

KA-3003

TRIPLEXER 1800-2100/2300/2600

The Kaelus KA-3003 is a bi-directional triplexer, designed to combine or split 1800-2100, 2300 and 2600 bands. The KA-3003 provides low insertion loss and high return loss with excellent passive inter-modulation performance in an extremely small and lightweight IP67 capable package

FEATURES

- Enables antenna & coax sharing for 1800, 2100, 2300 and 2600 systems
- Compact & lightweight
- Low insertion loss & high return loss
- Low passive IM performance
- Dual unit and quad unit versions available
- Hard wired and DC autosense versions available



TECHNICAL SPECIFICATIONS

BAND NAME	1800-2100	2300	2600
Passband	1710 - 2170MHz	2300 - 2400MHz	2500-2690MHz
Insertion loss	0.2dB typical, 0.3dB max	0.2dB typical, 0.3dB max	0.2dB typical, 0.35dB max
Return loss	20dB typical, 18dB minimum		
Maximum input power	250W (average) *	250W (average) *	250W (average) *
Intermodulation products	< -160dBc at 2 x 43dBm TX Carrier		
Rejection	50dB minimum in 2300 and 2600 band	50dB minimum in 1800-2100 and 2600 band	50dB minimum in 1800-2100 and 2300 band

(*) Limited to 500W (average) combined power at the common port.

ELECTRICAL

Impedance	50Ohms
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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 37.461

ENVIRONMENTAL

For further details of environmental compliance, please contact Kaelus.

Temperature range	-40°C to +70°C -40°F to +158°F
Ingress protection	IP67
Lightning protection	5kA maximum (8/20us)
MTBF	> 1,000,000 Hours
Compliance	Operation: ETSI EN 300 019 class 4.1E Storage: ETS 300 019-1-1 class 1.3E Transport: ETS 300 019-1-2 class 2.3 RoHS

MECHANICAL		
Feature	Dual Unit (6 in / 2 out)	Quad Unit (12 in / 4 out)
Dimensions H x D x W	150 x 95 x 190mm 5.89 x 3.73 x 7.48in	150 x 190 x 190mm 5.89 x 7.48 x 7.48in
Weight	4.7kg	9.2kg
Finish	Powder Coated, light grey, NCS 1502-R	
Connectors	4.3-10 (F) long neck	
Mounting	Pole/wall bracket supplied with two metal clamps for 45-178 mm diameter poles	

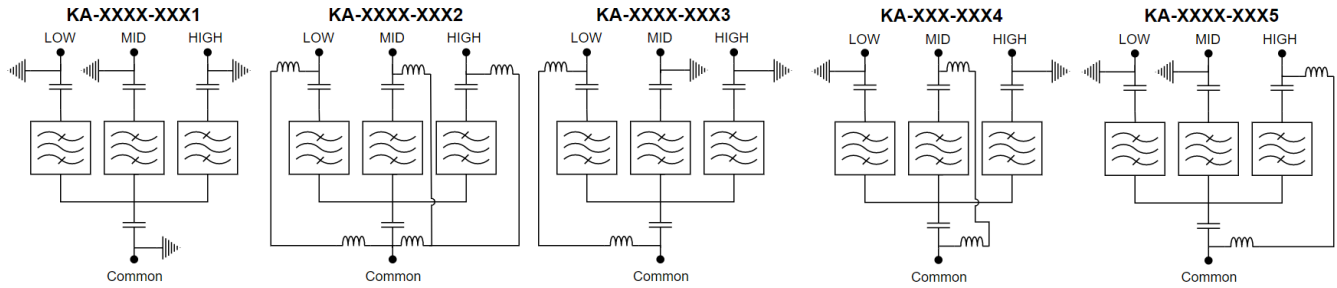
SHIPPING INFORMATION		
Feature	Dual Unit (6 in / 2 out)	Quad Unit (12 in / 4 out)
Carton size	300 x 267 x 200mm	300 x 267 x 290mm
Gross weight (including packaging)	5.3kg	9.9kg

ORDERING INFORMATION

PART NUMBER	CONFIGURATION	OPTIONAL FEATURES	CONNECTORS	DC/AISG CONFIGURATION
KA-3003-2032	6 in / 2 out	FIXED DC FACTORY CONFIGURABLE	4.3-10 (F)	DC TO ALL
KA-3003-4032	12 in / 2 out	FIXED DC FACTORY CONFIGURABLE	4.3-10 (F)	DC TO ALL

Note: DC autosense versions available, contact Kaelus for information

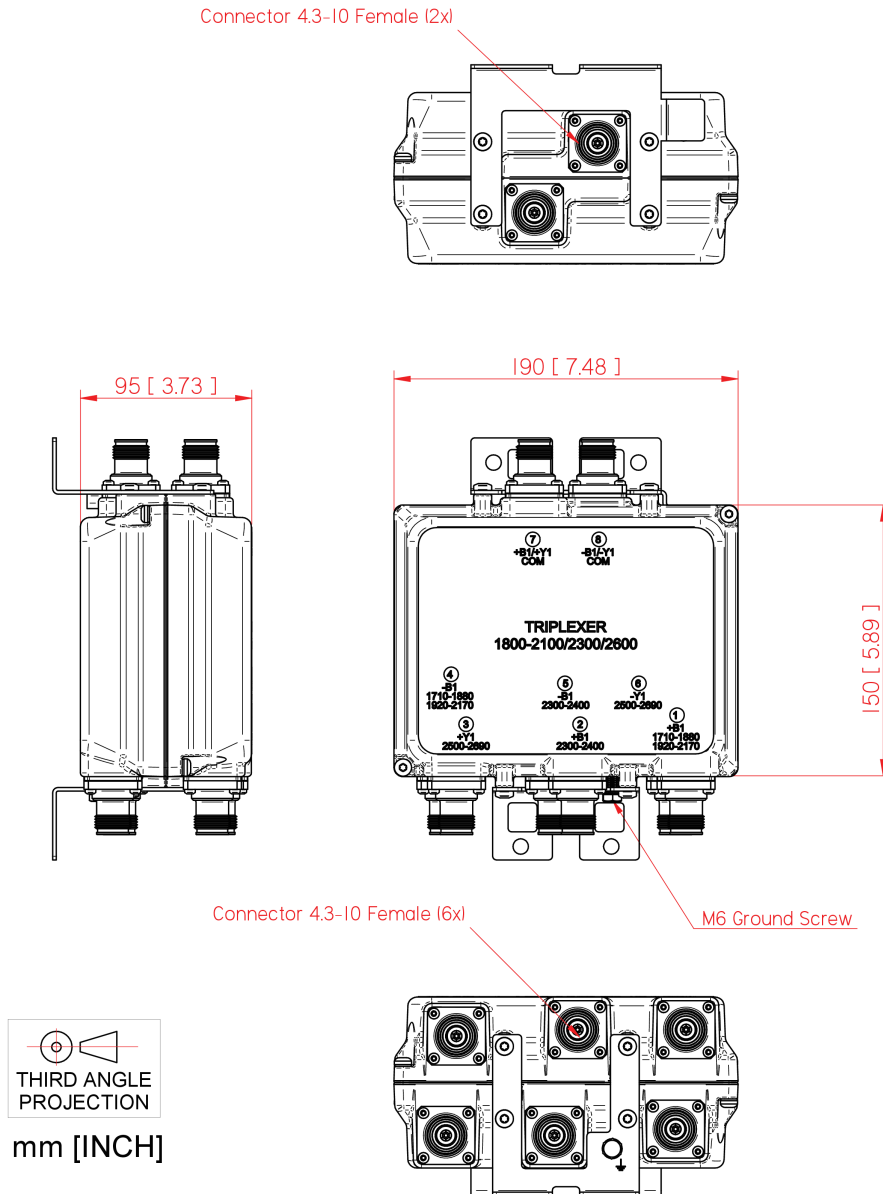
ELECTRICAL BLOCK DIAGRAM



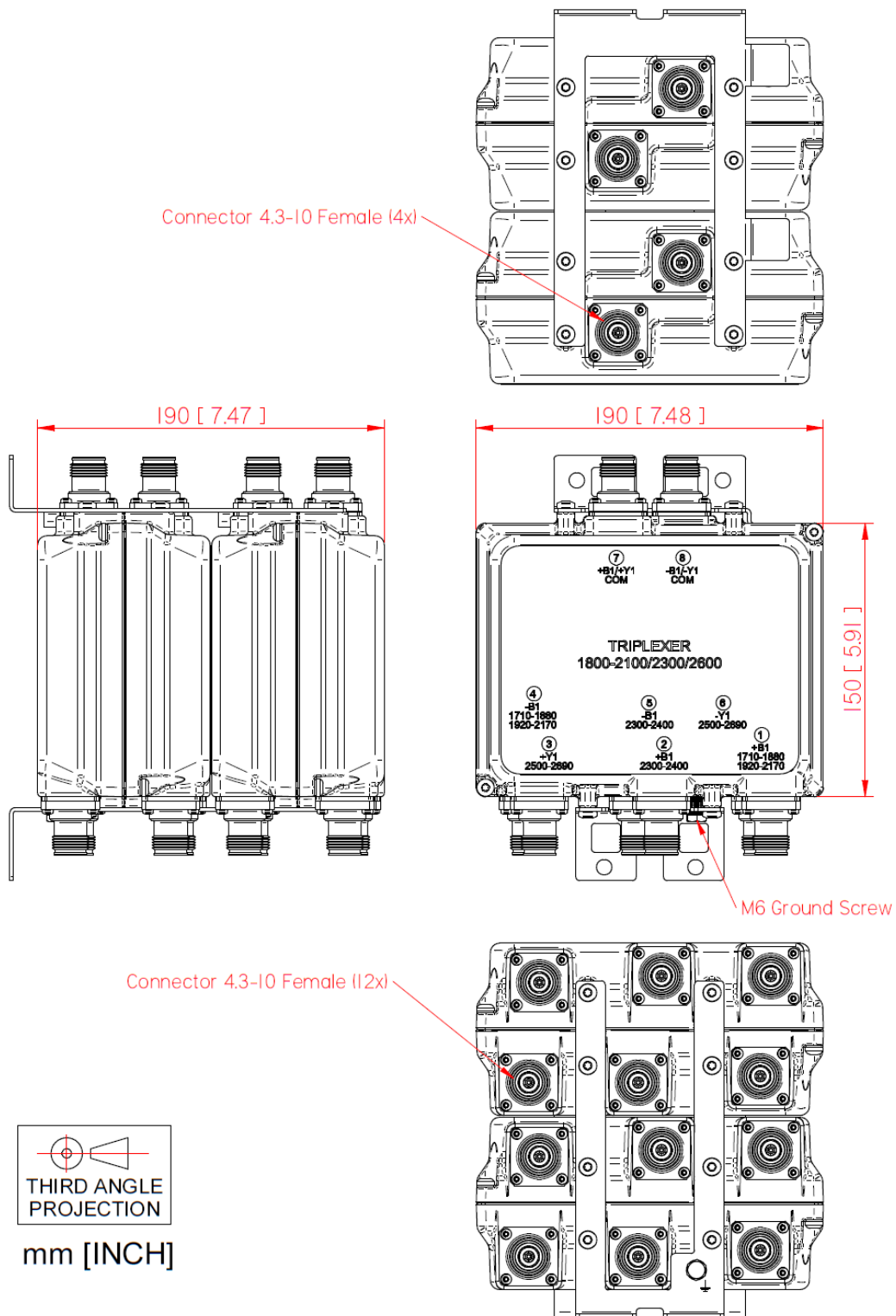
KA-3003-**XXXZ** where **Z** denotes the DC path variant

- **LOW** port is 1800-2100 band
- **MID** port is 2300 band
- **HIGH** port is 2600 band

MECHANICAL BLOCK DIAGRAM



KA-3003-2032



KA-3003-4032