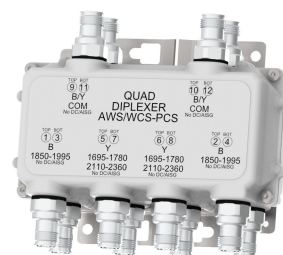


DBC0129F1V1-1

QUAD DIPLEXER AWS/WCS-PCS

Kaelus world proven outdoor solutions provide strong RF performance coupled with rugged features. The DBC0129 dual band combiner combines the AWS/WCS band with PCS. The DBC0129 can be used at either the BTS or antenna end of the feeder.



FEATURES

- Designed for multi-band, co-located sites
- Multiple DC/AISG bypass configurations available with built-in lightning protection
- Suitable for outdoor and indoor applications
- 4x4 MIMO LTE ready
- Wall or mast mounting

TECHNICAL SPECIFICATIONS

BAND NAME	AWS/WCS	PCS
Passband	1695 - 1780MHz, 2110 - 2360MHz	1850 - 1995MHz
Insertion loss	< 0.2dB typical, < 0.3dB maximum	< 0.25dB typical, < 0.38dB maximum
Return loss	> 20dB	
Maximum input power	100W (average) / 1kW (PEP)	
Intermodulation products	-160dBc maximum at 2 x 43dBm TX Carrier	
Rejection PCS	> 40dB	N/A
Rejection AWS/WCS	N/A	> 40dB

DC / AISG

Feature	DC-FIXED	DC-AUTOSENSE
Compliance	3GPP, TS 25.461	
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 – 31V DC	
DC current rating	3A	2A
Port priority (combiner mode)	N/A	Refer Ordering Information

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)
Compliance	ETS 300 019 1-4 Class 4.1E (OPERATIONAL) ETS 300 019 1-1 Class 1.2 (STORAGE)

MECHANICAL

Feature	DBC0129F1V1-1: NO DC	ALL OTHER VARIANTS
Dimensions H x D x W	220 x 107 x 76mm 8.7 x 4.2 x 3in	210 x 125 x 78mm 8.27 x 4.91 x 3.1 in
Weight	3.35kg 7.37lbs	5kg 11lbs
Finish	Painted, NCS 1502-R	
Connectors	4.3-10 (F)	
Mounting	Pole/wall bracket supplied with two metal clamps for 45-178 mm diameter poles	

ORDERING INFORMATION

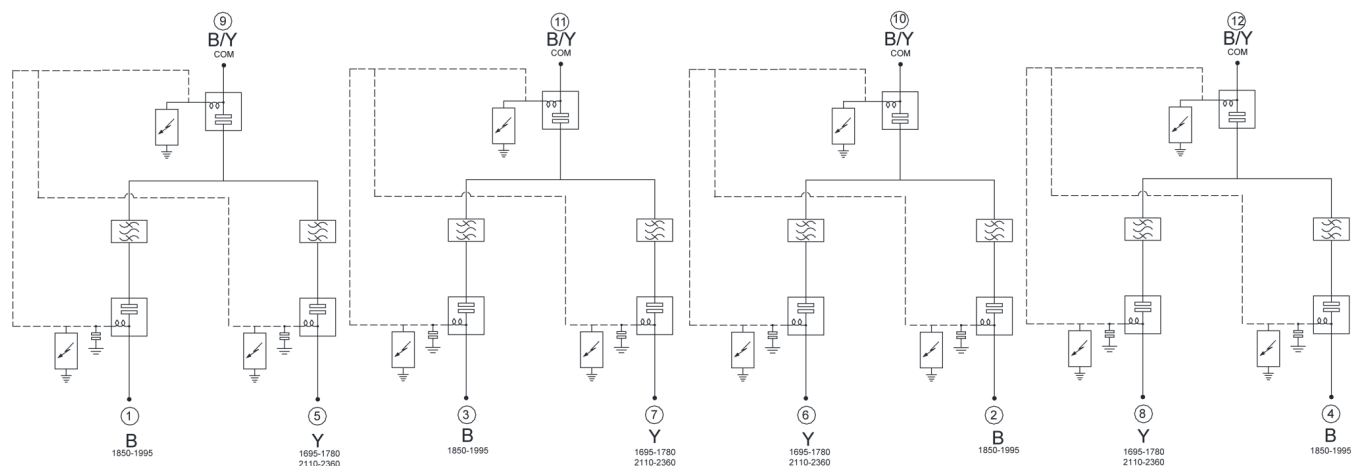
PART NUMBER	CONFIGURATION	OPTIONAL FEATURES	CONNECTORS	DC/AISG CONFIGURATION
DBC0129F1V1-1	QUAD 4 in / 8 out	FIXED DC	4.3-10 (F)	NO DC
DBC0129F1V11-1	QUAD 4 in / 8 out	FIXED DC	4.3-10 (F)	DC TO PCS
DBC0129F1V12-1	QUAD 4 in / 8 out	FIXED DC	4.3-10 (F)	DC TO AWS-WCS
DBC0129F1V13-1	QUAD 4 in / 8 out	FIXED DC	4.3-10 (F)	DC TO ALL
DBC0129F1V71-1	QUAD 4 in / 8 out	DC AUTOSENSING NO LED	4.3-10 (F)	PRIORITY AWS-WCS/PCS
DBC0129F1V72-1	QUAD 4 in / 8 out	DC AUTOSENSING NO LED	4.3-10 (F)	PRIORITY PCS/AWS-WCS

ELECTRICAL BLOCK DIAGRAM

DBC0129F1V-X where X denotes the hardware variant:

- V1, no DC
- V11, DC on PCS port (HIGH)
- V12, DC on AWS-WCS port (LOW)
- V13, DC on all port
- V71 or V72, DC autosense

For simplification, only one (single) RF path is shown.
The DBC0129 is packaged as a quad unit



MECHANICAL BLOCK DIAGRAM

DBC0129F1V1-1 - no DC variant shown

