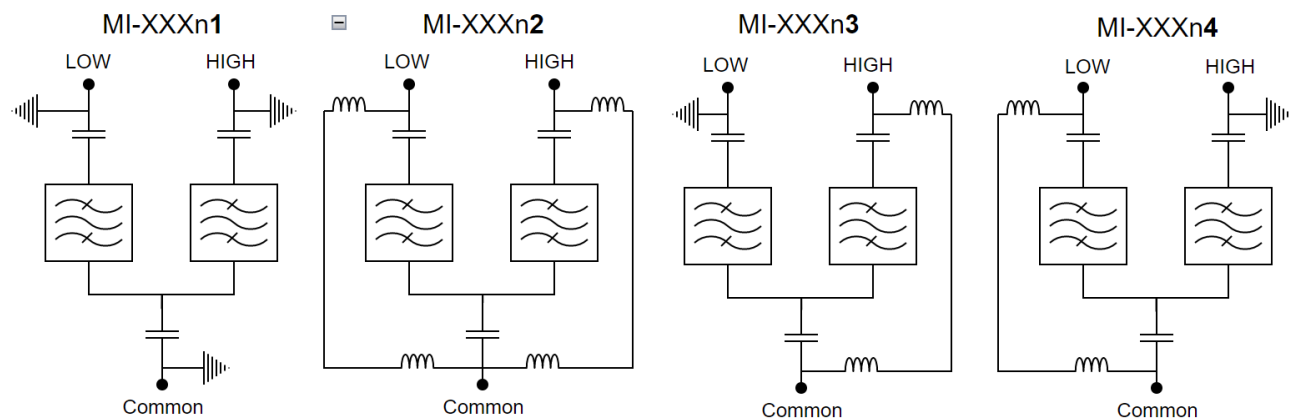
Temperature range	-40°C to +65°C -40°F to +149°F
Ingress protection	IP67
Lightning protection	10kA maximum (8/20us)
Compliance	ETSI 300 019-1-4 Class 4.1E (OPERATIONAL) ETSI 300 019-1-1 Class 1.2 (STORAGE)

MECHANICAL		
Feature	Single Mount	Dual Mount
Dimensions H x D x W	220 x 48.5 x 120 mm 8.66 x 1.91 x 4.72 in	220 x 91 x 120 mm 8.66 x 3.58 x 4.72 in
Weight	TBD	TBD
Finish	Painted, NCS 1502-R	
Mounting	Pole/wall bracket supplied with two metal clamps for 45-178 mm diameter poles	

ORDERING INFORMATION

PART NUMBER	CONFIGURATION	OPTIONAL FEATURES	CONNECTORS	DC/AISG CONFIGURATION
MI-5130n	Single Mount	BASE MODEL	7/16 (F)	Refer to DC /AISG table
MI-5131n	Dual Mount	BASE MODEL	7/16 (F)	Refer to DC /AISG table
MI-5133n	Single Mount	BASE MODEL	4.3-10 (F)	Refer to DC /AISG table
MI-5134n	Dual Mount	BASE MODEL	4.3-10 (F)	Refer to DC /AISG table
DC / AISG CONFIGURATION				
MI-513nA	Auto-Sense			
MI-513n1	NO DC Path			
MI-513n2	DC to Low band and High band			
MI-513n3	DC to High band			
MI-513n4	DC to Low band			

ELECTRICAL BLOCK DIAGRAM



Note: single mount shown

MECHANICAL BLOCK DIAGRAM

