

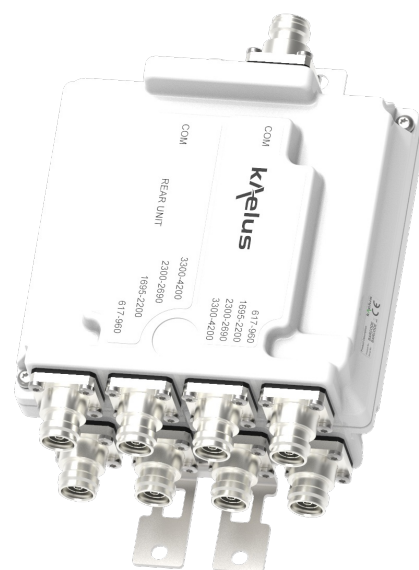
KA-4006

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

The Kaelus KA-4006 is a bi-directional Quadraplexer, designed to combine or split Lowband, AWS, PCS and 2.6 GHz and 3.5GHz bands. The KA-4006 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	617-960MHZ	1695-2200MHZ	2300-2690MHZ	3300-4200MHZ
Passband	617 - 960MHz	1695 - 2200MHz	2300 - 2690 MHz	3300 - 4200MHz
Insertion loss	<0.25dB typical, 0.3dB max	<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)	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)	<-160 dBc typ at 2 x +43dBm TX Carrier (IM3)	<-145 dBc typ at 2 x +43dBm TX Carrier (IM3)
Rejection	40dB minimum 1695-2200 MHz 2300-2690 MHz 3300-4200 MHz	40dB minimum 617-960 MHz 2300-2690 MHz 3300-4200 MHz	40dB minimum 617-960 MHz 1695-2200 MHz 3300-4200 MHz	40dB minimum 617-960 MHz 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

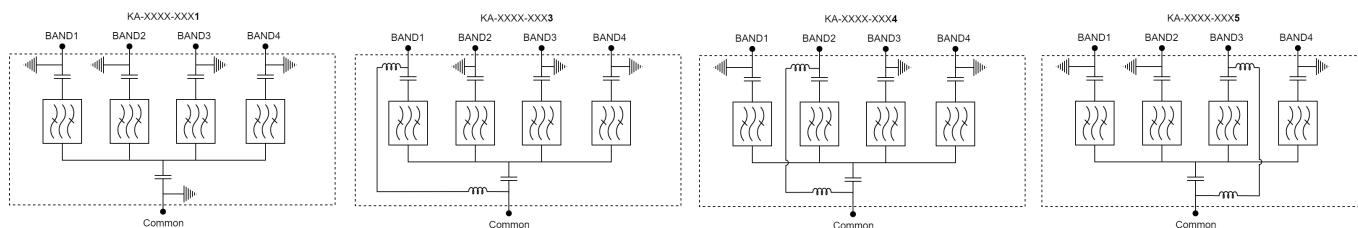
Passband	0 – 3MHz
Insertion loss	1dB maximum
Return loss	12dB minimum
Input voltage range	$\pm$ 30V
DC current rating	3A continuous
Compliance	3GPP TS 37.461

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
Weight	5.0kg 11.0lbs (Twin)
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-4006-1031	4 in / 1 out	FIXED DC FACTORY CONFIGURABLE	4.3-10 (F)	NO DC
KA-4006-1033	4 in / 1 out	FIXED DC FACTORY CONFIGURABLE	4.3-10 (F)	DC 617-960 TO COMMON
KA-4006-1034	4 in / 1 out	FIXED DC FACTORY CONFIGURABLE	4.3-10 (F)	DC 1427-2200 TO COMMON
KA-4006-1035	4 in / 1 out	FIXED DC FACTORY CONFIGURABLE	4.3-10 (F)	DC 2300-2690 TO COMMON
KA-4006-2031	8 in / 2 out	FIXED DC FACTORY CONFIGURABLE	4.3-10 (F)	NO DC
KA-4006-2033	8 in / 2 out	FIXED DC FACTORY CONFIGURABLE	4.3-10 (F)	DC 617-960 TO COMMON
KA-4006-2034	8 in / 2 out	FIXED DC FACTORY CONFIGURABLE	4.3-10 (F)	DC 1427-2200 TO COMMON
KA-4006-2035	8 in / 2 out	FIXED DC FACTORY CONFIGURABLE	4.3-10 (F)	DC 2300-2690 TO COMMON
KA-4006-4031	16 in / 4 out	FIXED DC FACTORY CONFIGURABLE	4.3-10 (F)	NO DC
KA-4006-4033	16 in / 4 out	FIXED DC FACTORY CONFIGURABLE	4.3-10 (F)	DC 617-960 TO COMMON
KA-4006-4034	16 in / 4 out	FIXED DC FACTORY CONFIGURABLE	4.3-10 (F)	DC 1427-2200 TO COMMON
KA-4006-4035	16 in / 4 out	FIXED DC FACTORY CONFIGURABLE	4.3-10 (F)	DC 2300-2690 TO COMMON

ELECTRICAL BLOCK DIAGRAM



KA-4006-XXXZ where

Z denotes the DC path variant

BAND 1 port is 617-960 MHz

BAND 2 port is 1695-2200 MHz

BAND 3 port is 2300-2690 MHz

BAND 4 port is 3300-4200 MHz

MECHANICAL BLOCK DIAGRAM

