

DBC0081F1V3-1

TWIN SAME BAND COMBINER, 1900

Designed to combine the 1900 A and the 1900 C or E bands the Kaelus DBC0081 provides a compact twin combining solution with low insertion. The DBC0081 solution minimizes feeders, TMA's and antennas thereby saving both capital and operational expenditure when combining two base stations.

FEATURES

- Allows two 1900 base stations to share feeders, TMAs and antennae
- Variable DC / AISG pass options available
- Low downlink and uplink insertion losses
- Suitable for indoor and outdoor use



TECHNICAL SPECIFICATIONS

PORT NAME	B-1 TX/RX	B-2 TX/RX
DOWNLINK		
Passband	1930 - 1945MHz	1965 - 1990MHz
Insertion loss	0.5dB typical	
Return loss	18dB minimum	
Maximum input power	100W (average) / 1kW (PEP)	
UPLINK		
Passband	1850 - 1865MHz	1885 - 1910MHz
Insertion loss	0.65dB typical	0.8dB typical
Return loss	18dB minimum	
ISOLATION COM PORT MUST BE TERMINATED IN 50OHMS		
B1 TX frequency range	35dB typical, 30dB minimum	
B2 TX frequency range	35dB typical, 30dB minimum	
B1 RX frequency range	35dB typical, 30dB minimum	
B2 RX frequency range	35dB typical, 30dB minimum	
ELECTRICAL		
Impedance	50Ohms	
Intermodulation products	-161dBc typical / -153dBc maximum all ports with 2 x 20W carriers in RX band	
DC / AISG		
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	9dB typical	
Input voltage range	+/- 33V maximum, 4A peak maximum	

ENVIRONMENTAL	
For further details of environmental compliance, please contact Kaelus.	
Temperature range	-20°C to +55°C +4°F to +131°F
Ingress protection	IP67
Altitude	2,000m 6,500ft
Lightning protection	RF: ±5kA maximum (8/20us)
MTBF	>1,000,000 hours
Compliance	ETSI EN 300 019 class 4.1, RoHS

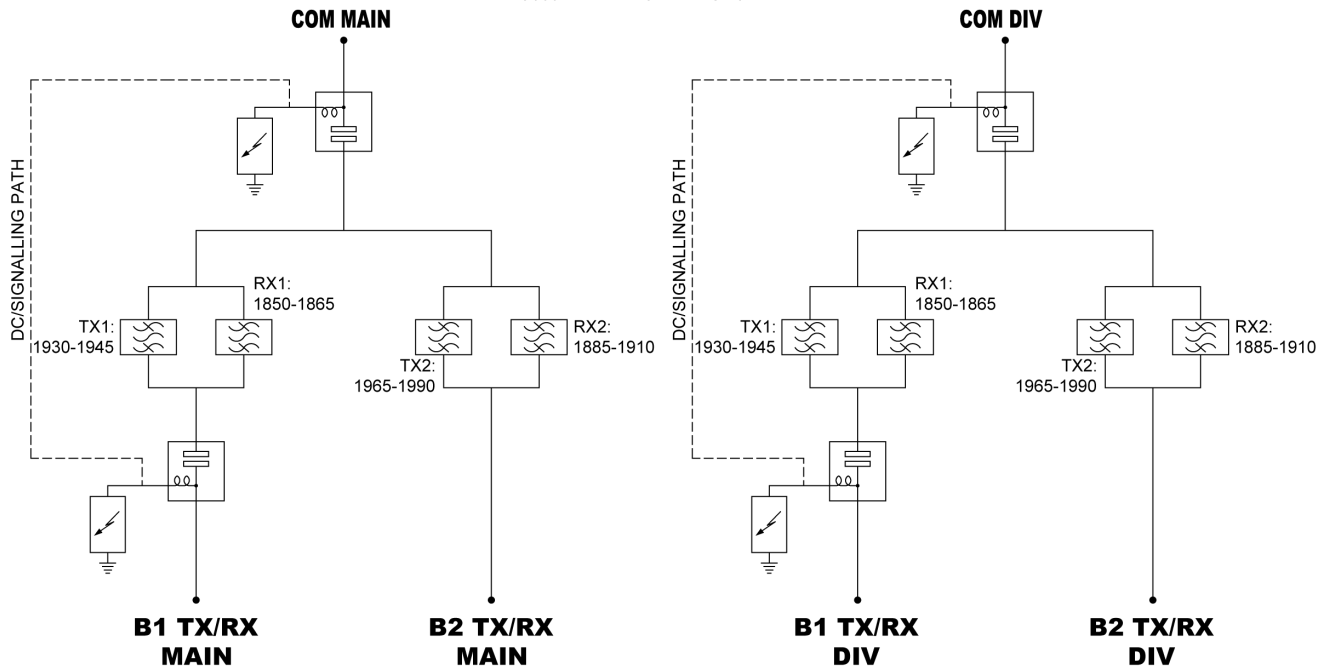
MECHANICAL	
Dimensions H x D x W	203 x 158 x 109mm 8 x 6.2 x 4.3in
Weight	6.30kg 13.9lbs
Finish	Powder coated, light grey (RAL7035)
Connectors	DIN 7-16 (F) x 6 long neck
Mounting	Pole/wall bracket supplied with two metal clamps for 45-178 mm diameter poles

ORDERING INFORMATION

PART NUMBER	CONFIGURATION	OPTIONAL FEATURES	CONNECTORS	DC/AISG CONFIGURATION
DBC0081F1V1-1	TWIN 2 in /4 out	FIXED DC	DIN 7-16 (F)	DC to ALL
DBC0081F1V2-1	TWIN 2 in /4 out	FIXED DC	DIN 7-16 (F)	DC to B1 1900 port
DBC0081F1V3-1	TWIN 2 in /4 out	FIXED DC	DIN 7-16 (F)	DC to B2 1900 port
DBC0081F1Vx-1	TWIN 2 in /4 out	FIXED DC	DIN 7-16 (F)	Various DC/AISG pass options available

ELECTRICAL BLOCK DIAGRAM

DBC0081F1V2-1 DC PATH SHOWN



MECHANICAL BLOCK DIAGRAM

