

MI-168

TMA TWIN 1800/2600

Designed to be deployed in collocated 1800 and 2600 systems, the Kaelus MI-168 enhances cell uplink coverage in 1800 and 2600 through improved system noise figure, thereby saving operational and capital expenditure.

FEATURES

- Improved base station sensitivity through gain in the 1800 and 2600 uplink
- 4 Antenna ports
- Excellent noise figure performance
- Full AISG operation and RET antenna support, AISG2.0 compatible
- Small and light for minimum visual impact



TECHNICAL SPECIFICATIONS

BAND NAME	1800	2600
DOWNLINK		
Passband	1805 - 1880MHz	2620 - 2690MHz
Insertion loss	0.5dB typical 0.7dB max	0.4dB typical
Return loss	18dB minimum	
Maximum input power	200W (average)	200W (average)
Intermodulation products	-160dBc in RX band at ANT	
UPLINK		
Passband	1710 - 1785MHz	2500 - 2570MHz
Gain	12dB nominal	
Return loss	16dB minimum	
Bypass return loss	12dB minimum	
Bypass loss	2.7dB typical	2.6dB typical
Noise figure	1.5dB typical	
Output IP3	25dBm typical	
Maximum input power with no damage	12dB typical	
ELECTRICAL		
Impedance	50Ohms	
AISG MODE OF OPERATION (AUTO SELECTED ON VALID AISG 2.0 FRAMES)		
AISG signals can be applied to the BTS ports. The TMA unit switches to AISG mode when valid frames are detected on either port.		
DC supply voltage	+9.0V to +30V DC	
AISG version	1.1 or 2.0	
Power consumption, AISG mode	< 4W	
AISG connector, current rating	IEC60130-9, 8-pin female, 1.6A	

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
MTBF	>1,000,000 hours
Compliance	EMC: EN 301 489-8 Safety: IEC/EN 62368-1 Operation: ETSI EN 300 019-1-4 class 4.1E Storage: ETS 300 019-1-1 class 1.2

MECHANICAL	
Dimensions H x D x W	224 x 109 x 209 mm 8.8 x 4.3 x 8.2in (excluding brackets and connectors)
Weight	6.9kg 15.21lbs
Finish	Powder coated, NCS 1502-R
Connectors	See ordering information
Mounting	Pole/wall bracket using two metal clamps, suits 40-140mm diameter poles

SHIPPING INFORMATION	
Carton size	355 x 265 x 178 mm 13.98 x 10.43 x 7.01 in
Gross weight (including packaging)	7.7kg 16.98lb
Carton Qty / Pallet	48

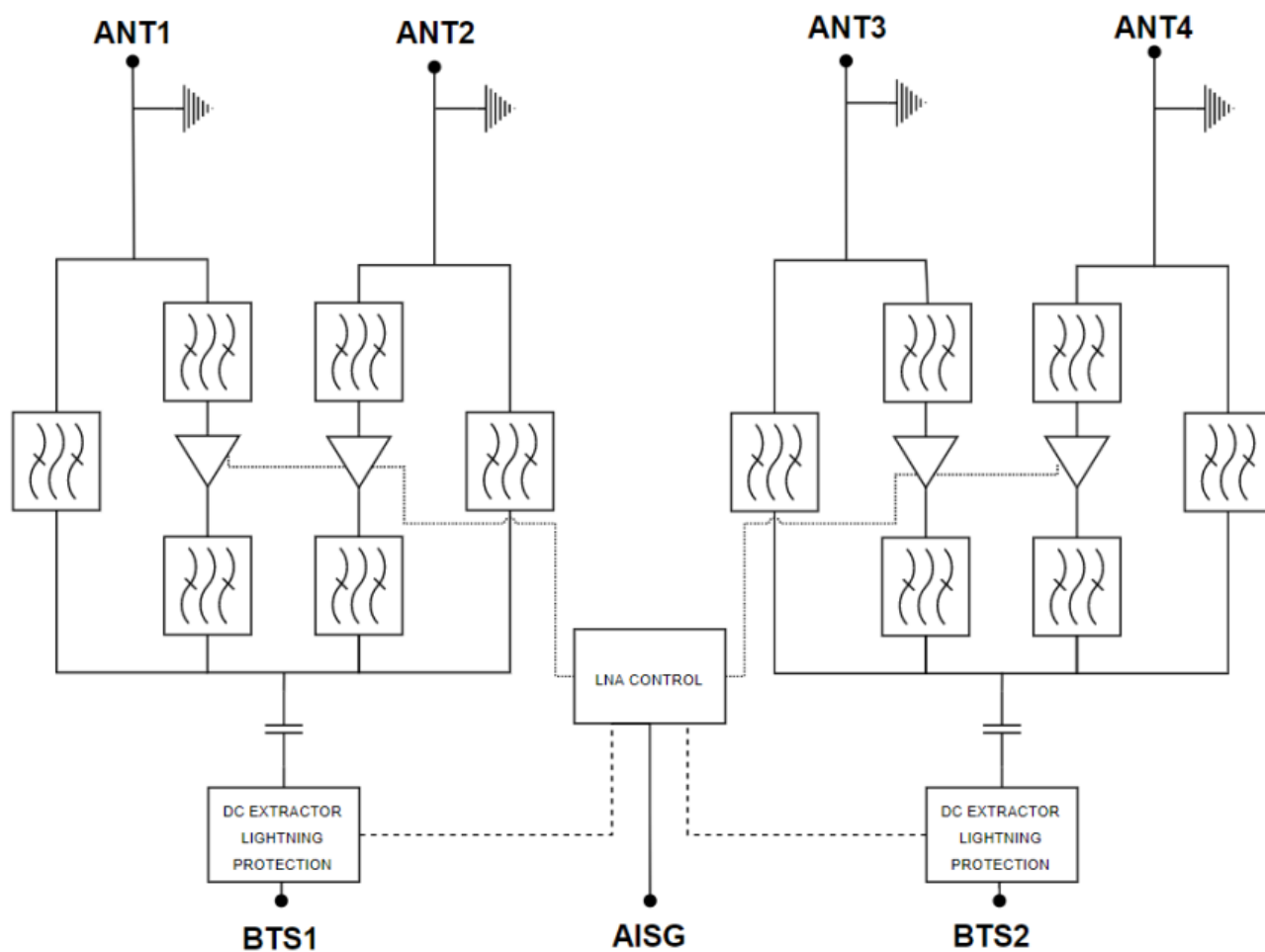
ORDERING INFORMATION

PART NUMBER	CONFIGURATION	OPTIONAL FEATURES	CONNECTORS	AISG MODE
MI-16801	TWIN, 2 in / 4 out	BASE MODEL	7/16 (F) 1xAISG	COMMON MODE ONETWO (*)
MI-16802	TWIN, 2 in / 4 out	BASE MODEL	7/16 (F) 1xAISG	COMMON MODE TWOTWO (**)
MI-16806	TWIN, 2 in / 4 out	BASE MODEL	7/16 (F) 2xAISG	INDEPENDENT
MI-16831	TWIN, 2 in / 4 out	BASE MODEL	4.3-10 (F) 1xAISG	COMMON MODE ONETWO (*)
MI-16832	TWIN, 2 in / 4 out	BASE MODEL	4.3-10 (F) 1xAISG	COMMON MODE TWOTWO (**)
MI-16836	TWIN, 2 in / 4 out	BASE MODEL	4.3-10 (F) 2xAISG	INDEPENDENT

(*) ONETWO: the TMA is identified as 1 logic unit with 2 subunits

(**) TWOTWO: the TMA is identified as 2 logic units with 2 subunits each

ELECTRICAL BLOCK DIAGRAM



MECHANICAL BLOCK DIAGRAM

