

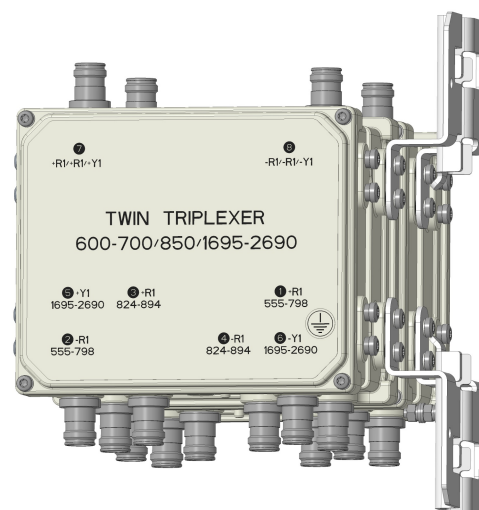
TBC0043F1V10-2

TRIPLEXER 600-700/850/1695-2690

The Kaelus TBC0043 is a bi-directional Triplexer designed to combine 600-700 with 850 and 1695-2690 technologies, the TBC0043 provides excellent insertion loss and passive intermodulation performance.

FEATURES

- Enables antenna/feeder sharing for 600-700, 850 and 1695-2690 networks
- Compact & lightweight - perfect for Small Cell applications
- Low insertion loss & high return loss
- Low passive IM performance
- Twin (-1) and Quad (-2) models available
- 4.3-10 (F) long neck connectors standard
- Hard Wired and DC Autosense versions available
- Provisions for wall or mast mounting
- AWS3 and 4 ready



TECHNICAL SPECIFICATIONS

BAND NAME	600-700	850	1695-2690
Passband	555 - 798MHz	824 - 894MHz	1695 - 2690MHz
Insertion loss	0.2dB typical	0.3dB typical	0.25dB typical
Return loss	23dB typical		
Maximum input power	120W (average) / 1.2kW (PEP)	120W (average) / 1.2kW (PEP)	120W (average) / 1.2kW (PEP)

RF PERFORMANCE

Rejection in 600-700	N/A	50dB typical	50dB typical
Rejection in 850	50dB typical	N/A	50dB typical
Rejection in AWS-WCS	50dB typical	50dB typical	N/A
Isolation	50dB typical, 40dB minimum		

ELECTRICAL

Impedance	50Ohms		
Intermodulation products	-161dBc typ, -156dBc maximum with 2 x 43dBm carriers		
Group delay variation over any 10MHz	14ns maximum	10ns maximum	2.5ns typical
Absolute group delay	35 ns maximum	30 ns maximum	5ns typical

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	±5kA maximum (8/20us)
MTBF	>1,000,000 hours

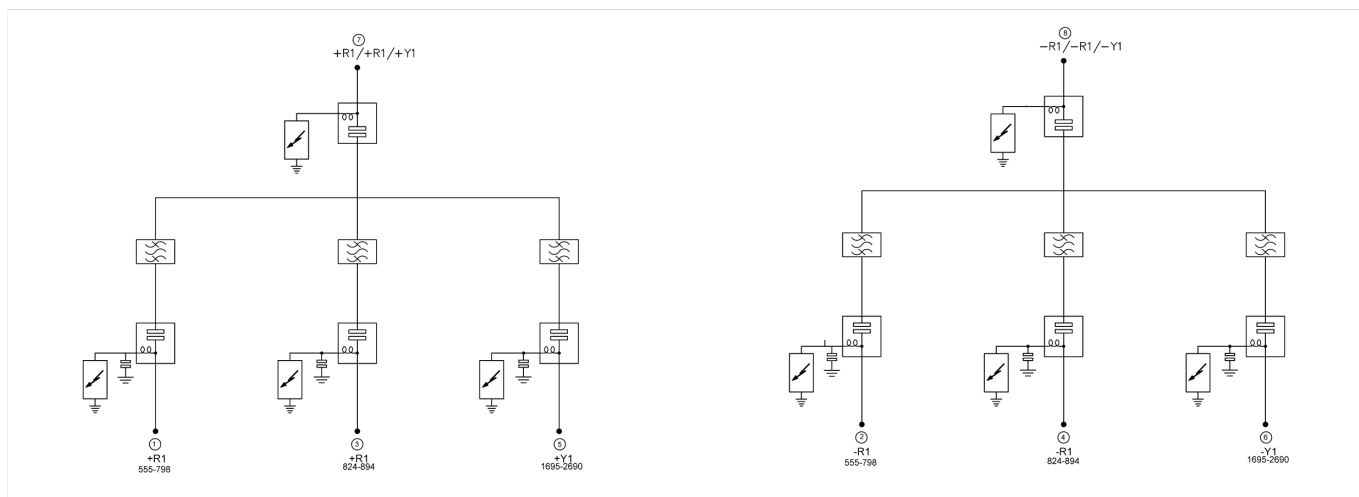
MECHANICAL

Dimensions H x D x W (single twin unit)	207 x 172 x 151 mm 8.14 x 6.77 x 5.96 in maximum
Dimensions H x D x W (dual twin unit)	207 x 172 x 308.4 mm 8.14 x 6.77 x 12.14 in maximum
Weight	7.0kg / 15.4lbs (Twin) 14.0kg / 30.9lbs (Quad)
Finish	Painted, light grey (RAL7035)
Connectors	4.3-10 (F) x 8 long neck (Twin) 4.3-10 (F) x 16 long neck (Quad)
Wind Load	Front 132N, Side 257N (Twin) Front 160N, Side 384N (Quad) At 74m/s (AS/NZS 1170-2-2011 Structural design - Wind actions - Cyclone areas)
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
TBC0043F1V10-1	TWIN, 2 in / 6 out	FIXED DC	4.3-10 (F)	NO DC
TBC0043F1V10-2	QUAD, 4 in / 12 out	FIXED DC	4.3-10 (F)	NO DC

ELECTRICAL BLOCK DIAGRAM



SINGLE TWIN SCHEMATIC

