

# DBC0037F2V2-1

## DIPLEXER 698-960/1900-AWS

The Kaelus DBC0037F2V2 Dual Band Combiner combines the lower 698MHz to 960MHz frequency Bands with the higher 1900-AWS frequency Bands. The diplexer is designed to minimize infrastructure capital expenditure and improve network reliability.



### FEATURES

- LTE ready
- HI port has DC priority
- Auto select DC/AISG pass with built-in lightning protection
- Single or Dual configurations available for Indoor or Outdoor use
- Six combiners in 19 inch or 23 inch rack
- AWS3/4 ready

### TECHNICAL SPECIFICATIONS

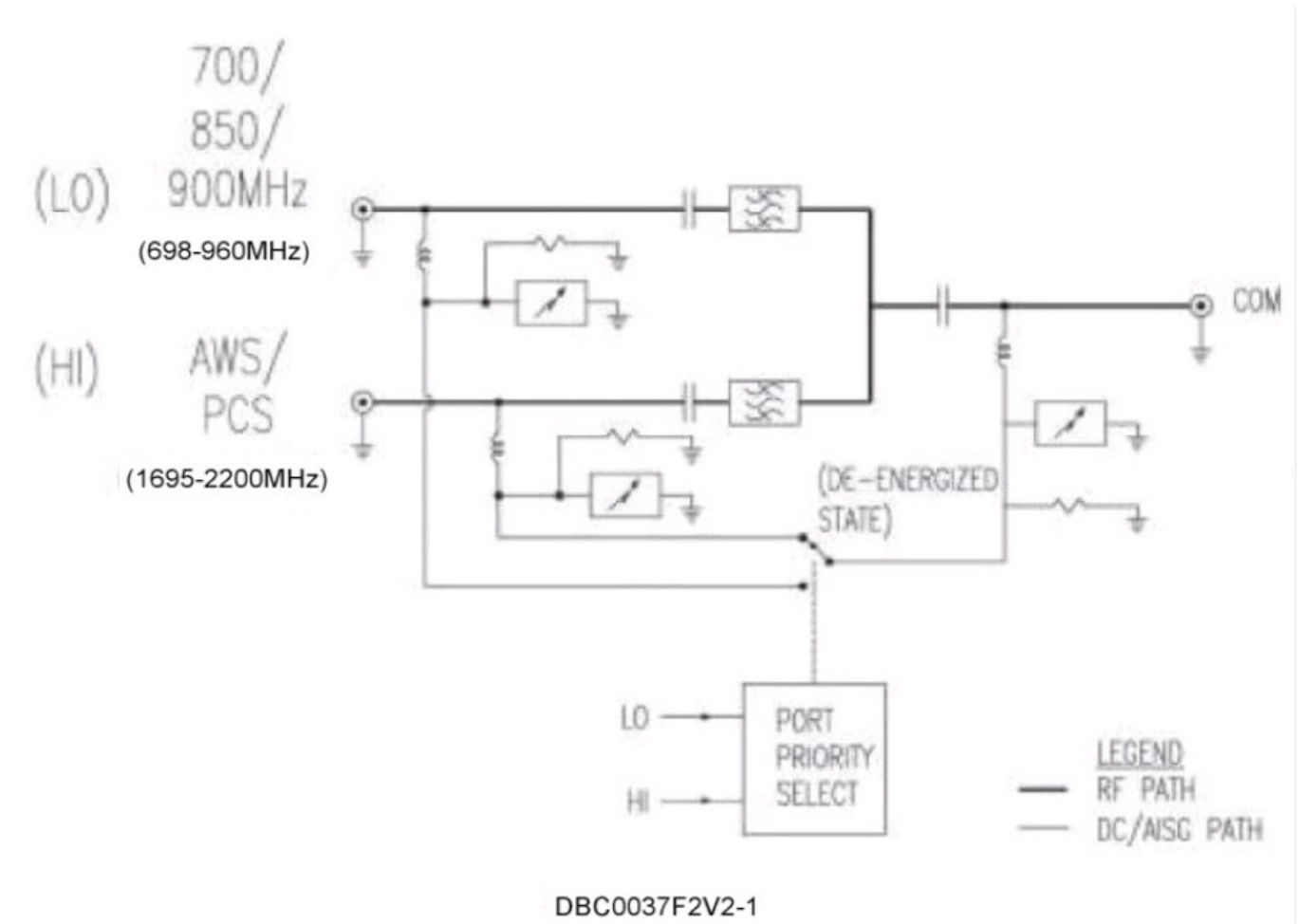
BAND NAME	698-960 (LO)	1900-AWS (HI)
Passband	698 - 960MHz	1695 - 2200MHz
Insertion loss	0.11dB typical, 0.15dB maximuml	0.11dB typical, 0.2dB maximum
Return loss	20dB minimum	
Group delay variation	0.1ns / 180KHz maximum over bandwidth	
Maximum input power	500W (average) / 5kW (PEP)	500W (average) / 5kW (PEP)
Phase linearity variation	0.1° / 180KHz maximum over bandwith	
<b>ELECTRICAL</b>		
Isolation to 700-900	N/A	60dB minimum
Isolation to 1900-AWS	60dB minimum	N/A
Impedance	50Ohms	
Intermodulation products	-161dBc typical / -155dBc maximum all ports with 2 x 20W carriers	
<b>DC / AISG</b>		
DC/AISG path to COM port dependent on port voltages		
Input voltage range	31V DC maximum	
DC current rating	2A continuous, 4A peak	
LO port wins	(LO>7V) and (HI<6V)	
HI port wins	(HI>7V) or (LO<2.5V)	
DC supply current: LO port	60mA, typical when LO port wins otherwise 2mA	
DC supply current: HI port	1mA typical	
DC breakdown	1000V	
Voltage drop in DC path	2.2V maximum @ 2.0A	
<b>ENVIRONMENTAL</b>		
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	RF: ±5kA maximum (8/20us)	
Compliance	ETSI EN 300 019 class 4.1	

MECHANICAL	
Dimensions H x D x W	483 x 207 x 108mm   19 x 8.14 x 7.09in (6 units in rack)
Dimensions H x D x W (single unit)	170 x 150 x 62mm   6.69 x 5.9 x 2.44in
Dimensions H x D x W (twin unit)	170 x 150 x 109mm   6.69 x 5.9 x 4.3in
Weight	2.9kg   6.4lbs (single unit) 6kg   13.2lbs (twin unit) 19kg   41.9lbs (6 units in rack)
Finish	Painted, light grey (RAL7035)
Connectors	DIN 7-16 (F) x 3 long neck (single unit) x 6 long neck (twin unit) x 18 long neck (6 units in rack)
Mounting	Pole/wall bracket supplied with two metal clamps for 45-178 mm diameter poles or 19 inch or 23 inch rack

## ORDERING INFORMATION

PART NUMBER	DESCRIPTION
DBC0037F2V2-1	Diplexer, 698-960/1900-AWS, DC AUTO 1900 priority
DBC0037F2V2-2	Diplexer, x2, 698-960/1900-AWS, DC AUTO 1900 priority
DBC0037F2V2-6R	Diplexer, x6, 698-960/1900-AWS, DC AUTO 1900 priority

**ELECTRICAL BLOCK DIAGRAM**



**MECHANICAL BLOCK DIAGRAM**

