

MI-537

TRIPLEXER 600-900/1695-2200/2300-2600

The Kaelus MI-537 is a bi-directional triplexer, designed to combine or split 600-900/1695-2200/2300-2600 MHz. The MI-537 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 600-900/1695-2200/2300-2600 MHz bands systems.
- Compact & lightweight - perfect for Small Cell applications
- Low insertion loss & high return loss
- High passive IM performance
- Single and dual 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

BAND NAME	600 - 900	1695 - 2200	2300 - 2600
Passband	555 - 960 MHz	1695 - 2200 MHz	2300 - 2700 MHz
Insertion loss	< 0.2 dB typical	< 0.2 dB typical	< 0.2 dB typical
Return loss	> 20 dB maximum	> 20 dB maximum	> 20 dB maximum
Maximum input power	250 W / 2000 W		
Intermodulation products	-160 dBc at 2 x 43dBm TX Carrier		
Rejection	50 dB minimum in 1695 - 2200 and 2300 - 2700 MHz	50 dB minimum in 555 - 960 and 2300 - 2700	50 dB minimum in 555 - 2200 MHz

ELECTRICAL

Impedance	50 Ω
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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.

Insertion loss	1 dB max
Return loss	12 dB min
Input voltage range	8 - 30 V DC max 0.3 W
DC current rating	3 A continuous, Drop max 2.4 V
Compliance	3GPP TS 37.461

ENVIRONMENTAL

For further details of environmental compliance, please contact Kaelus.

Temperature range	-40 $^{\circ}$ C to +65 $^{\circ}$ C -40 $^{\circ}$ F to +149 $^{\circ}$ F
Ingress protection	IP67
Lightning protection	5 kA maximum (8/20 us)
MTBF	> 1,000,000 Hours
Compliance	ETSI EN 300 019-1-4 class 4.1E, RoHS

MECHANICAL		
Feature	Single Mount	Dual Mount
Dimensions H x D x W	190 x160 x 50 mm 7.48 x 6.3 x 1.96 in	190 x 160 x106 mm 7.48 x 6.3 x 4,17 in
Volume	1.5 l	3.2 l
Weight	2.6 kg 5.73 lb	4.7 kg 10.36 lb
Finish	Painted, NCS 1502-R (Light Grey)	
Mounting	Hose clamps or wall mount (Supporter pole Diameter: 40 - 140 mm)	
Feature	Single Mount With Auto-sense	Dual Mount With Auto-sense
Dimensions H x D x W	190 x160 x 61 mm 7.48 x 6.3 x 2.4 in	190 x 160 x128 mm 7.48 x 6.3 x 5.0 in
Volume	1.9 l	3.9 l
Weight	TBD	TBD
Finish	Painted, NCS 1502-R (Light Grey)	
Mounting	Hose clamps or wall mount (Supporter pole Diameter: 40 - 140 mm)	

ORDERING INFORMATION

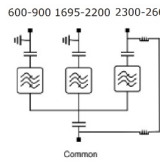
PART NUMBER	CONFIGURATION	OPTIONAL FEATURES	CONNECTORS	DC/AISG CONFIGURATION
MI-5370n	Single Mount	BASE MODEL	7/16 (F)	Refer to DC /AISG table
MI-5371n	Dual Mount	BASE MODEL	7/16 (F)	Refer to DC /AISG table
MI-5373n	Single Mount	BASE MODEL	4.3-10 (F)	Refer to DC /AISG table
MI-5374n	Dual Mount	BASE MODEL	4.3-10 (F)	Refer to DC /AISG table
DC / AISG CONFIGURATION				
MI-537nA	Auto-sense			
MI-537n1	DC TO 2300 - 2600			
MI-537n2	DC TO 1695 - 2100			
MI-537n3	DC TO 600 - 900			
MI-537n4	DC TO 1695 - 2100 and 2300 - 2600			
MI-537n5	DC TO ALL			
MI-537n6	DC TO 600 - 900 and 2300 - 2600			
MI-537n7	DC BLOCK			
Auto-sense Priority				
MI-537nA.1	FPO TO 600 - 900 1695 - 2100 and 2300 - 2600			
MI-537nA.2	XOR TO 600 - 900 1695 - 2100 and 2300 - 2600			
MI-537nA.3	2300 - 2600 Priority 1, 1695 - 2100 Priority 2 and 600 - 900 Priority 3			
MI-537nA.4	600 - 900 Priority 1, 1695 - 2100 Priority 2 and 2300 - 2600 Priority 3			
MI-537nA.5	1695 - 2100 Priority 1 2300 - 2600 Priority 2 and 600 - 900 Priority 3			
MI-537nA.6	1695 - 2100 Priority 1, 600 - 900 Priority 2 and 2300 - 2600 Priority 3			
MI-537nA.7	600 - 900 Priority 1, 2300 - 2600 Priority 2 and 1695 - 2100 Priority 3			
MI-537nA.8	2300 - 2600 Priority 1, 600 - 900 Priority 2 and 1695 - 2100 Priority 3			

ELECTRICAL BLOCK DIAGRAM

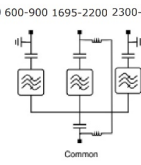
MI-537nA

DC/ AISG
Auto-Sense

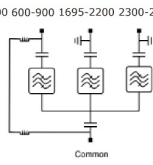
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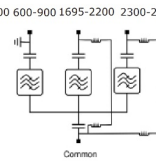
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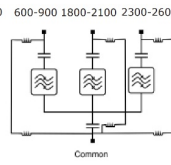
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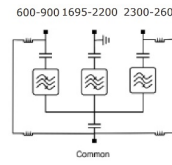
MI-537n4



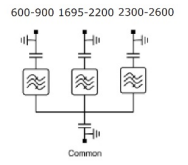
MI-537n5



MI-537n6



MI-537n7



MECHANICAL BLOCK DIAGRAM

