

MI-187

TMA TWIN 600/700

Designed to be deployed in collocated 600 and 700 systems, the Kaelus MI-187 enhances cell uplink coverage in 600 and 700 through improved system noise figure, thereby saving operational and capital expenditure.

FEATURES

- Improved base station sensitivity through gain in the 600 and 700 uplink
- Internal diplexing on the antenna port of 600 and 700 bands: 2 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	600	700
DOWNLINK		
Passband	617 - 652 MHz	728 - 746 MHz
Insertion loss	0.4dB typical	
Return loss	18dB minimum	
Maximum input power	200W (average)	200W (average)
Intermodulation products	-165dBc typical in RX band at ANT	
UPLINK		
Passband	663 - 698 MHz	698 - 716 MHz
Gain	12dB nominal	
Return loss	16dB minimum	
Bypass return loss	12dB minimum	
Bypass loss	1.7dB typical	
Noise figure	1.4dB typical	
Output IP3	25dBm 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. Each LNA is controlled uniquely by its sub-unit number.		
DC supply voltage	24 V DC nominal (+9.0V to +30V DC)	
AISG version	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
Lightning protection	RF: ±5kA (8/20us), AISG: ±2.5kA (8/20us) common mode
MTBF	>1,000,000 hours
Compliance	EMC: EN 301 489-50 Safety: EN 62368-1 Operation: ETSI EN 300 019-1-4 class 4.1E

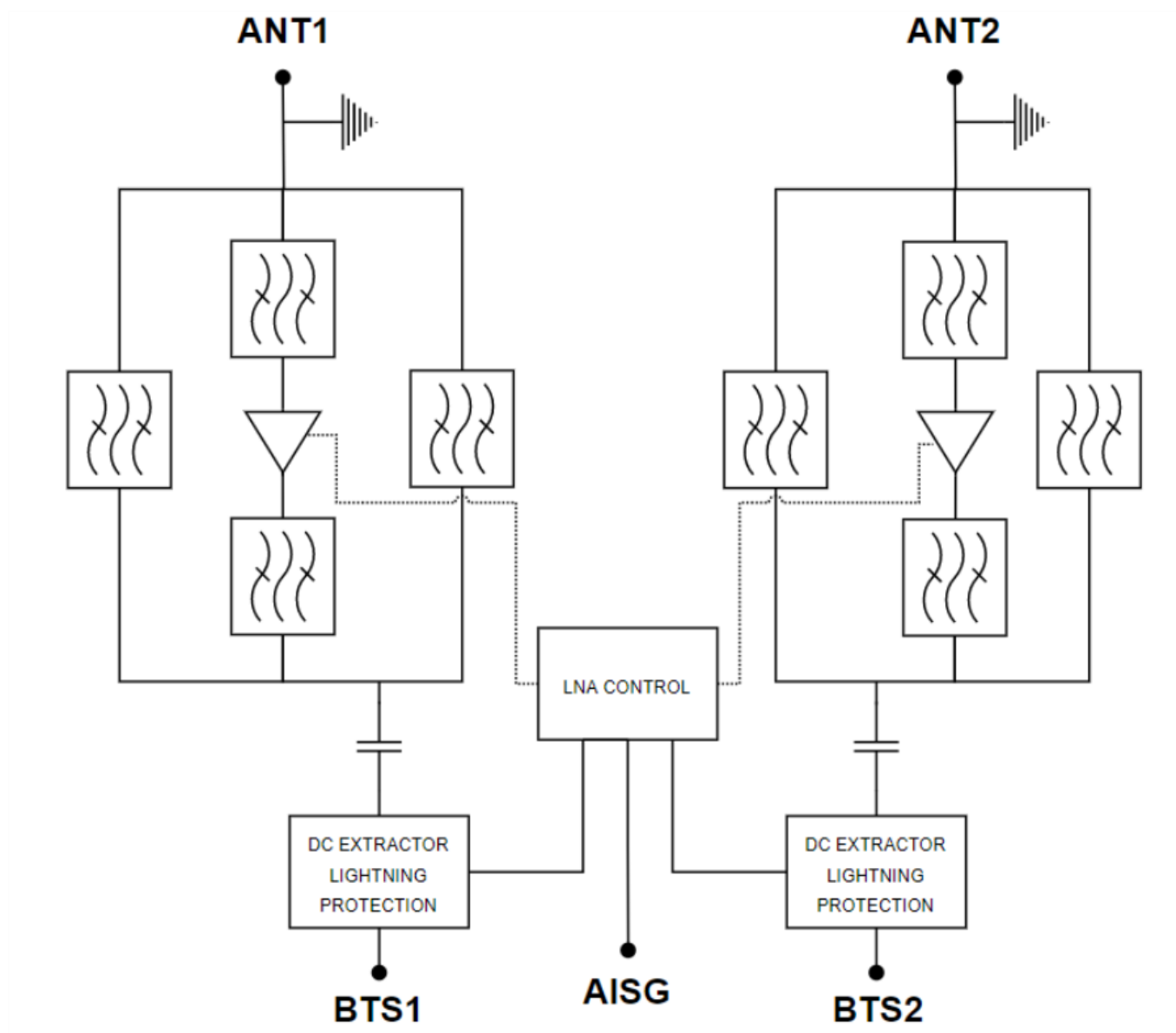
MECHANICAL	
Dimensions H x D x W	265 x159 x 246 mm 10.4 x 6.2 x 9.7in (excluding brackets and connectors)
Weight	11.0kg 24.25lbs
Finish	Powder coated, NCS 1502-R
Connectors	See ordering information
Wind Load	401 N @ 70 m/s
Mounting	Pole/wall bracket using two metal clamps, suits 40-140mm diameter poles

SHIPPING INFORMATION	
Carton size	360 x 320 x 200mm 12.6 x 12.6 x 7.9in2
Gross weight (including packaging)	12kg 26.5lb
Carton Qty / Pallet	32

ORDERING INFORMATION

PART NUMBER	CONFIGURATION	OPTIONAL FEATURES	CONNECTORS	AISG MODE
MI-18701	TWIN, 2 in / 2 out	BASE MODEL	7/16 (F) 1xAISG	COMMON MODE TWOTWO (*)
MI-18702	TWIN, 2 in / 2 out	BASE MODEL	7/16 (F) 1xAISG	COMMON MODE TRITWO (**)
MI-18706	TWIN, 2 in / 2 out	BASE MODEL	7/16 (F) 2xAISG	INDEPENDENT
MI-18731	TWIN, 2 in / 2 out	BASE MODEL	4.3-10 (F) 1xAISG	COMMON MODE TWOTWO (*)
MI-18732	TWIN, 2 in / 2 out	BASE MODEL	4.3-10 (F) 1xAISG	COMMON MODE TRITWO (**)
MI-18736	TWIN, 2 in / 2 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

