

DBC2037F1V1-1

Dual Band Combiner, 700/850/900 and AWS/PCS w/ Integrated Monitor port & AISG modem, Single Unit

The Kaelus DBC2037F1V1 Dual Band Combiner combines the lower 698 to 960MHz frequency Bands with the higher AWS/PCS frequency Bands. Used to minimize infrastructure capital expenditure and improving network reliability



PRODUCT FEATURES

- LTE ready
- Integrated AISG modem & monitor port
- Auto select DC/AISG pass with built-in lightning protection
- Single or Twin configurations available for Indoor or Outdoor use
- AISG port DC takes priority over HI and LO ports, HI port takes priority over LO port

TECHNICAL SPECIFICATIONS

BAND 1

Passband MHz	698-960
Insertion Loss dB (max)	0.15
Insertion Loss dB (typ)	0.12
Return Loss dB (min)	20
Isolation to Band 2 dB (min)	60
Phase linearity variation ° max over BW	0.1 / 180 KHz
Group delay variation ns max over BW	0.1 / 180 KHz
Maximum average input power Watts	500
Maximum PEP input power Watts	5000

BAND 2

Passband MHz	1710-2170
Insertion Loss dB (max)	0.15
Return Loss dB (min)	20
Isolation to Band 1 dB (min)	60
Phase linearity variation ° max over BW	1.0 / 180 KHz
Group delay variation ns max over BW	0.1 / 180 KHz
Maximum average input power Watts	500
Maximum PEP input power Watts	5000

GENERAL SPECIFICATIONS

Monitor Port Coupling dB nom relative to COM	-40
Intermod Products dBc All Ports	-155

DC / AISG

DC to COM Lo port Wins	(LO > 7V) and (HI < 6V) and (AISG < 2.5V)
DC to COM Hi port Wins	((HI > 7V) and (AISG < 2.5V)) or (LO & AISG < 2.5V)
DC to COM AISG port Wins	AISG > 7V
Maximun input voltage VDC	31
DC Current rating A Continuous, A peak	2 / 4
AISG passband MHz	0-3
Compatibility AISG	AISG 1.1, 2.0 and 3GPP TS25.461
DC Breakdown V	1000
Voltage drop in DC path	2.4V max @ 2.0 A

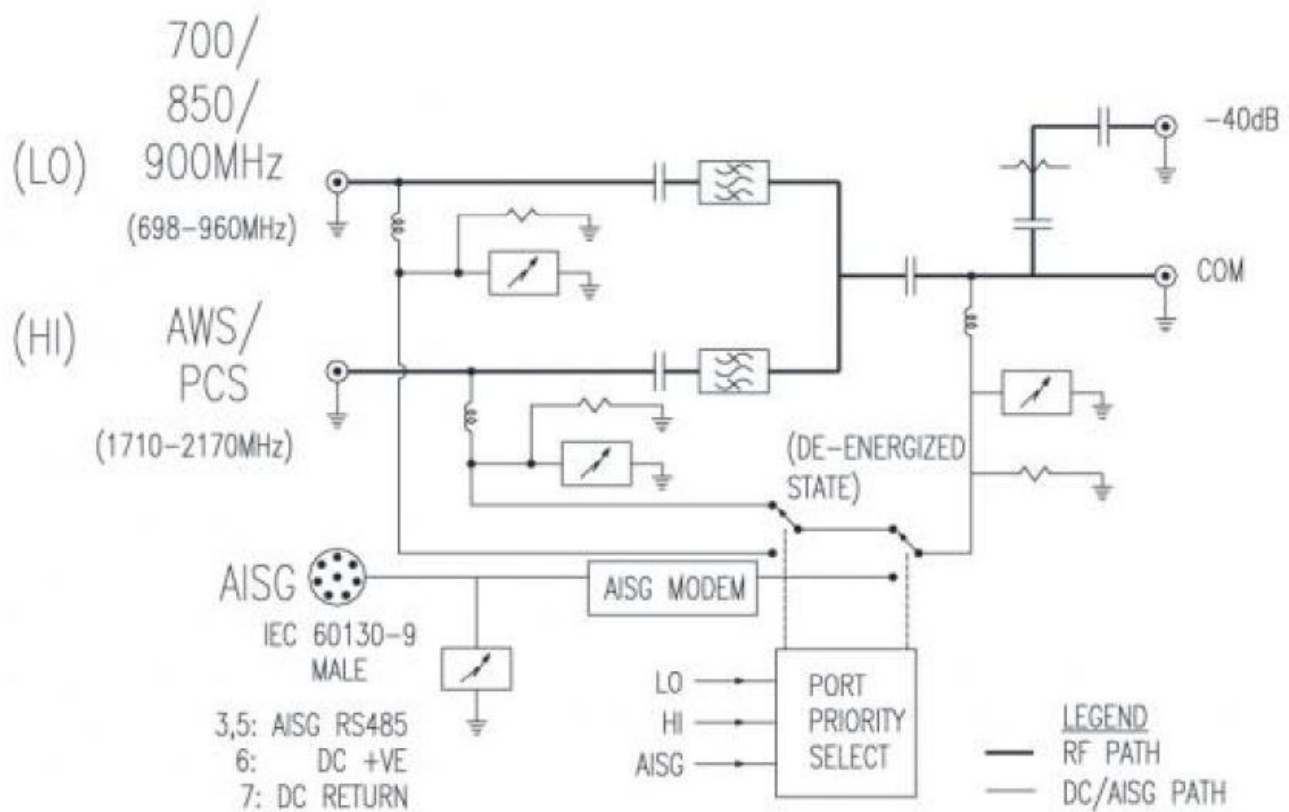
ENVIRONMENTAL

Environmental rating	ETSI EN 300 019 class 4.1
Ingress protection	IP67
Temperature range °C	-40 to +65
Temperature range °F	-40 to +149
Lightning protection all ports	±5kA max (8/20us)

MECHANICAL

Connectors RF	DIN 7-16 (F) long neck
Connectors Quantity	3
Connector Quantity	1
Dimensions excluding brackets & connectors H x D x W mm (in.)	170 x 62 x 150 / 6.69 x 2.44 x 5.90
Weight, KG, (lbs)	3.2 / 7
Mounting	Wall or pole mount

ELECTRICAL BLOCK DIAGRAM



MECHANICAL BLOCK DIAGRAM

