

QBC0003F1V51-1

QUADRUPLER 700-900/1800/2100/2600

Designed to combine 700-850-900, 1800, 2100 and 2600 technologies, the Kaelus QBC0003 saves significant capital and operational expenses by limiting feeder runs and components needed on the tower.



FEATURES

- Combines 700-1900, 1800, 2100 and 2600 Bands
- DC/AISG bypass field settable
- Very low insertion loss
- Wall or pole mounting
- Designed for low Passive intermodulation
- High power handling

TECHNICAL SPECIFICATIONS

BAND NAME	700 - 900	1800	2100	2600
RF PERFORMANCE				
Passband	698 - 960MHz	1710 - 1880MHz	1920 - 2170MHz	2500 - 2690MHz
Insertion loss	0.2dB typical	0.3dB typical	0.3dB typical	0.3dB typical
Return loss	18dB minimum			
Group delay variation	<15 / 10MHz maximum			
Absolute group delay	2.5ns typical, 5ns maximum	8ns typical, 12ns maximum	9ns typical, 20ns maximum	6ns typical, 10ns maximum
Maximum input power	300W (average) / 2.5kW (PEP)	300W (average) / 2.5kW (PEP)	300W (average) / 2.5kW (PEP)	300W (average) / 2.5kW (PEP)
Isolation at 700 - 900	N/A	50dB minimum	50dB minimum	50dB minimum
Isolation at 1800	50dB minimum	N/A	50dB minimum	50dB minimum
Isolation at 2100	50dB minimum	50dB minimum	N/A	50dB minimum
Isolation at 2600	50dB minimum	50dB minimum	50dB minimum	N/A
ELECTRICAL				
Intermodulation products	-153dBc maximum all ports with 2 x 43dBm carriers			
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 maximum			
Insertion loss, two DC/AISG pass	4.5dB typical			
Return loss, two DC/AISG pass	9dB typical			
Input voltage range	31V DC maximum			
DC current rating	2.5A continuous, 4A peak			
Port 1 DC to COM plug color	Blue			
Port 2 DC to COM plug color	White			
Port 3 DC to COM plug color	Yellow			
Port 4 DC to COM plug color	Red			

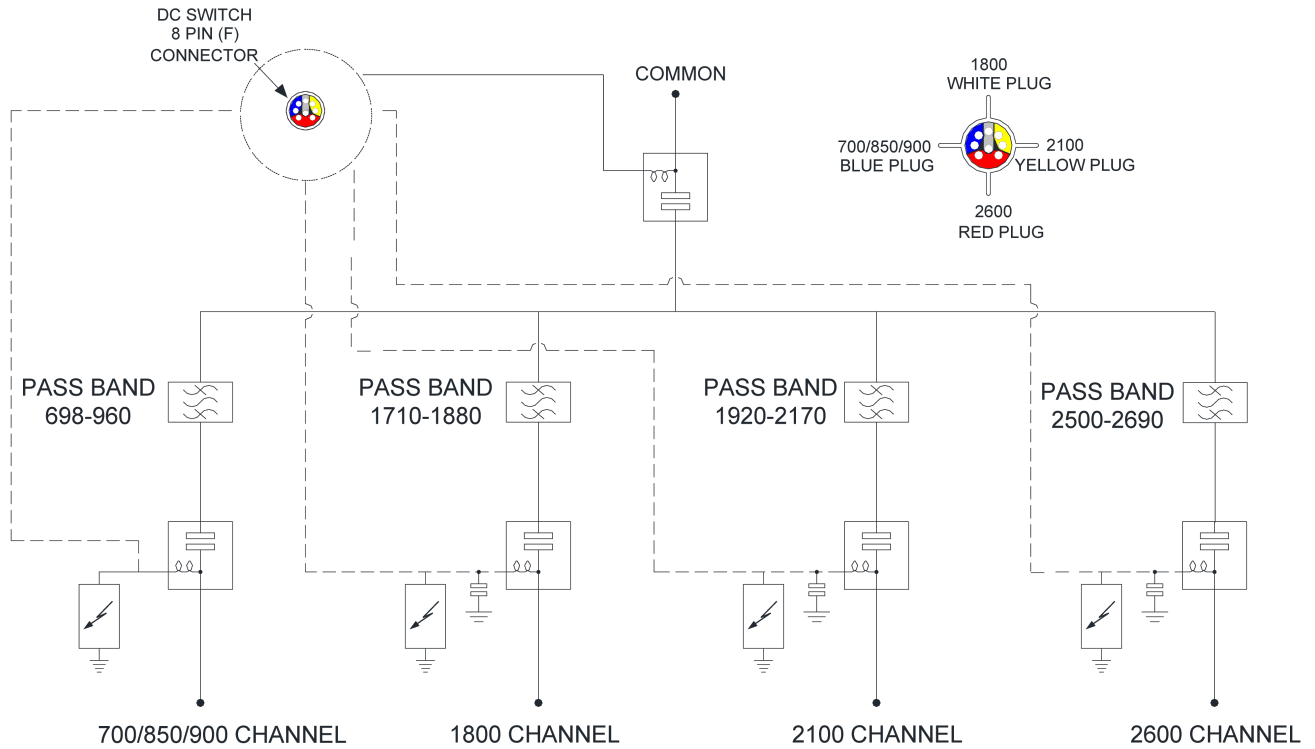
ENVIRONMENTAL	
For further details of environmental compliance, please contact Kaelus.	
Temperature range	-20°C to +65°C -4°F to +149°F
Ingress protection	IP67
Altitude	2,000m 6,560ft maximum
Lightning protection	±5kA maximum (8/20us)
MTBF	>1,000,000 hours
Compliance	EMC:EN301 489, ETSI EN 300 019 class 4.1, RoHS

MECHANICAL	
Dimensions H x D x W (single unit)	239 x 58.5 x 217mm 9.4 x 2.3 x 8.5in
Dimensions H x D x W (twin unit)	239 x 117 x 217mm 9.4 x 4.6 x 8.5in
Weight	5.3kg 11.7lb (single unit) 10.6kg 23.4lb (twin unit)
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
QBC0003F1V51-1	SINGLE 1 in / 4 out	DC SWITCH	7/16 (F)	FIELD CONFIGURABLE
QBC0003F1V51-2	TWIN 2 in / 8 out	DC SWITCH	7/16 (F)	FIELD CONFIGURABLE

ELECTRICAL BLOCK DIAGRAM



MECHANICAL BLOCK DIAGRAM

