

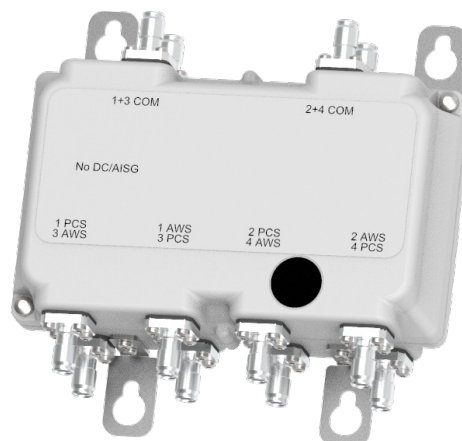
MI-727

DIPLEXER AWS+PCS

The Kaelus MI-727 is a bi-directional Diplexer, designed to combine or split AWS and PCS bands. The MI-727 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 AWS and PCS bands systems.
- Compact & lightweight - perfect for Small Cell applications
- Low insertion loss & high return loss
- High passive IM performance
- Single and dual models available
- NEX10 connectors
- Hard Wired and DC Autosense versions available
- Provisions for wall or mast mounting



TECHNICAL SPECIFICATIONS

PORT NAME	AWS	PCS
Passband	1695 - 1780, 2120 - 2200 MHz	1850 - 1995 MHz
Insertion loss	0.3 dB typical, 0.4 dB maximum over temp	0.3 dB typical, 0.4 dB maximum over temp
Return loss	22 dB typical, 20 dB over temp	22 dB typical, 20 dB over temp
Maximum input power	50 W (average)	
Intermodulation products	-157 dBc with 2 x 40 dBm TX Carrier	-157 dBc with 2 x 40 dBm TX Carrier
Rejection	50 dB minimum in 1850 - 1995 MHz	50 dB minimum in 1695 - 1780, 2120 - 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.

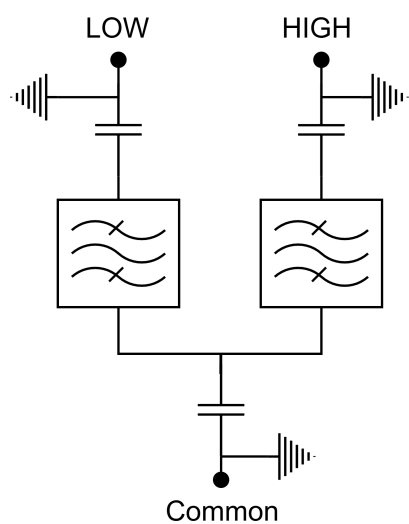
Temperature range	-40 °C to +85 °C -40 °F to +185°F
Ingress protection	IP67
Lightning protection	5 kA maximum (8/20 us)
MTBF	> 1,000,000 Hours
Compliance	ETSI EN 300 019-1-4 class 4.1E, RoHS

MECHANICAL		
Feature	Single Mount	Dual Mount
Dimensions H x D x W	182 x 107 x 35 mm 7.17 x 4.21 x 1.38 in	182 x 107 x 64mm 7.17 x 4.21 x 2.51 in
Volume	0.7 l	1.3 l
Weight	1.7 kg 3.75 lb	2.6 kg 5.73 lb
Finish	Painted, NCS 1502-R	
Mounting	Hose clamps or wall mount	

ORDERING INFORMATION

PART NUMBER	CONFIGURATION	OPTIONAL FEATURES	CONNECTORS	DC/AISG CONFIGURATION
MI-72711	Single Mount	BASE MODEL	NEX10	DC BLOCK
MI-72731	Single Mount	BASE MODEL	NEX10	DC BLOCK
DC / AISG CONFIGURATION				
Auto-sense Priority				

ELECTRICAL BLOCK DIAGRAM



MECHANICAL BLOCK DIAGRAM

