

TBC0038F1V94-1

TRIPLEXER 555-960/1695-2200/2300-2700

Kaelus world-proven outdoor solutions provide strong RF performance coupled with rugged operation. The TBC0038 provides the following features:

FEATURES

- Enables feeder sharing of various technologies including but not limited to LTE700, LTE800, EGSM900, PCS, WCS, 1800, 2300TDD, 2100, 2600
- Low insertion loss and high isolation
- Autosense of DC/AISG allows operation at the bottom or the top of the tower
- Low passive IM performance
- Single or Twin Models Available



TECHNICAL SPECIFICATIONS

BAND NAME	555 - 960	1695 -2200	2300 - 2700
Passband	555 - 960MHz	1695 - 2200MHz	2300 - 2700MHz
Insertion loss	<0.2dB typical	<0.2dB typical	<0.2dB typical
Return loss	>20dB	>20dB	>20dB
Maximum input power	250W (average) / 2kW (PEP)	250W (average) / 2kW (PEP)	250W (average) / 2kW (PEP)
Intermodulation products	<-160 dBc at 2 x +43dBm TX Carrier		
Attenuation in 555 - 960MHz	N/A	> 50dB	> 50dB
Attenuation in 1695 - 2200MHz	> 50dB	N/A	> 50dB
Attenuation in 2300 - 2700MHz	> 50dB	> 50dB	N/A

DC / AISG

The DC/AISG path is automatically selected. In bottom of the tower applications (combiner mode), each RF channel port is sequentially checked for the presence of DC voltage. If more than one port has voltage, the port that has the highest (programmed) priority is passed to the common port. If a short circuit is detected on the common port DC/AISG is disabled. In top-of-tower applications (splitter mode), DC/AISG is passed to all ports that do not present a short circuit. If a short circuit is detected, the shorted RF port will be disabled for DC/AISG while other RF ports remain connected.

Passband	0-3MHz
Input voltage range	7.5 - 30V DC
DC current rating	2.5A continuous
Compliance	3GPP, TS 25.461
Port priority (combiner mode)	1st) 555-960, 2nd) 1695-2200, 3rd) 2300-2700

ENVIRONMENTAL

For further details of environmental compliance, please contact Kaelus.

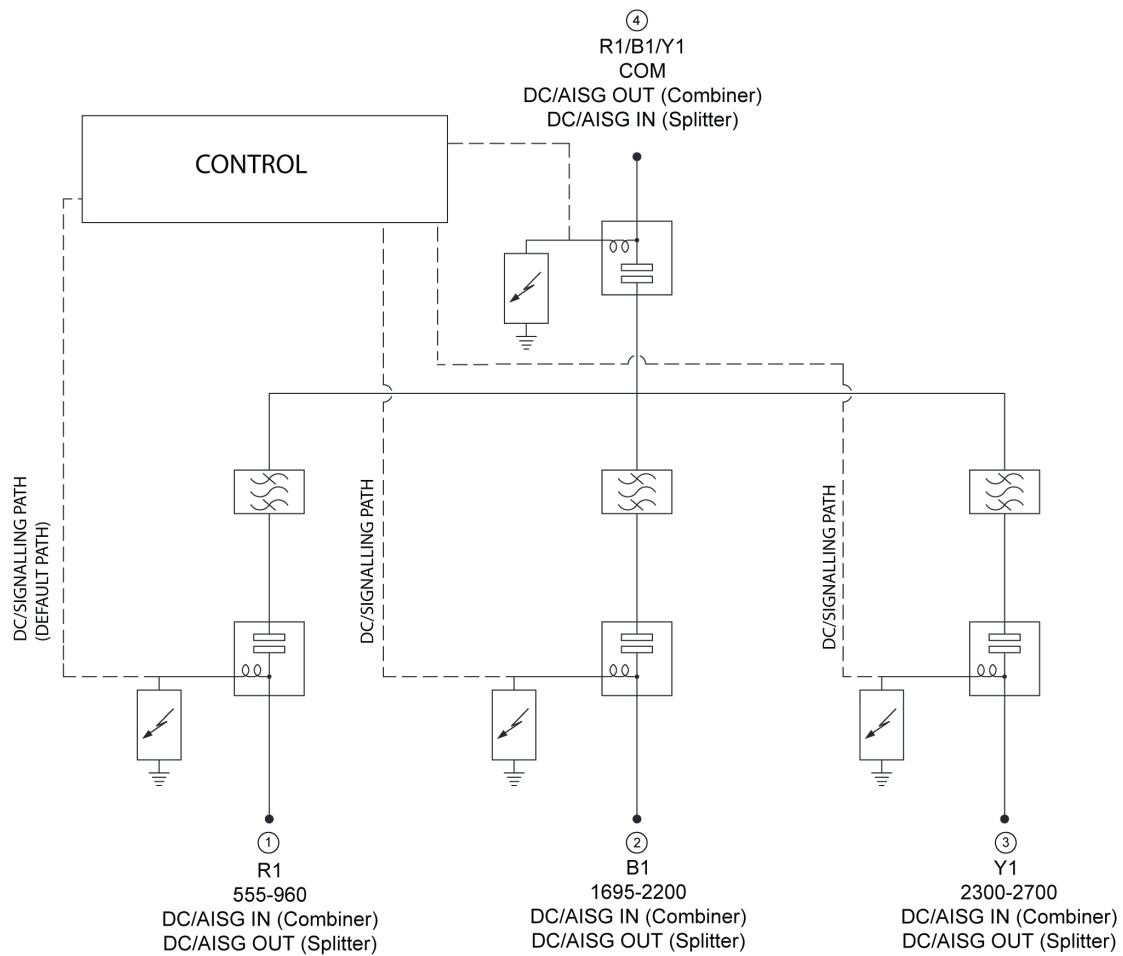
Temperature range	-40°C to +65°C -40°F to 149°F
Ingress protection	IP67
Lightning protection	5kA 8/20 µs
MTBF	> 1,000,000 Hours
Compliance	ETS 300 019 1-4 (OPERATIONAL) ETS 300 019 1-1 (STORAGE)

MECHANICAL	
Dimensions H x D x W (single unit)	190 x 160 x 61 mm 7.48 x 6.30 x 2.41 in
Dimensions H x D x W (twin unit)	190 x 160 x 128 mm 7.48 x 6.30 x 5.00 in
Weight	3.0kg / 6.6lbs (single) 6.0kg / 13.2lbs (twin)
Finish	Painted, light grey (RAL7035)
Connectors	4.3-10 (F) x 4 long neck (single unit) 4.3-10 (F) x 8 long neck (twin unit)
Wind Load	Front 207N, Side 37N (Single) Front 231N, Side 97N (Twin) 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

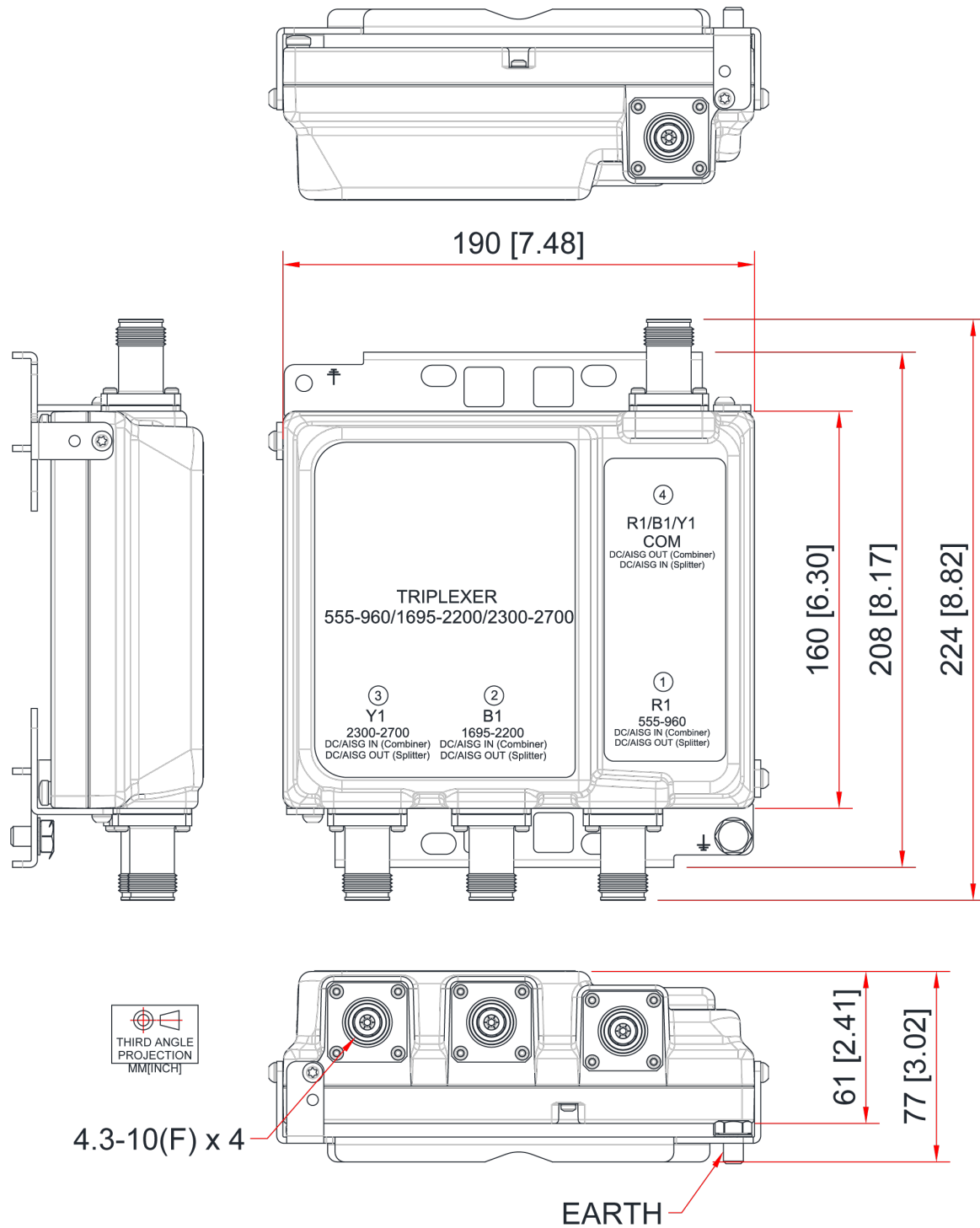
ORDERING INFORMATION

PART NUMBER	CONFIGURATION	OPTIONAL FEATURES	CONNECTORS	DC/AISG CONFIGURATION
TBC0038F1V94-1	SINGLE 1 in / 3 out	DC AUTOSENSING WITHOUT LED	4.3-10 (F)	PRIORITY 555-960//1695-2200/2300-2700
TBC0038F1V94-2	TWIN 2 in / 6 out	DC AUTOSENSING WITHOUT LED	4.3-10 (F)	PRIORITY 555-960//1695-2200/2300-2700

ELECTRICAL BLOCK DIAGRAM



MECHANICAL BLOCK DIAGRAM



DC-AUTOSENSE SINGLE