

QBC0007F2V51-1

QUADRUPLER 700/850/1900-AWS/WCS

Designed to combine 700, 850, 1900-AWS and WCS bands, the Kaelus QBC0007 saves significant capital and operational expenses by limiting feeder runs, and components needed on the tower. Available in an outdoor package the QBC0007 has the following features:

FEATURES

- Combines 700, 850, 1900-AWS and WCS bands
- Very low insertion loss
- Designed for low passive intermodulation
- DC/AISG bypass field settable
- Wall or pole mounting
- High power handling
- Single and twin configurations available



TECHNICAL SPECIFICATIONS

BAND NAME	700	850	1900-AWS	WCS
Passband	698 - 798MHz	824 - 906MHz	1695- 2200MHz	2305 - 2360MHz
Insertion loss	0.3dB typical	0.3dB typical	0.25dB typical	0.4dB typical
Return loss	24dB typical			
Maximum input power	150W (average) / 1.5kW (PEP)	500W (average) / 5kW (PEP)	250W (average) / 2.5kW (PEP)	150W (average) / 1.5kW (PEP)
Rejection in 700	N/A	50dB typical	80dB typical	80dB typical
Rejection in 850	50dB typical	N/A	80dB typical	80dB typical
Rejection in 1900-AWS	80dB typical	80dB typical	N/A	50dB typical
Rejection in WCS	80dB typical	80dB typical	50dB typical	N/A

ELECTRICAL

Impedance	50Ohms
Intermodulation products	-153dBc typical (2x 20 W carriers, in receive band)
Phase linearity variation over any 10MHz	< 10°
Group delay variation over any 10MHz	< 20ns

DC / AISG

A field selectable DC/AISG path is achieved via mechanical links on a IEC60130-9, 8-pin female connector (see mechanical diagram). It is Kaelus's recommendation that due to AISG link budget reasons that a maximum of 2 DC/AISG paths are activated simultaneously without active repeating of the AISG signal

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
Compliance	AISG 1.1/2.0

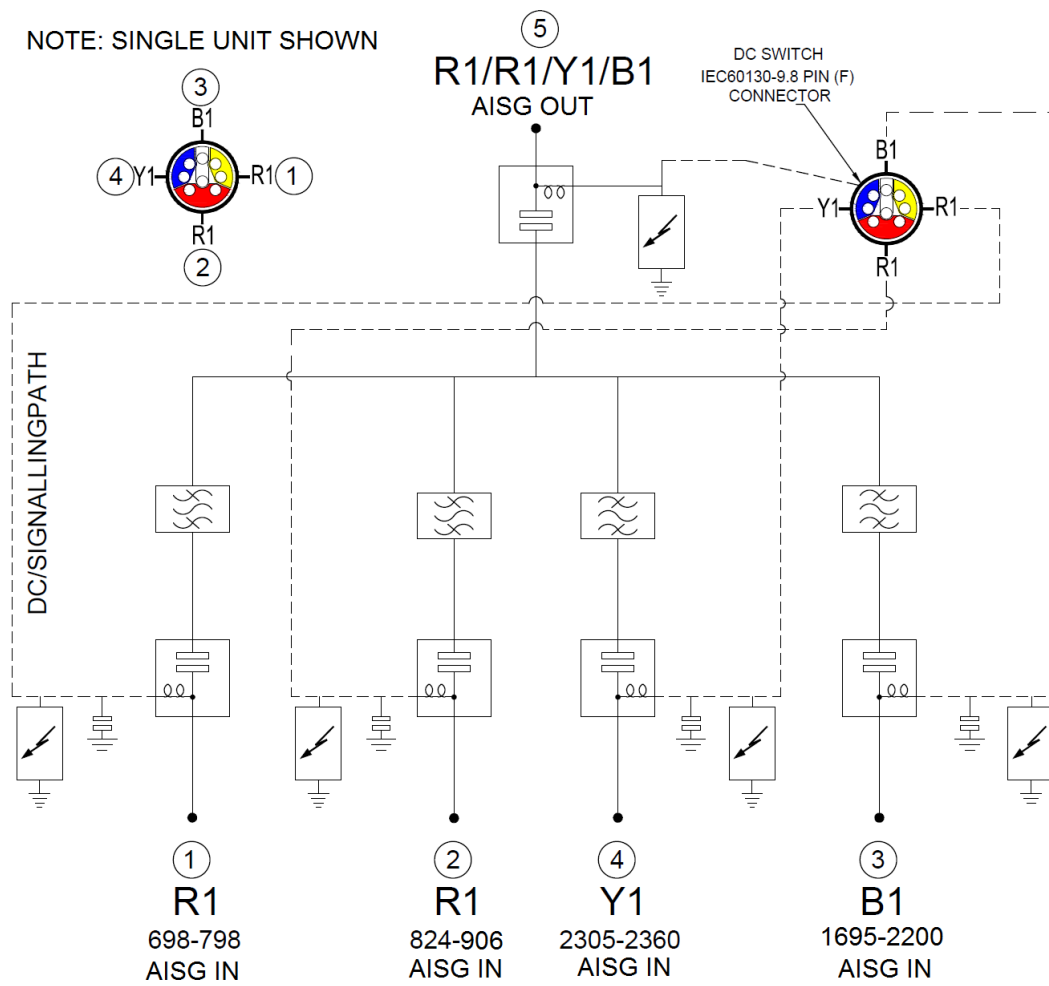
ENVIRONMENTAL	
For further details of environmental compliance, please contact Kaelus.	
Temperature range	-40°C to +65°C -40°F to +149°F
Ingress protection	IP67
Lightning protection	IEC61312-1 ±5kA maximum (8/20us)
MTBF	>1,000,000 hours
Compliance	ETSI EN 300 019 class 4.1, RoHS

MECHANICAL	
Dimensions H x D x W (single unit)	246 x 223 x 86mm 9.73 x 8.78 x 3.39in (excluding brackets & connectors)
Dimensions H x D x W (twin unit)	246 x 223 x 205mm 9.73 x 8.78 x 8.06in (excluding brackets & connectors)
Weight	7.6kg 16.7lb (single unit) 15.2kg 33.4lb (twin unit)
Finish	Painted, light grey (RAL7035)
Connectors	DIN 7-16 (F) x 5 long neck(single unit) DIN 7-16 (F) x 10 long neck(twin 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
QBC0007F2V51-1	SINGLE 1 in / 4 out	DC SWITCH	7/16 (F)	FIELD CONFIGURABLE
QBC0007F2V51-2	TWIN 2 in / 8 out	DC SWITCH	7/16 (F)	FIELD CONFIGURABLE

ELECTRICAL BLOCK DIAGRAM



MECHANICAL BLOCK DIAGRAM

NOTE:
SINGLE UNIT SHOWN

