

MI-201

DIPLEXER 1800/2100

The Kaelus MI-201 is a bi-directional Diplexer, designed to combine or split 1800 and 2100 MHz bands. The MI-201 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 1800 and 2100 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	1800	2100
Passband	1710 - 1880 MHz	1920 - 2170 MHz
Insertion loss	1710-1785MHz 0.15dB typical, 0.2dB maximum 1805-1880MHz 0.15dB typical, 0.3 maximum	1920-1980MHz 0.2dB typical, 0.4dB maximum 2110-2170MHz 0.15dB typical, 0.2 maximum
Return loss	20dB typical, 18dB minimum	
Maximum input power	250W (average)	250W (average)
Intermodulation products	-160dBc with 2 x 20W carriers	
Rejection	60dB minimum in 2100 band	58dB minimum in 1800 band
ELECTRICAL		
Impedance	50Ohms	
DC / AISG		
For hardwired versions, DC/AISG can be fully connected (DC all) or a specific connection can be orderd (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)	
MTBF	> 1,000,000 Hours	
Compliance	ETSI 300 019-1-4 Class 4.1E (OPERATIONAL) ETSI 300 019-1-1 Class 1.2 (STORAGE) IEC 60068-2-11 (SALT MIST Ka - 30 days)	

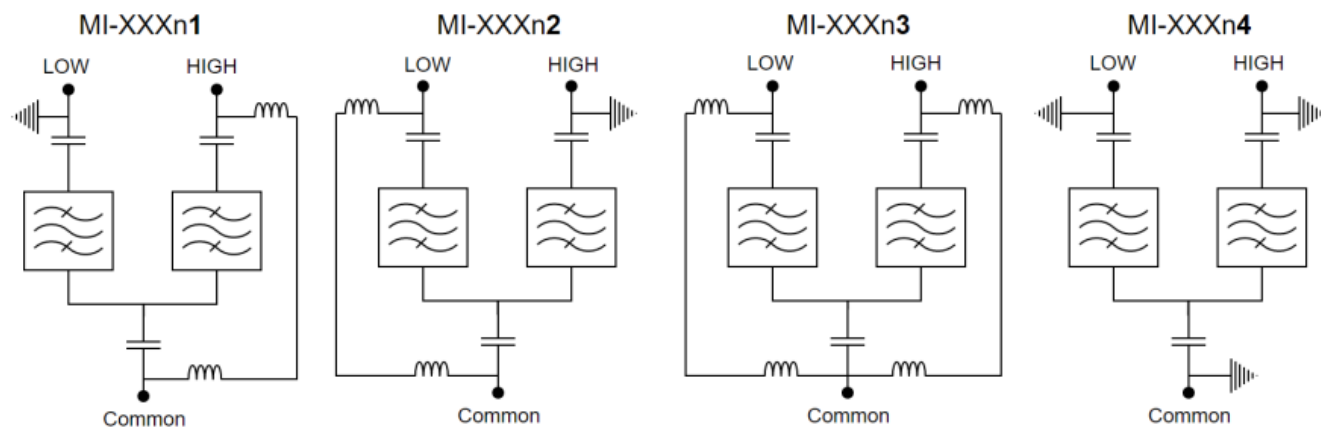
MECHANICAL		
Feature	Single Mount	Dual Mount
Dimensions H x D x W	150 x 48.5 x 142mm 5.91 x 1.91 x 5.59in With Auto-Sense 150 x 60 x 142mm 5.91 x 2.36 x 5.59in	150 x 103 x 142mm 5.93 x 4.06 x 5.59in With Auto-Sense 150 x 125 x 142mm 5.93 x 4.92 x 5.59in
Weight	2.4kg 5.30lb gross / 1.9kg 4.19lb net	4.2kg 9.30lb gross / 3.6kg 7.94lb net
Finish	Painted, NCS 1502-R	
Mounting	Pole/wall bracket supplied with two metal clamps for 45-178 mm diameter poles	

SHIPPING INFORMATION		
Feature	Single Mount	Dual Mount
Carton size	315 x 240 x 150 mm 12.40 x 9.45 x 5.91 in	320 x 240 x 220 mm 12.60 x 9.45 x 8.66 in
Carton Qty / Pallet	150	72

ORDERING INFORMATION

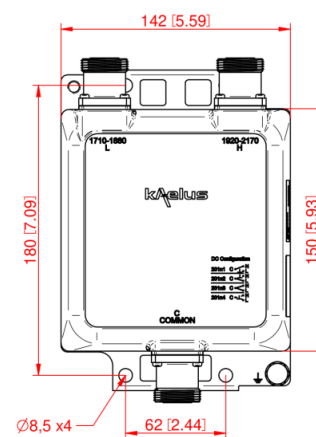
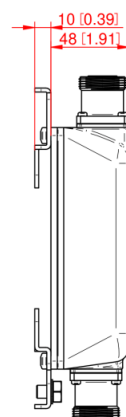
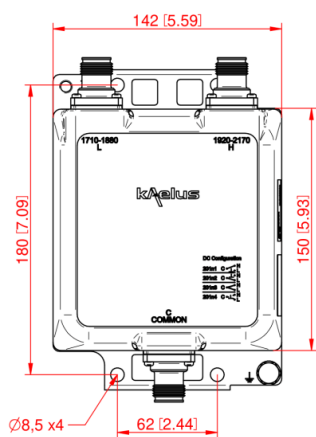
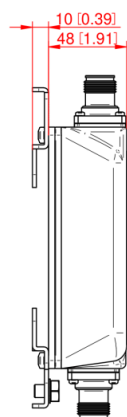
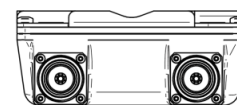
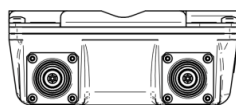
PART NUMBER	CONFIGURATION	OPTIONAL FEATURES	CONNECTORS	DC/AISG CONFIGURATION
MI-2013n	Single Mount	BASE MODEL	4.3-10 (F)	Refer to DC /AISG table
MI-2014n	Dual Mount	BASE MODEL	4.3-10 (F)	Refer to DC /AISG table
MI-2010n	Single Mount	BASE MODEL	7/16 (F)	Refer to DC /AISG table
MI-2011n	Dual Mount	BASE MODEL	7/16 (F)	Refer to DC /AISG table
DC / AISG CONFIGURATION				
MI-201nA	Auto-Sense			
MI-201n1	DC to 2100 Path only			
MI-201n2	DC to 1800 Path only			
MI-201n3	DC to 1800 and 2100			
MI-201n4	NO DC Path			

ELECTRICAL BLOCK DIAGRAM

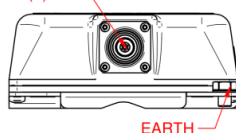


Note: single mount shown

MECHANICAL BLOCK DIAGRAM

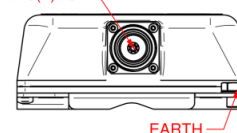


CON 4.3-10(F) x3

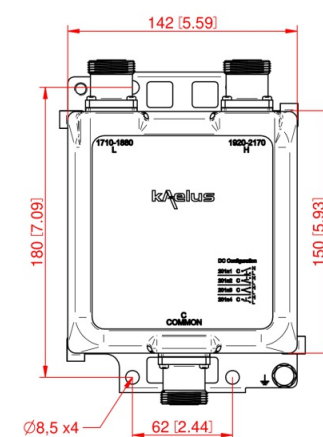
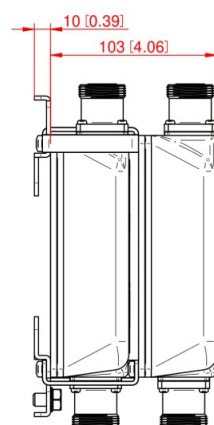
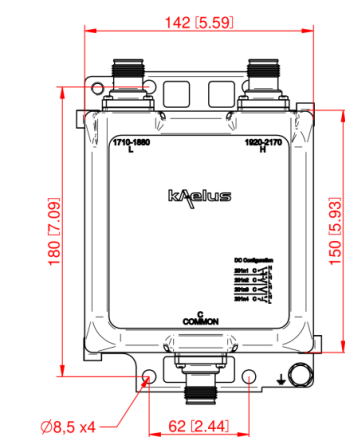
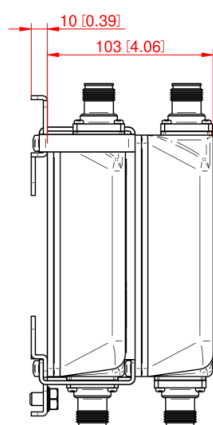
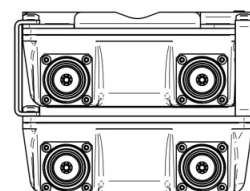
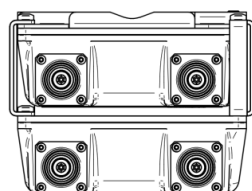


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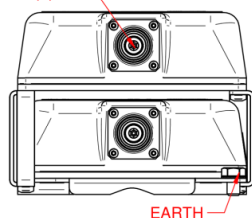
CON 7/16(F) x3



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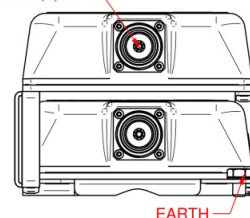


CON 4.3-10(F) x6



EARTH

CON 7/16(F) x6



EARTH



