

MI-572

TRIPLEXER 617 - 960/1695 - 1780, 2110 - 2200/1850 - 1990 MHz

The Kaelus MI-572 is a bi-directional triplexer, designed to combine or split 600 - 900 MHz/AWS/PCS. The MI-572 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 MHz, AWS, PCS 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
- 4.3-10 (F) connectors
- Hard Wired and DC Autosense versions available
- Provisions for wall or mast mounting



TECHNICAL SPECIFICATIONS

BAND NAME	600 - 900	AWS	PCS
Passband	617 - 960 MHz	1695 - 1780 and 2110 - 2200 MHz	1850 - 1990 MHz
Bandwidth			
Insertion loss	< 0.2 dB typical	< 0.2 dB typical	< 0.2 dB typical
Return loss	>20 dB	>20 dB	>20 dB
Maximum input power	250W		
Intermodulation products	-160 dBc at 2 x 43 dBm TX Carrier		
Rejection	50 dB minimum in 1695 - 2200 MHz	50 dB minimum in 617 - 960 and 1850 - 1990 MHz	50 dB minimum in 617 - 960 and 1695 - 1780, 2110 - 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 °C to +65 °C -40 °F to +149 °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	192 mm x 148 x 51 mm 7.56 x 5.82 x 2.02 in	192 mm x 148 x 95 mm 7.56 x 5.82 x 3.74 in
Volume	1.5 l	2.7 l
Weight	3 kg 6.61 lb	5.4 kg 11.9 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	192 mm x 148 x 63 mm 7.56 x 5.82 x 2.48 in	192 mm x 148 x 124 mm 7.56 x 5.82 x 4.88 in
Volume	1.8 l	3.5 l
Weight	3.6 kg 7.94 lb	7 kg 15.43 lb
Finish	Painted, NCS 1502-R (Light Grey)	
Mounting	Hose clamps or wall mount (Supporter pole Diameter: 40 - 140 mm)	

ORDERING INFORMATION

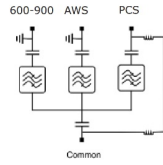
PART NUMBER	CONFIGURATION	OPTIONAL FEATURES	CONNECTORS	DC/AISG CONFIGURATION
MI-5723n	Single Mount	BASE MODEL	4.3-10 (F)	Refer to DC /AISG table
MI-5724n	Dual Mount	BASE MODEL	4.3-10 (F)	Refer to DC /AISG table
DC / AISG CONFIGURATION				
MI-572nA	Auto-sense			
MI-572n1	DC TO PCS			
MI-572n2	DC TO AWS			
MI-572n3	DC TO 600 - 900			
MI-572n4	DC TO AWS, PCS			
MI-572n5	DC TO ALL			
MI-572n6	DC TO 600 - 900 and PCS			
MI-572n7	DC Block			
Auto-sense Priority				
MI-572nA.1	FPO to 617 - 960 and 1695 - 1780, 2110 - 2200 and 1850-1990 MHz			
MI-572nA.2	XOR to 617 - 960 and 1695 - 1780, 2110 - 2200 and 1850-1995 MHz			
MI-572nA.3	1850 - 1995 Priority 1, 1695 - 1780, 2110 - 2200 and 617 - 960 Priority 2			
MI-572nA.4	617 - 960 Priority 1, 1695 - 1780, 2110 - 2200 and 1850 - 1995 Priority 2			

ELECTRICAL BLOCK DIAGRAM

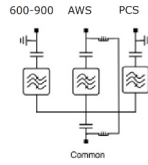
MI-572nA

**DC/ AISG
Auto-Sense**

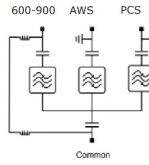
MI-572n1



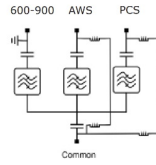
MI-572n2



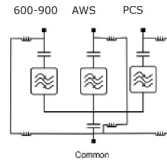
MI-572n3



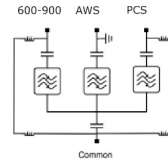
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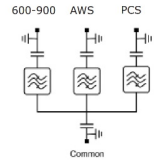
MI-572n5



MI-572n6



MI-572n7



MECHANICAL BLOCK DIAGRAM

