

KA-1006

TMA TDD 3700-4100 4X4 & 8X8 MIMO

Designed to be deployed with 3700-4100MHz TDD systems, the Kaelus KA-1006 enhances cell uplink coverage through improved system noise figure, thereby saving operational and capital expenditure. It can be used in 4x4 or 8x8 MIMO systems.

FEATURES

- Improved base station sensitivity through gain in 3700-4100MHz
- Suitable for 5G NR signals
- Full AISG operation and RET antenna support
- Small and light for minimum visual impact



TECHNICAL SPECIFICATIONS

BAND	3700-4100MHz
DOWNLINK	
Passband	200MHz Band within 3700 - 4100MHz
Insertion loss	1.3dB typical
Return loss	18dB minimum
Maximum input power	50W per channel
UPLINK	
Passband	200MHz Band within 3700 - 4100MHz
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: ±2.5kA maximum (common mode)
MTBF	1.0Mh (4x4), 0.5Mh (8x8)
Compliance	EMC: EN 301 489-50 Safety: EN 62368-1 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	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	

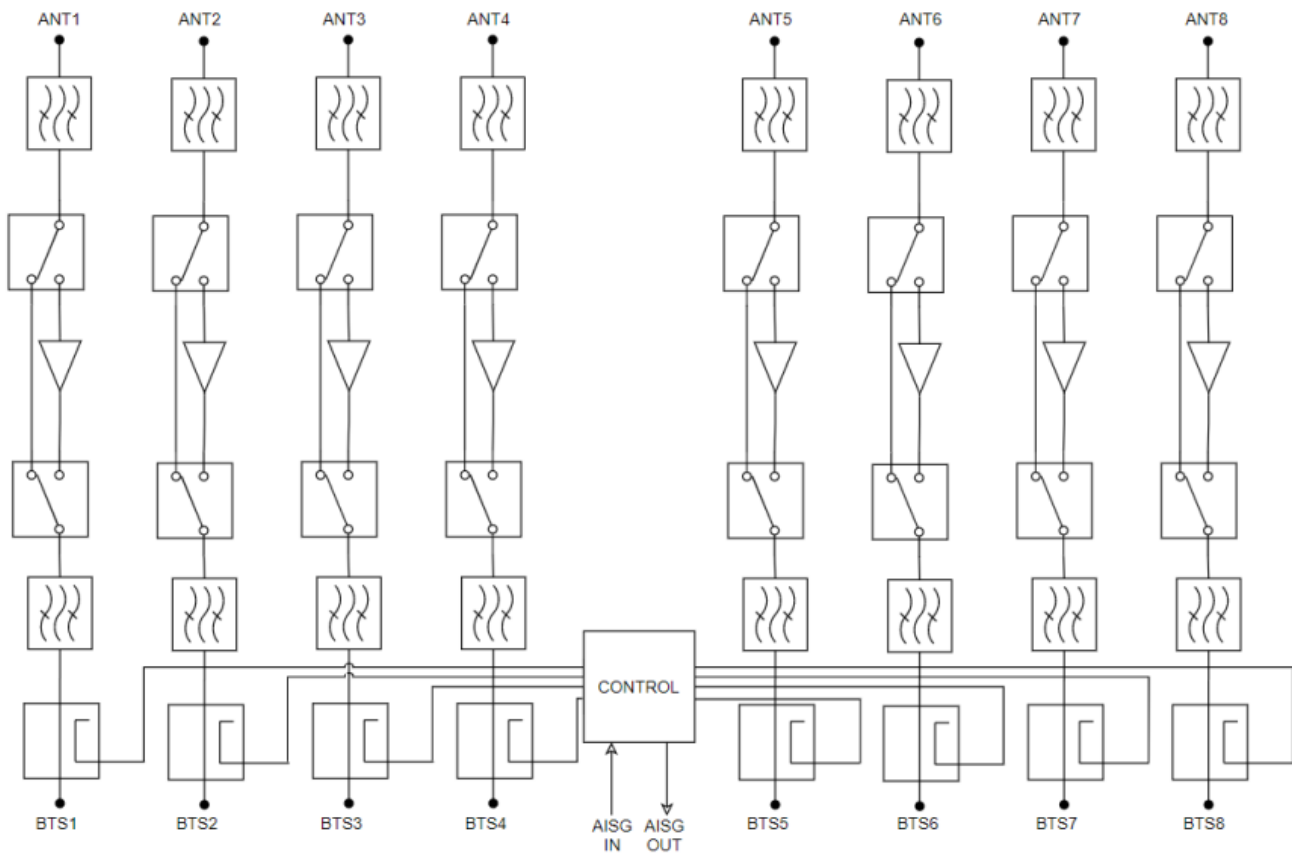
SHIPPING INFORMATION		
Carton size	400 x 500 x 200mm	400 x 500 x 160mm
Gross weight (including packaging)	9.9kg	5.8kg

ORDERING INFORMATION

PART NUMBER	CONFIGURATION	PASSBAND	CONNECTORS	AISG MODE
KA-1006-4041	4x4, 4 in / 4 out	3700-3900MHz	NEX10(F)	ONEFOR
KA-1006-4031	4x4, 4 in / 4 out	3700-3900MHz	4.3-10 (F)	ONEFOR
KA-1006-8041	8x8, 8 in / 8 out	3700-3900MHz	NEX10(F)	ONEOCT
KA-1006-8031	8x8, 8 in / 8 out	3700-3900MHz	4.3-10 (F)	ONEOCT
KA-1006-4141	4x4, 4 in / 4 out	3900-4100MHz	NEX10(F)	ONEFOR
KA-1006-4131	4x4, 4 in / 4 out	3900-4100MHz	4.3-10 (F)	ONEFOR
KA-1006-8141	8x8, 8 in / 8 out	3900-4100MHz	NEX10(F)	ONEOCT
KA-1006-8131	8x8, 8 in / 8 out	3900-4100MHz	4.3-10 (F)	ONEOCT
Other frequency tuning available, please contact Kaelus.				

ELECTRICAL BLOCK DIAGRAM

CONFIGURATION: 8x8



MECHANICAL BLOCK DIAGRAM

