

KA-1004

TMA TDD B42/B43 4X4 & 8X8 MIMO

Kaelus B42/B43 (3500MHz) TDD TMA KA-1004 can be deployed as a 4x4 or 8x8 MIMO.

FEATURES

- Improved base station sensitivity through gain in 3500MHz
- Suitable for 5G NR signals
- Full AISG operation and RET antenna support
- Small and light for minimum visual impact



TECHNICAL SPECIFICATIONS

BAND	B42/B43 (3500MHZ)
DOWNLINK	
Passband	200MHz Band within 3400 - 3800MHz
Insertion loss	1.3dB typical
Return loss	18dB minimum
Maximum input power	40W per channel
UPLINK	
Passband	200MHz Band within 3400 - 3800MHz
Bandwidth	Note: 200MHz Bandwidth, factory tunable anywhere within 3400 - 3800MHz
Gain	12dB
Return loss	18dB minimum
Bypass return loss	18dB minimum
Bypass loss	1.3dB typical
Noise figure	1.6dB typical
Output IP3	+25dBm typical
ELECTRICAL	
Impedance	50Ohms
AISG MODE OF OPERATION	
DC/AISG signal must be applied to the AISG IN port to power up the Low Noise Amplifiers (LNA) in the Uplink path. Each LNA is controlled uniquely by its sub-unit number.	
DC supply voltage	+9V to +30V DC
AISG version	2.0
Power consumption, AISG mode	2W per channel
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	RF: ±5kA maximum (8/20us), AISG: ±5kA maximum (common mode)
MTBF	1.0Mh (4x4), 0.5Mh (8x8)
Compliance	EMC:EN 301 489-50 SAFETY: IEC/EN 62368-1 OPERATION: ETSI 300 019-1-4. CLASS 4.1E STORAGE: ETSI 300 019-1-1, CLASS 1.2

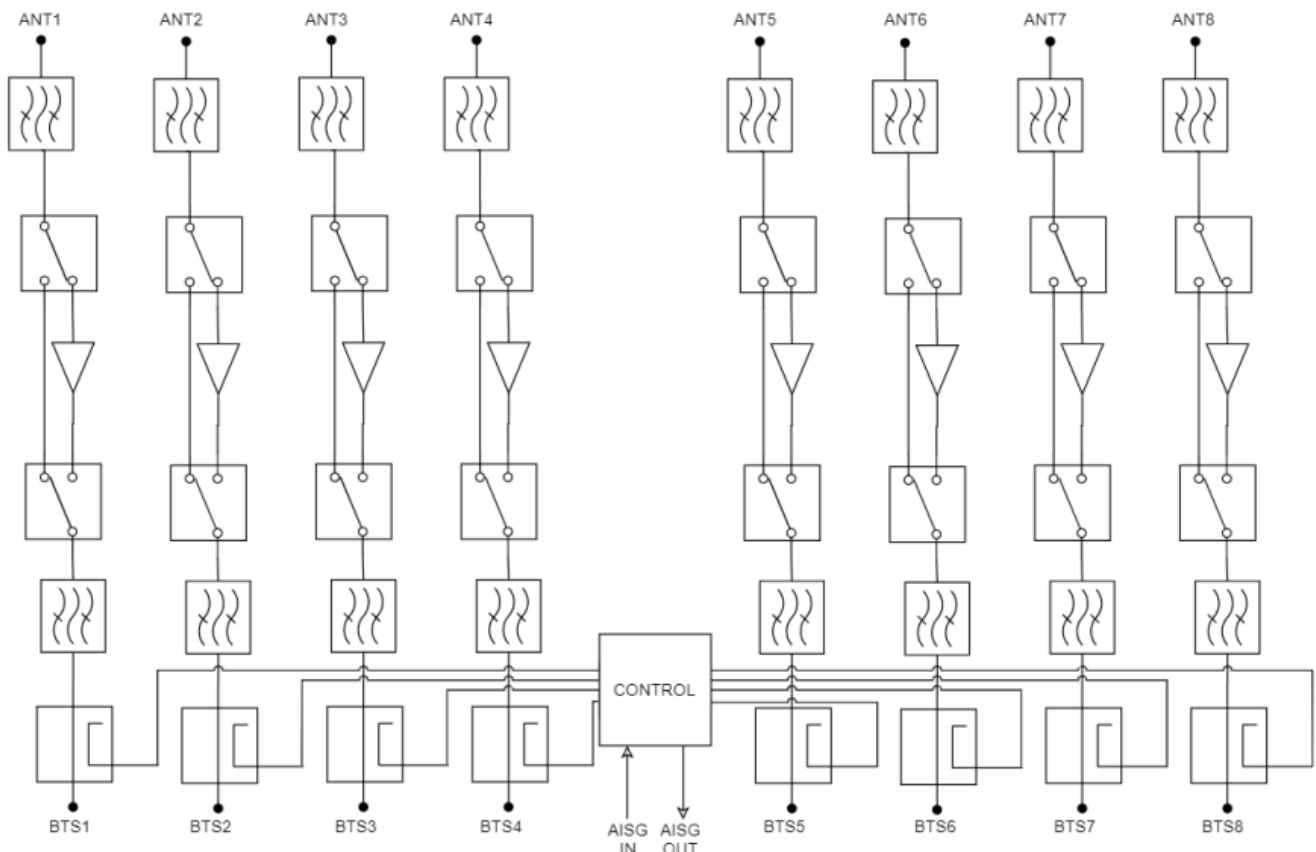
MECHANICAL		
Feature	8x8	4x4
Dimensions H x D x W	290x240x80 mm 11.4x9.5x3.1 in	290x240x44 mm 11.4x9.5x1.7 in
Volume	5.6 L	3.1 L
Weight	8.9kg 19.8 lbs	4.8kg 10.7 lbs
Finish	NCS 1502-R	
Wind Load	286 N @70 m/s	
Mounting	Pole/wall bracket supplied with two metal clamps 40-140mm diameter poles	

ORDERING INFORMATION

PART NUMBER	CONFIGURATION	PASSBAND	CONNECTORS	AISG MODE
KA-1004-4041	4x4, 4 in / 4 out	3400-3600MHz	NEX10(F)	ONEQUAD
KA-1004-4031	4x4, 4 in / 4 out	3400-3600MHz	4.3-10 (F)	ONEQUAD
KA-1004-8041	8x8, 8 in / 8 out	3400-3600MHz	NEX10(F)	ONEOCT
KA-1004-8031	8x8, 8 in / 8 out	3400-3600MHz	4.3-10 (F)	ONEOCT
KA-1004-4141	4x4, 4 in / 4 out	3600-3800MHz	NEX10(F)	ONEQUAD
KA-1004-4131	4x4, 4 in / 4 out	3600-3800MHz	4.3-10 (F)	ONEQUAD
KA-1004-8141	8x8, 8 in / 8 out	3600-3800MHz	NEX10(F)	ONEOCT
KA-1004-8131	8x8, 8 in / 8 out	3600-3800MHz	4.3-10 (F)	ONEOCT
Other frequency tuning available, please contact Kaelus.				

ELECTRICAL BLOCK DIAGRAM

CONFIGURATION: 8x8



MECHANICAL BLOCK DIAGRAM

