

KA-6008-8433

3.7GHZ BAND INTERFERENCE MITIGATION FILTER

The KA-6008-8433 is an interference mitigation filter tunable to two different positions: when set to position one, it rejects interference in the Satellite Communication Band (3820-3980MHz) band while passing 3700-3760MHz (A1/A2/A3 Block). When the Satellite Communication Band is vacated, the filter can be reconfigured to position two to pass 3700-3980MHz (A, B and C block). The change of configuration can be performed remotely via AISG. Capable of being used in an outdoor environment, the KA-6008-8433 contains eight identical filters, suitable for 8x8 MIMO configuration, offering excellent insertion loss and rejection.

FEATURES

- Remote tunable filter set to 2 positions: position one, passing A1/A2/A3 block only, mitigates interference in the Satellite Communication band and position two allows the full 3.7GHz (A, B and C block) spectrum use, once the Satellite Communication band has been vacated.
- Low insertion loss
- Outdoor and indoor configurations
- 8 in, 8 out configuration suitable for 8x8 MIMO configuration



TECHNICAL SPECIFICATIONS

POSITION	POSITION 1 (FACTORY SETTING)	POSITION 2
Passband	3700-3760MHz	3700-3980MHz
Insertion loss	0.55 typ / 0.75dB maximum	0.35dB typ / 0.5dB max
Return loss	24dB typical, 20dB minimum	
Maximum input power	75W per channel	
Intermodulation products	-153dBc (2x20W, IM5)	
Group Delay Absolute	20ns typ, 30ns max	3ns typ, 4.5ns max
Group Delay Variation across 60MHz	7ns typ, 15ns max	1ns typ, 2ns max
Group Delay Tracking between channels	15ns ±5ns at 3700MHz 10ns ±5ns at 3730MHz 17ns ±10ns at 3760MHz	< 4.5ns
Rejection	60dB minimum @ 3820-3980MHz	N/A

ELECTRICAL

Impedance	50Ohms
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DC / AISG

Compliance	AISG2.0, 3GPP TS 25.461
Input voltage range	10 - 30V
DC current rating	2A average maximum, 4A peak
Power Consumption	2W maximum in idle state 15W maximum during tuning
Device Type	TMAAP
AISG command for device setting	Position 1: "TMA SET Mode" to Normal Mode Position 2: "TMA SET Mode" to Bypass Mode

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, Outdoor unit
Lightning protection	RF port: ±5kA maximum (8/20us), IEC 61000-4-5
MTBF	>500,000 hours
Compliance	ETSI EN 300 019 class 4.1E, RoHS

MECHANICAL	
Dimensions H x D x W	201 x 108 x 296mm 7.91 x 4.25 x 11.65in (Excluding brackets and connectors)
Weight	12kg 26.5lbs estimated
Finish	Powder coated, light grey (NCS 1502-R)
Connectors	RF: 4.3-10 (F)
Mounting	Pole/wall bracket supplied with two metal clamps 45-178mm diameter poles

ORDERING INFORMATION

MODELS			
PRODUCT NUMBER	CONFIGURATION	OPTIONAL FEATURES	CONNECTORS
KA-6008-8433	8 way, 8 in / 8 out	Tunable filter AISG IN on port BTS1	4.3-10 (F)

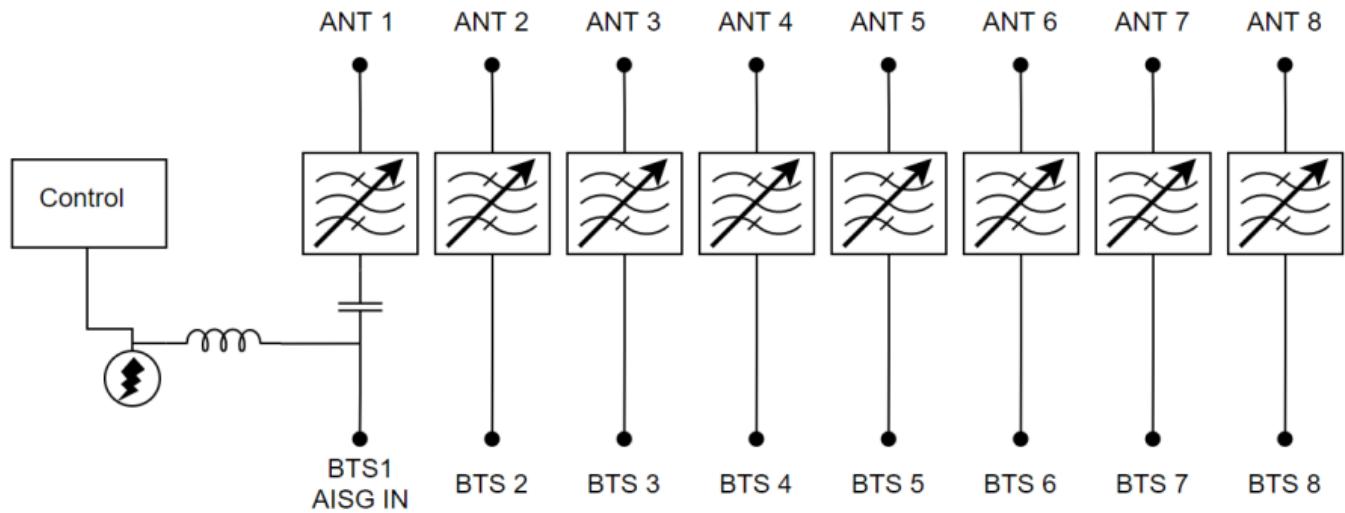
ACCESSORIES	
PRODUCT NUMBER	DESCRIPTION
KA-9007-0001	Low-PIM bracket

ELECTRICAL BLOCK DIAGRAM

KA-6008-WXYZ where

- **W** denotes the configuration: W=8, 8 way - 8:8
- **X** denotes the optional feature: X=0, basic - fixed tuned to position 1, X=4, tunable
- **Y** denotes the connector type: Y=3, 4.3-10 (F)
- **Z** denotes the DC configuration: Z=1, No DC, Z=3, DC on first port (BTS1)

KA-6008-8433 is shown



MECHANICAL BLOCK DIAGRAM

