

KA-3006

TRIPLEXER LB+PCS+AWS/WCS+BRS/C-BAND

The Kaelus KA-3006 is a bi-directional Triplexer, designed to combine or split Lowband, AWS, PCS and 2.6 GHz and 3.5GHz bands. The KA-3006 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 Lowband, AWS, PCS, 2.6 GHz and C-band systems
- Compact & lightweight - perfect for Small Cell applications
- Low insertion loss & high return loss
- Low passive IM performance
- Single, dual and quad models available
- Provisions for wall or mast mounting



TECHNICAL SPECIFICATIONS

BAND NAME	617-960/1695-2200MHZ	2300-2690MHZ	3300-4200MHZ
Passband	617-960/1695-2200 MHz	2300-2690 MHz	3300-4200 MHz
Insertion loss	<0.25dB typical, 0.3dB max	<0.35dB typical, 0.4dB max	<0.25dB typical, 0.3dB max
Return loss	20dB typical, 18dB minimum		
Maximum input power	100W (average) / 1000W (PEP)	100W (average) / 1000W (PEP)	100W (average) / 1000W (PEP)
Intermodulation products	<-160 dBc typ at 2 x +43dBm TX Carrier (IM3)	<-160 dBc typ at 2 x +43dBm TX Carrier (IM3)	<-145 dBc typ at 2 x +43dBm TX Carrier (IM3)
Rejection	40dB minimum 2300-2690 MHz 3300-4200 MHz	40dB minimum 617-960/1695-2200 MHz 3300-4200 MHz	40dB minimum 617-960/1695-2200 MHz 2300-2690 MHz

ELECTRICAL

Impedance	50Ohms
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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	+/-5kA 8/20 μ s
MTBF	> 1,000,000 Hours
Compliance	ETSI 300 019-1-4 Class 4.1 ETSI 300 019-2-3 Class 3.2

DC / AISG

DC/AISG path is factory configurable, see ordering information

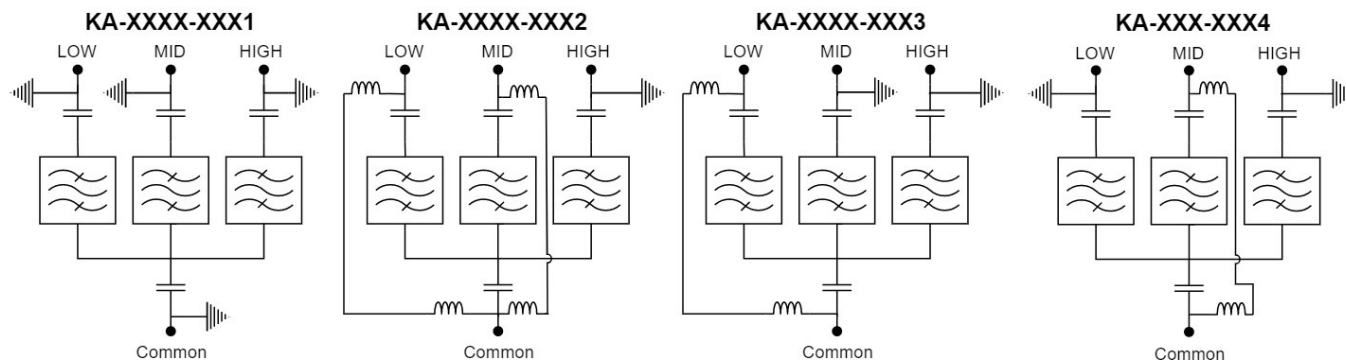
Passband	0 – 3MHz
Insertion loss	1dB maximum
Return loss	12dB minimum
Input voltage range	$\pm$ 30V
DC current rating	3A continuous
Compliance	3GPP TS 37.461

MECHANICAL	
Dimensions H x D x W (single unit)	170 x 177 x 53mm 6.7 x 7.3 x 2.1in
Dimensions H x D x W (twin unit)	170 x 177 x 98mm 6.7 x 7.3 x 3.9in
Dimensions H x D x W (quad unit)	170 x 177 x 200mm 6.7 x 7.3 x 7.9in
Weight	5.0kg 11.0lbs (Twin) 10.0kg 22.0lbs (Quad)
Finish	Painted, NCS 1502-R
Connectors	4.3-10 Female
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
KA-3006-1031	3 in / 1 out	FIXED DC FACTORY CONFIGURABLE	4.3-10 (F)	NO DC
KA-3006-1033	3 in / 1 out	FIXED DC FACTORY CONFIGURABLE	4.3-10 (F)	DC LOW TO COMMON
KA-3006-1034	3 in / 1 out	FIXED DC FACTORY CONFIGURABLE	4.3-10 (F)	DC MID TO COMMON
KA-3006-2031	6 in / 2 out	FIXED DC FACTORY CONFIGURABLE	4.3-10 (F)	NO DC
KA-3006-2033	6 in / 2 out	FIXED DC FACTORY CONFIGURABLE	4.3-10 (F)	DC LOW TO COMMON
KA-3006-2034	6 in / 2 out	FIXED DC FACTORY CONFIGURABLE	4.3-10 (F)	DC MID TO COMMON
KA-3006-4031	12 in / 4 out	FIXED DC FACTORY CONFIGURABLE	4.3-10 (F)	NO DC
KA-3006-4033	12 in / 4 out	FIXED DC FACTORY CONFIGURABLE	4.3-10 (F)	DC LOW TO COMMON
KA-3006-4034	12 in / 4 out	FIXED DC FACTORY CONFIGURABLE	4.3-10 (F)	DC MID TO COMMON

ELECTRICAL BLOCK DIAGRAM



KA-3006-**XXXZ** where
Z denotes the DC path variant
LOW port is 617-960/1695-2200 MHz
MID port is 2300-2690 MHz
HIGH port is 3300-4200 MHz

MECHANICAL BLOCK DIAGRAM

