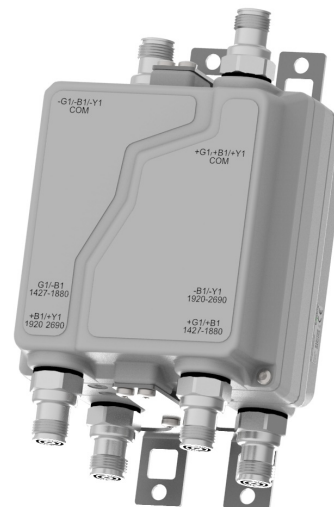


KA-2000

DIPLEXER 1427-1880/1920-2690

Kaelus world proven outdoor solutions provide strong RF performance coupled with rugged features. The KA-2000 dual band combiner combines the 1427-1880 MHz and 1920-2690 MHz frequency bands. The KA-2000 can be used at either the BTS or antenna end of the feeder. Single and twin units are available.



FEATURES

- Very low passive intermodulation
- Multiple DC/AISG bypass configurations available with built-in lightning protection
- Single and twin configurations available
- Suitable for outdoor and indoor applications
- Available as autosense
- Wall or mast mounting

TECHNICAL SPECIFICATIONS

BAND NAME	1427 - 1880	1920 - 2690
Passband	1427 - 1880MHz	1920 - 2690MHz
Insertion loss	0.2dB typical	0.2dB typical
Return loss	> 18dB	> 18dB
Maximum input power	250W (average)	250W (average)
Intermodulation products	-160dBc (2 x 20W carriers, In receive band)	
Rejection high band	40dB min	N/A
Rejection low band	N/A	40dB min

DC / AISG

Feature	DC-FIXED	AUTOSENSE
Compliance	3GPP, TS 37.461	
Passband	0 - 3MHz	
Insertion loss, single DC/AISG pass	1dB maximum	
Return loss, single DC/AISG pass	12dB minimum	
Insertion loss, two DC/AISG pass	4.5dB maximum	
Return loss, two DC/AISG pass	6dB typical	
Input voltage range	8 – 30V DC	
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	5kA maximum (8/20us)
MTBF	> 1,000,000 Hours
Compliance	ETS 300 019 1-4 (OPERATIONAL) ETS 300 019 1-1 (STORAGE)

MECHANICAL		
Feature	DC-FIXED	AUTOSENSE
Dimensions H x D x W (single unit)	160 x 144 x 50mm 6.3 x 5.7 x 2.0in	160 x 144 x 65mm 6.3 x 5.7 x 2.6in
Dimensions H x D x W (twin unit)	160 x 144 x 92mm 6.3 x 5.7 x 3.6in	160 x 144 x 121mm 6.3 x 5.7 x 4.8in
Weight (single unit)	1.8kg 4.0lbs	1.9kg 4.2lbs
Weight (twin unit)	3.3kg 7.3lbs	3.4kg 7.5lbs
Finish	Painted, NCS 1502-R	
Wind Load	Front 116N, Side 32N (Single) Front 87N, Side 96N (Twin) At 74m/s (AS/NZS 1170-2-2011 Structural design - Wind actions - Cyclone areas)	
Connectors	4.3-10 (F) x 3 long neck (single unit) 4.3-10 (F) x 6 long neck (twin unit)	
Mounting	Pole/wall bracket supplied with two metal clamps for 40-140 mm diameter poles	

ORDERING INFORMATION

PART NUMBER	CONFIGURATION	OPTIONAL FEATURES	CONNECTORS	DC/AISG CONFIGURATION
KA-2000-1031	2 in / 1 out	FIXED DC FACTORY CONFIGURABLE	4.3-10 (F)	NO DC
KA-2000-2031	4 in / 2 out	FIXED DC FACTORY CONFIGURABLE	4.3-10 (F)	NO DC
KA-2000-2032	4 in / 2 out	FIXED DC FACTORY CONFIGURABLE	4.3-10 (F)	DC TO ALL
KA-2000-2033	4 in / 2 out	FIXED DC FACTORY CONFIGURABLE	4.3-10 (F)	DC LOW TO COMMON
KA-2000-2034	4 in / 2 out	FIXED DC FACTORY CONFIGURABLE	4.3-10 (F)	DC HIGH TO COMMON
KA-2000-1131	2 in / 1 out	AUTOSENSE WITHOUT LED	4.3-10 (F)	AUTOSENSE FIRST POWER ON
KA-2000-1133	2 in / 1 out	AUTOSENSE WITHOUT LED	4.3-10 (F)	AUTOSENSE PRIORITY HIGH
KA-2000-1134	2 in / 1 out	AUTOSENSE WITHOUT LED	4.3-10 (F)	AUTOSENSE PRIORITY LOW
KA-2000-2131	4 in / 2 out	AUTOSENSE WITHOUT LED	4.3-10 (F)	AUTOSENSE FIRST POWER ON
KA-2000-2133	4 in / 2 out	AUTOSENSE WITHOUT LED	4.3-10 (F)	AUTOSENSE PRIORITY HIGH
KA-2000-2134	4 in / 2 out	AUTOSENSE WITHOUT LED	4.3-10 (F)	AUTOSENSE PRIORITY LOW
Other DC path options are available. DC autosensing available. Contact Kaelus for details				

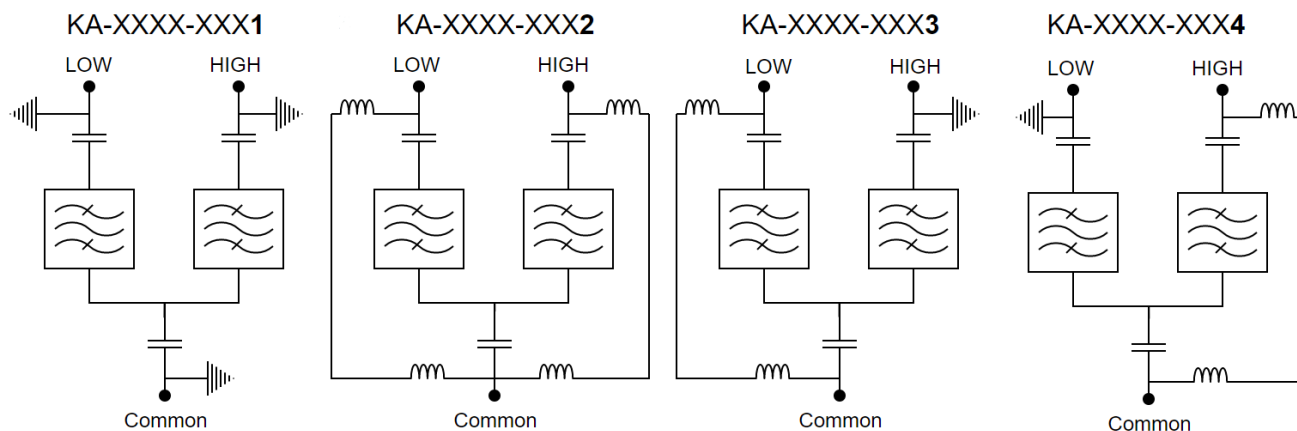
ELECTRICAL BLOCK DIAGRAM

KA-2000-WXYZ where

- **W** denotes the configuration: "1" single, "2" Twin
- **Z** denotes the DC path configuration as per electrical diagram

Note

- **LOW** port is 1427-1880 band
- **HIGH** port is 1920-2690 band



MECHANICAL BLOCK DIAGRAM

