

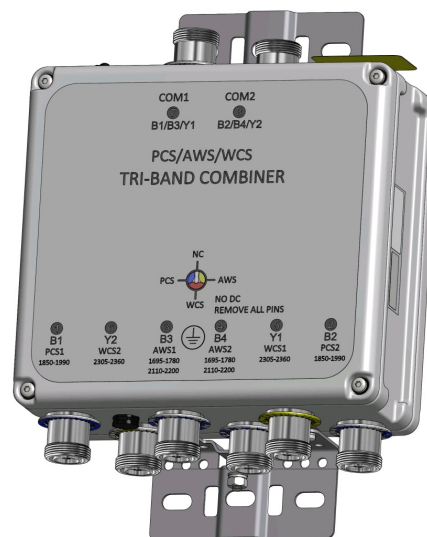
TBC0037F2V51-1

TWIN TRIPLEXER PCS/AWS/WCS

Kaelus world proven outdoor solutions provide strong RF performance coupled with rugged features. The TBC0037 Tri Band Combiner combines the PCS, AWS and WCS bands. Used to minimize infrastructure capital expenditure and improving network reliability.

FEATURES

- Designed for multi-band, co-located sites
- Mechanical switch allows switching of DC/AISG to any port
- Twin configuration
- Suitable for outdoor and indoor applications; wall or mast mounting



TECHNICAL SPECIFICATIONS

PORT NAME	PCS	AWS	WCS
Passband	1850 - 1990MHz	1695 - 1780MHz / 2110 - 2200MHz	2305 - 2360MHz
Insertion loss	0.25dB typical	0.3dB typical	0.25dB typical
Return loss	18dB minimum	18dB minimum	18dB minimum
Maximum input power	200W (average) / 2kW (PEP)	200W (average) / 2kW (PEP)	200W (average) / 2kW (PEP)
Intermodulation products	153dBc maximum all ports 2 x 20W carriers	153dBc maximum all ports 2 x 20W carriers	153dBc maximum all ports 2 x 20W carriers

ELECTRICAL

Impedance	50Ohms unbalanced
Isolation between bands	50dB minimum
Phase linearity variation over any 10MHz	10° maximum
Group delay variation over any 10MHz	10ns maximum

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	4.5 dB 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

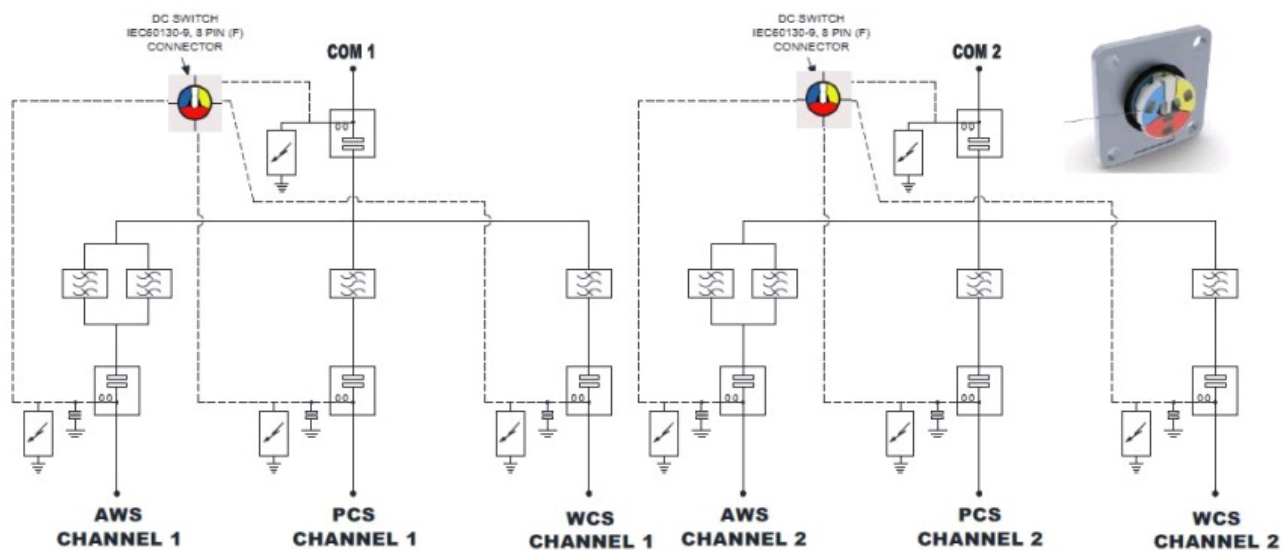
ENVIRONMENTAL	
For further details of environmental compliance, please contact Kaelus.	
Temperature range	-20°C to +65°C -4°F to +149°F
Ingress protection	IP67
Lightning protection	IEC61000-4-5, RF: ±5kA maximum (8/20us)
MTBF	>1,000,000 hours
Compliance	EMC:EN301 489, ETSI EN 300 019 class 4.1, RoHS

MECHANICAL	
Dimensions H x D x W	240x 220 x 110mm 9.4 x 8.7 x 4.3in
Weight	8.5kg 18.7lbs
Finish	Powder coated, light grey (RAL7035)
Connectors	DIN 7-16 (F) x 8 long neck
Mounting	Pole/wall bracket supplied with two metal clamps for 45-178 mm diameter poles

ORDERING INFORMATION

PART NUMBER	DESCRIPTION
TBC0037F2V51-1	Twin Triplexer, PCS/AWS/WCS, field settable DC Switch

ELECTRICAL BLOCK DIAGRAM



MECHANICAL BLOCK DIAGRAM

