

DBC0056

DIPLEXER 700/850

Designed to combine the North American 700MHz and 850MHz bands the Kaelus DBC0056 provides a compact combining solution with low insertion loss thereby saving main feeder or cable runs.



FEATURES

- Combines uplink and downlinks of both 700 and 850 bands to one feeder
- Very low insertion loss
- Designed for Low IMD
- Wall or pole mounting
- Field configurable DC/AISG path

TECHNICAL SPECIFICATIONS

PORT NAME	700	850
Passband	696 - 746MHz	824 - 894MHz
Insertion loss	0.2dB maximum	
Return loss	20dB minimum	
Group delay variation	< 5ns over any 10MHz	
Phase linearity over any 10MHz	< 10°	
Isolation from 700 to 850	60dB minimum	

ELECTRICAL

Intermodulation products	-161dBc typical / -155dBc maximum all ports with 2 x 20W carriers
Maximum input power	500W (average) / 5kW (PEP)

DC / AISG

A field selectable DC/AISG path is achieved via mechanical links on a IEC60130-9, 8-pin female connector (see electrical block diagram).

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	+ 31V
DC current rating	2.5A continuous, 4A peak

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
Altitude	3000m 10,000ft maximum
Lightning protection	RF: ±5kA maximum (8/20us), IEC61312-1
MTBF	>1,000,000 hours
Compliance	EMC:EN301 489, ETSI EN 300 019 class 4.1, RoHS

MECHANICAL

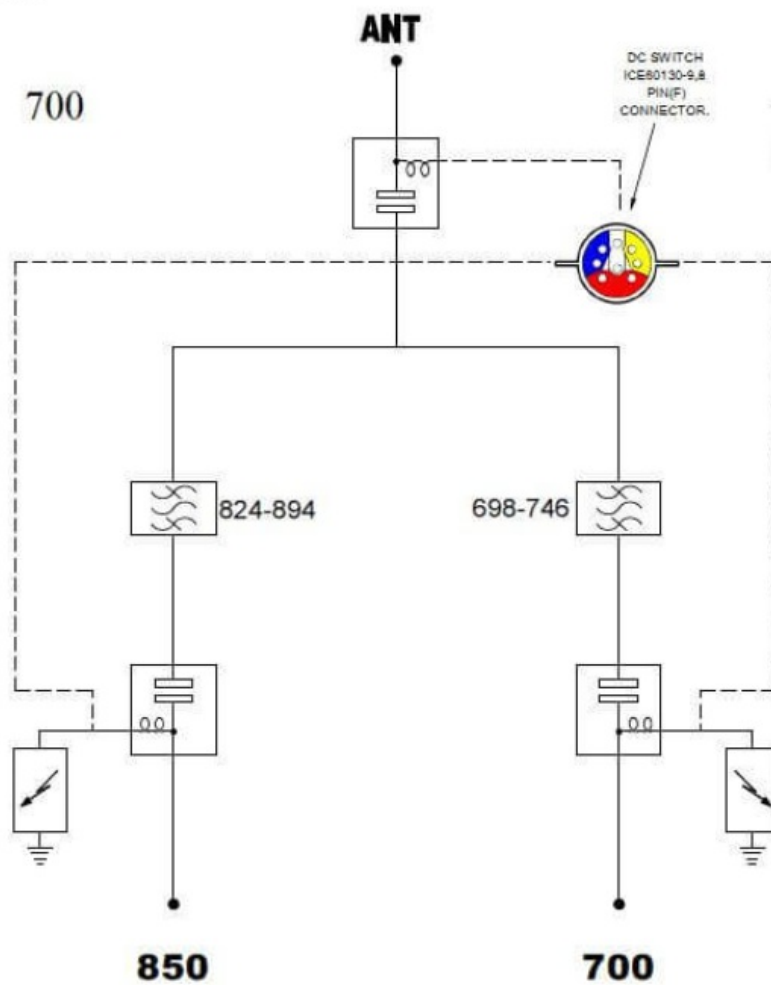
Dimensions H x D x W (single unit)	203 x 158 x 93mm 8 x 6.2 x 3.7in
Weight	3.2kg 7.05lbs (single unit) 6.4kg 14.1lbs (dual unit)
Finish	Painted, light grey (RAL7035)
Connectors	DIN 7-16 (F) x 3 long neck (single unit) DIN 7-16 (F) x 6 long neck (dual unit)
Mounting	Pole/wall bracket supplied with two metal clamps for 45-178 mm diameter poles

ORDERING INFORMATION

PART NUMBER	CONFIGURATION	OPTIONAL FEATURES	CONNECTORS	DC/AISG CONFIGURATION
DBC0056F1V51-1	SINGLE 1 in / 2 out	DC SWITCH	7/16 (F)	FIELD CONFIGURABLE
DBC0056F1V51-2	TWIN 2 in / 4 out	DC SWITCH	7/16 (F)	FIELD CONFIGURABLE

ELECTRICAL BLOCK DIAGRAM

DBC0056F1V51-1 shown



MECHANICAL BLOCK DIAGRAM

