

DBC0061

DIPLEXER 700/850

Designed to combine 700 and 850 technologies, the Kaelus DBC0061 provides excellent insertion loss and passive intermodulation performance. Suitable for outdoor or indoor environments.

FEATURES

- Combines 700 and 850 BTS into one feeder
- Covers 700MHz US Public Safety Bands
- Very low insertion losses
- Designed for low passive intermodulation
- Wall ,pole or rack mounting
- DC/AISG bypass field settable



TECHNICAL SPECIFICATIONS

BAND NAME	700	850
Passband	698 - 798MHz	824 - 894MHz
Insertion loss	0.25dB typical 698-793MHz 0.35dB typical 793-798MHz	0.25dB typical
Return loss	20dB minimum 698-798MHz 24dB typical 746-787MHz	24dB typical
Maximum input power	300W (average) / 3kW (PEP)	300W (average) / 3kW (PEP)
Phase linearity over any 10MHz	< 10°	
Group delay variation over any 10MHz	15ns typical	8ns typical
Isolation port to port	50dB minimum 698-793MHz and 824-894MHz 35dB minimum 793-798MHz	

ELECTRICAL

Impedance	50Ohms
Intermodulation products	-155dBc maximum all ports with 2 x 20W carriers

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 typical
Return loss, two DC/AISG pass	9dB typical
Input voltage range	± 31V
DC current rating	2A continuous, 4A peak

ENVIRONMENTAL

For further details of environmental compliance, please contact Kaelus.

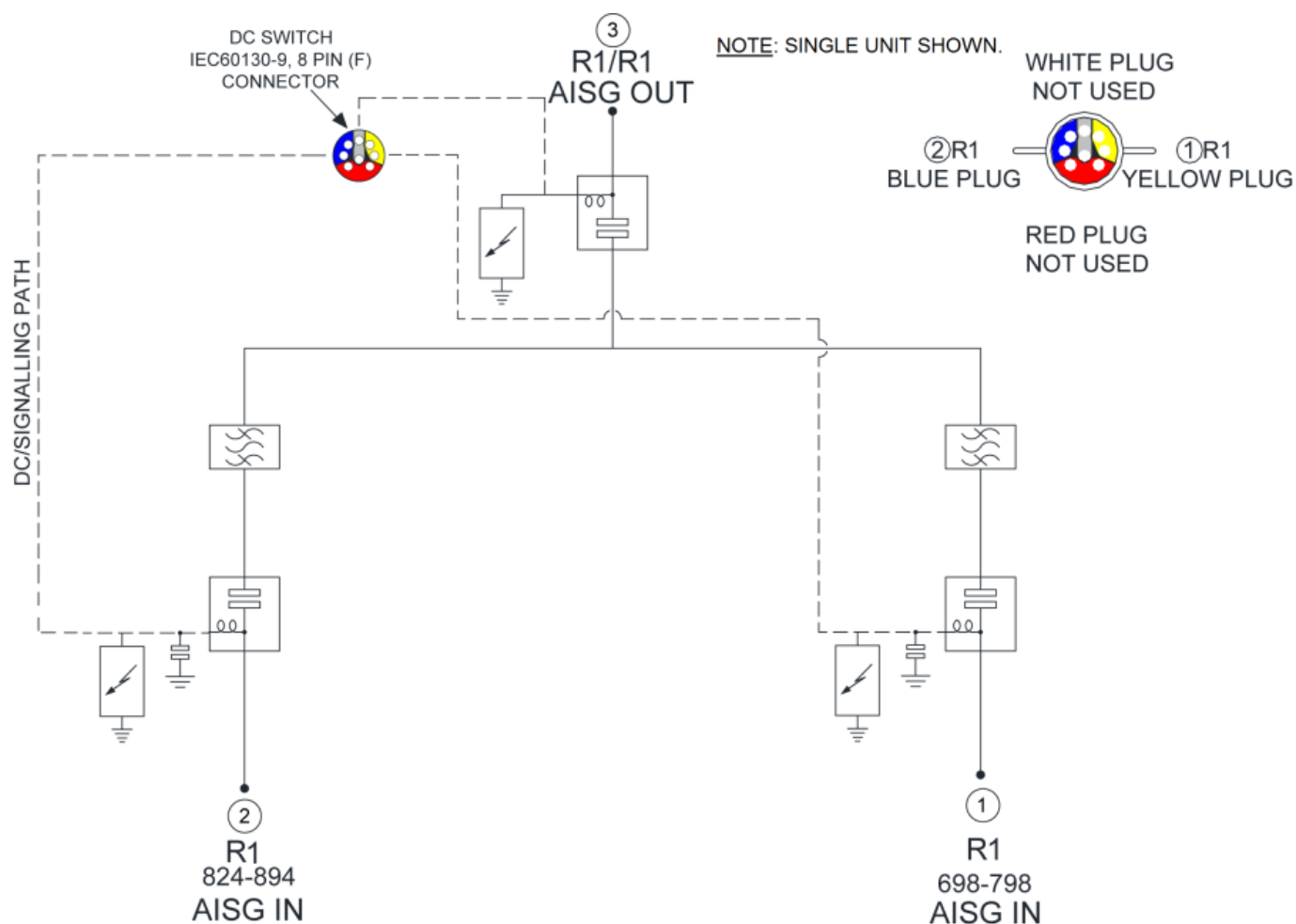
Temperature range	-40°C to +65°C -40°F to +149°F
Ingress protection	IP67
Altitude	3000m 10,000ft maximum
Lightning protection	RF port: ±5kA maximum (8/20us), IEC61312-1
MTBF	>1,000,000 hours
Compliance	ETSI EN 300 019 class 4.1, RoHS

MECHANICAL	
Dimensions H x D x W	481 x 266 x 164mm 18.94 x 10.46 x 6.46in (rack of units: -6R version)
Dimensions H x D x W (single unit)	203 x 158 x 81mm 8 x 6.2 x 3.2in
Dimensions H x D x W (twin unit)	203 x 158 x 164mm 8 x 6.2 x 6.45in
Weight	4.3kg 9.5lbs (single unit) 8.3kg 18.3lbs (dual unit) 26 kg 57.3lbs (rack of units: -6R version)
Finish	Painted, light grey (RAL7035)
Connectors	DIN 7-16 (F) x 3 long neck (single unit) 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
DBC0061F1V51-1	SINGLE 1 in / 2 out	DC SWITCH	7/16 (F)	FIELD CONFIGURABLE
DBC0061F1V51-2	TWIN 2 in / 4 out	DC SWITCH	7/16 (F)	FIELD CONFIGURABLE
DBC0061F1V51-6R	RACK 6 in / 12 out	DC SWITCH	7/16 (F)	FIELD CONFIGURABLE
E92-K0057	SINGLE MOUNT BRACKET KIT	NA	NA	NA
E92-K0055	DUAL MOUNT BRACKET KIT	NA	NA	NA

ELECTRICAL BLOCK DIAGRAM



MECHANICAL BLOCK DIAGRAM

