

KA-3004

TRIPLEXER 700/800/900

The Kaelus KA-3004 is a bi-directional Triplexer, designed to combine or split 700, 800 and 900 bands. The KA-3004 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 700, 800, and 900 systems
- Compact & lightweight
- Low insertion loss & high return loss
- Low passive IM performance
- Single twin and dual twin models available
- Hard Wired and DC Autosense versions available



TECHNICAL SPECIFICATIONS

BAND NAME	700	800	900
Passband	703-788MHz	801-862MHz	890-960MHz
Insertion loss	0.2dB typical, 0.5dB max	0.25dB typical, 0.5dB max	0.2dB typical, 0.4dB max
Return loss	18dB minimum		
Maximum input power	250W (average) *	250W (average) *	250W (average) *
Intermodulation products	< -160dBc at 2 x 43dBm TX Carrier		
Rejection	50dB minimum in 800 RX and 900 RX band	50dB minimum in 700 RX and 900 RX band	50dB minimum in 700 RX and 800 RX band
(*) Limited to 500W (average) combined power at the common port.			

ELECTRICAL

Impedance	50Ohms
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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	± 8-30V
DC current rating	3A continuous
Compliance	3GPP TS 37.461

ENVIRONMENTAL

For further details of environmental compliance, please contact Kaelus.

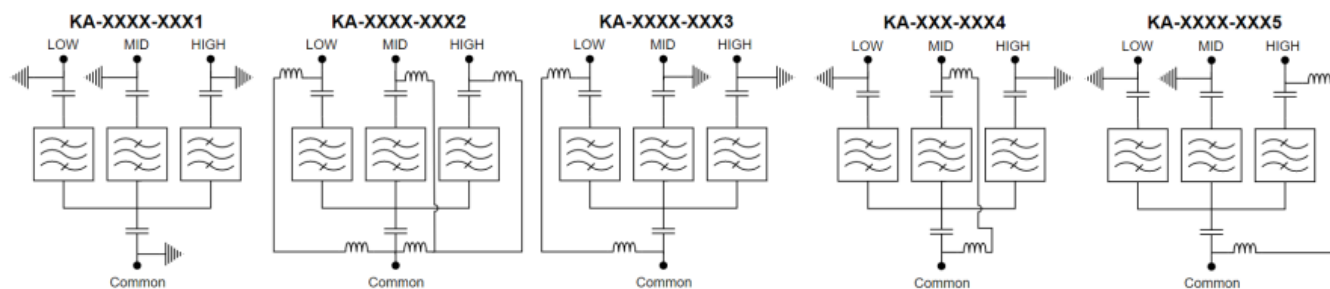
Temperature range	-40°C to +65°C -40°F to +149°F
Ingress protection	IP67
Lightning protection	5kA maximum (8/20us)
MTBF	> 1,000,000 Hours
Compliance	Operation: ETSI EN 300 019 class 4.1E Transport: ETS 300 019-1-2 class 2.3 RoHS

MECHANICAL		
Dimensions H x D x W (single unit)	180 x 75 x 225mm	
Dimensions H x D x W (twin unit)	180 x 141 x 225mm	
Weight (single unit)	4.9kg	
Weight (twin unit)	9.3kg	
Finish	Powder Coated, light grey, NCS 1502-R	
Connectors	4.3-10 (F) long neck	
Mounting	Pole/wall bracket supplied with two metal clamps for 40-140 mm diameter poles	
SHIPPING INFORMATION		
Feature	6 in / 2 out	3 in / 1 out
Carton size	330 x 290 x 215mm	330 x 290 x 148mm
Gross weight (including packaging)	9.9kg	5.4kg

ORDERING INFORMATION

PART NUMBER	CONFIGURATION	OPTIONAL FEATURES	CONNECTORS	DC/AISG CONFIGURATION
KA-3004-1031	3 in / 1 out	FIXED DC FACTORY CONFIGURABLE	4.3-10 (F)	DC BLOCK
KA-3004-1032	3 in / 1 out	FIXED DC FACTORY CONFIGURABLE	4.3-10 (F)	DC TO ALL
KA-3004-1033	3 in / 1 out	FIXED DC FACTORY CONFIGURABLE	4.3-10 (F)	DC TO LOW PORT
KA-3004-1034	3 in / 1 out	FIXED DC FACTORY CONFIGURABLE	4.3-10 (F)	DC TO MID PORT
KA-3004-1035	3 in / 1 out	FIXED DC FACTORY CONFIGURABLE	4.3-10 (F)	DC TO HIGH PORT
KA-3004-2031	6 in / 2 out	FIXED DC FACTORY CONFIGURABLE	4.3-10 (F)	DC BLOCK
KA-3004-2032	6 in / 2 out	FIXED DC FACTORY CONFIGURABLE	4.3-10 (F)	DC TO ALL
KA-3004-2033	6 in / 2 out	FIXED DC FACTORY CONFIGURABLE	4.3-10 (F)	DC TO LOW PORT
KA-3004-2034	6 in / 2 out	FIXED DC FACTORY CONFIGURABLE	4.3-10 (F)	DC TO MID PORT
KA-3004-2035	6 in / 2 out	FIXED DC FACTORY CONFIGURABLE	4.3-10 (F)	DC TO HIGH PORT
KA-3004-2131	6 in / 2 out	AUTOSENSE WITHOUT LED	4.3-10 (F)	AUTOSENSE FIRST POWER ON
KA-3004-2231	6 in / 2 out	AUTOSENSE WITH LED	4.3-10 (F)	AUTOSENSE FIRST POWER ON
KA-3004-1131	3 in / 1 out	AUTOSENSE WITHOUT LED	4.3-10 (F)	AUTOSENSE FIRST POWER ON
KA-3004-1231	3 in / 1 out	AUTOSENSE WITH LED	4.3-10 (F)	AUTOSENSE FIRST POWER ON
KA-3004-2233	6 in / 2 out	AUTOSENSE WITH LED	4.3-10 (F)	AUTOSENSE PRIORITY 900 - 800 - 700
KA-3004-2235	6 in / 2 out	AUTOSENSE WITH LED	4.3-10 (F)	AUTOSENSE PRIORITY 800 - 900 - 700
KA-3004-2236	6 in / 2 out	AUTOSENSE WITH LED	4.3-10 (F)	AUTOSENSE PRIORITY 800 - 700 - 900
Note: DC autosense versions available, contact Kaelus for information				

ELECTRICAL BLOCK DIAGRAM



KA-3004-XXXZ where Z denotes the DC path variant

- **LOW** port is 700 band
- **MID** port is 800 band
- **HIGH** port is 900 band

MECHANICAL BLOCK DIAGRAM

