

TBCT038F1V14-1

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

Kaelus world-proven outdoor solutions provide strong RF performance coupled with rugged operation. The TBCT038 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
- Multiple DC/AISG bypass configurations available with built-in lightning protection
- Low passive IM performance

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	<-165 dBc typ 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

ELECTRICAL

Impedance	50Ohms
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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)

DC / AISG

DC/AISG path is factory configurable, see ordering information

Passband	0 – 3MHz
Insertion loss	1dB maximum
Return loss	12dB minimum
Input voltage range	± 30V
DC current rating	3A continuous
Compliance	3GPP TS 25.461

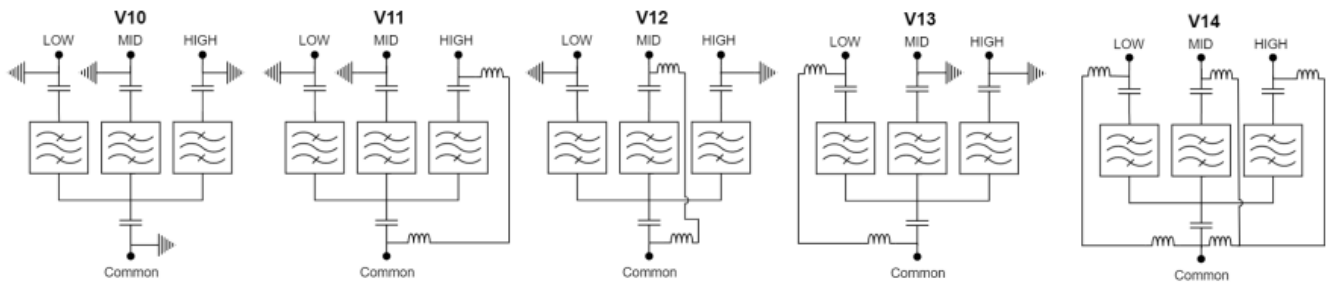
MECHANICAL	
Dimensions H x D x W	166 x 92 x 190mm 6.5 x 3.6 x 7.5in
Weight	4.7kg 10.31lbs max
Finish	Painted, NCS 1502-R
Connectors	4.3-10 (F) x 8 long neck
Wind Load	Front 207N, Side 37N (Single) Front 231N, Side 97N (Twin) At 74m/s (AS/NZS 1170-2-2011 Structural design - Wind actions - Cyclone areas)
Mounting	Pole/wall bracket supplied with two metal clamps for 45-178 mm diameter poles

ORDERING INFORMATION

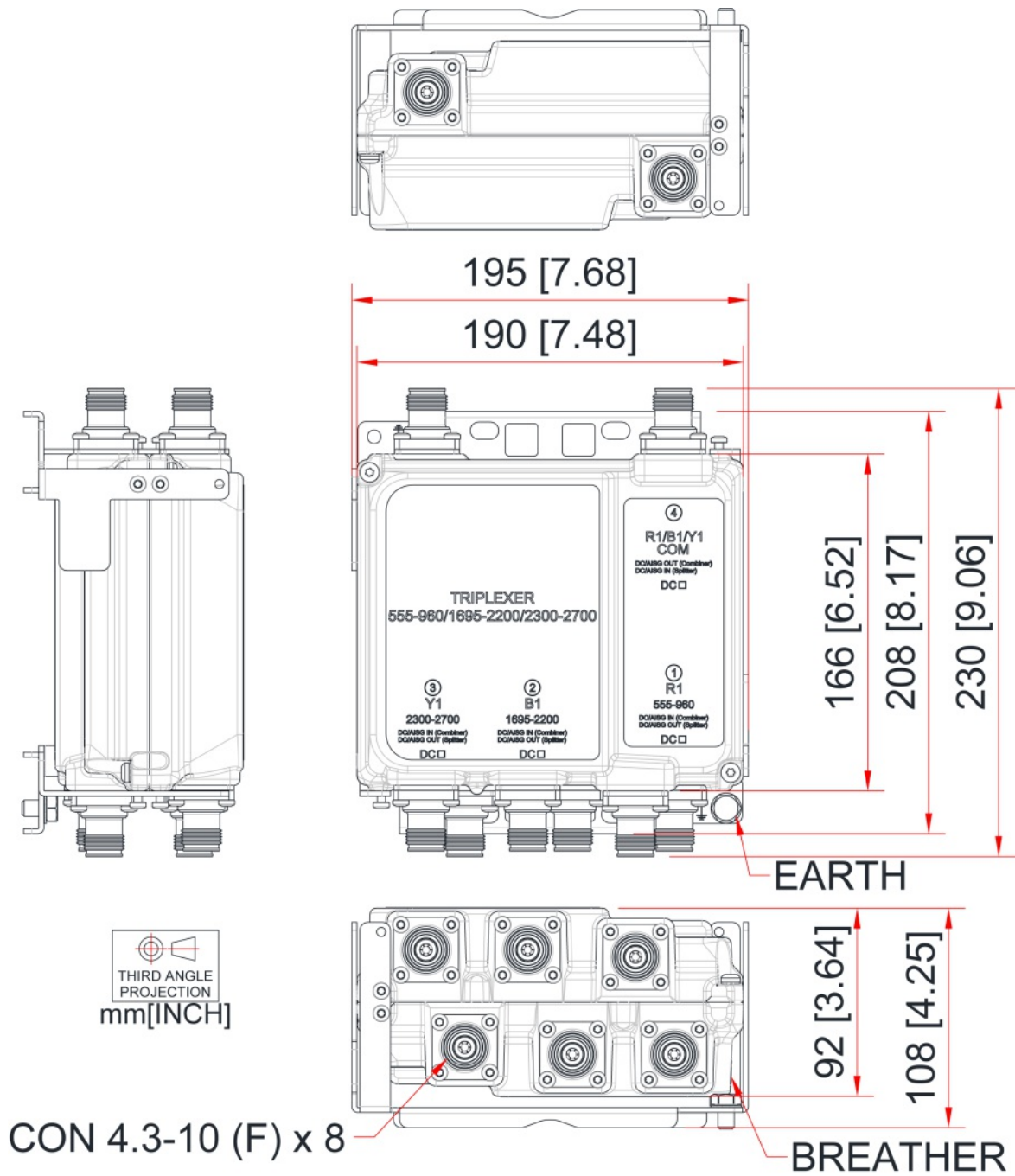
PART NUMBER	CONFIGURATION	OPTIONAL FEATURES	CONNECTORS	DC/AISG CONFIGURATION
TBCT038F1V10-1	2 in / 6 out	FIXED DC FACTORY CONFIGURABLE	4.3-10 (F)	NO DC
TBCT038F1V11-1	2 in / 6 out	FIXED DC FACTORY CONFIGURABLE	4.3-10 (F)	DC TO 2300-2700MHz
TBCT038F1V12-1	2 in / 6 out	FIXED DC FACTORY CONFIGURABLE	4.3-10 (F)	DC TO 1695-2200MHz
TBCT038F1V13-1	2 in / 6 out	FIXED DC FACTORY CONFIGURABLE	4.3-10 (F)	DC TO 555-960MHz
TBCT038F1V14-1	2 in / 6 out	FIXED DC FACTORY CONFIGURABLE	4.3-10 (F)	DC TO ALL PATH
Note: DC autosense versions available, contact Kaelus for information				

ELECTRICAL BLOCK DIAGRAM

TBCT038F1VXX-Z where
XX denotes the DC path variant
Z denotes the mounting : "-1" = single mount and "-2" = dual mount
LOW port is 555-960MHz band
MID port is 1695-2200MHz band
HIGH port is 2300-2700MHz band



MECHANICAL BLOCK DIAGRAM



TBCT038F1VXX-1
SINGLE MOUNT