

MI-185

TMA TWIN 1800/2100/2600 WITH L-BAND BYPASS

Designed to be deployed in collocated 1800, 2100, 2600 and L band systems, the Kaelus MI-185 enhances cell uplink coverage in 1800, 2100 and 2600 through improved system noise figure, thereby saving operational and capital expenditure.

FEATURES

- Improved base station sensitivity through gain in the 1800, 2100 and 2600 uplink
- L-Band bypass
- Internal diplexing: 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	1800	2100	2600
DOWNLINK			
Passband	1805 - 1880MHz	2110 - 2170MHz	2620 - 2690MHz
Insertion loss	0.5dB typical	0.4dB typical	0.4dB typical
Return loss	20dB typical, 18dB minimum		
Maximum input power	200W (average)*	200W (average)*	200W (average)*
Intermodulation products	-160dBc in RX band at ANT		
UPLINK			
Passband	1710 - 1785MHz	1920 - 1980MHz	2500 - 2570MHz
Gain	12dB		
Return loss	16dB minimum		
Bypass return loss	12dB minimum		
Bypass loss	2dB typical	2.2dB typical	2dB typical
Noise figure	1.4dB typical	1.4dB typical	1.4dB typical
Output IP3	25dBm typical		
L-BAND			
Passband	1427 - 1517MHz		
Insertion loss	0.25dB typical		
Maximum input power	200W average (*)		
(*) Limited to 500W (average) combined power at the ANT and BTS ports			
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 +31V DC		
AISG version	2.0		
Power consumption, AISG mode	< 4W		
AISG connector, current rating	IEC60130-9, 8-pin female		

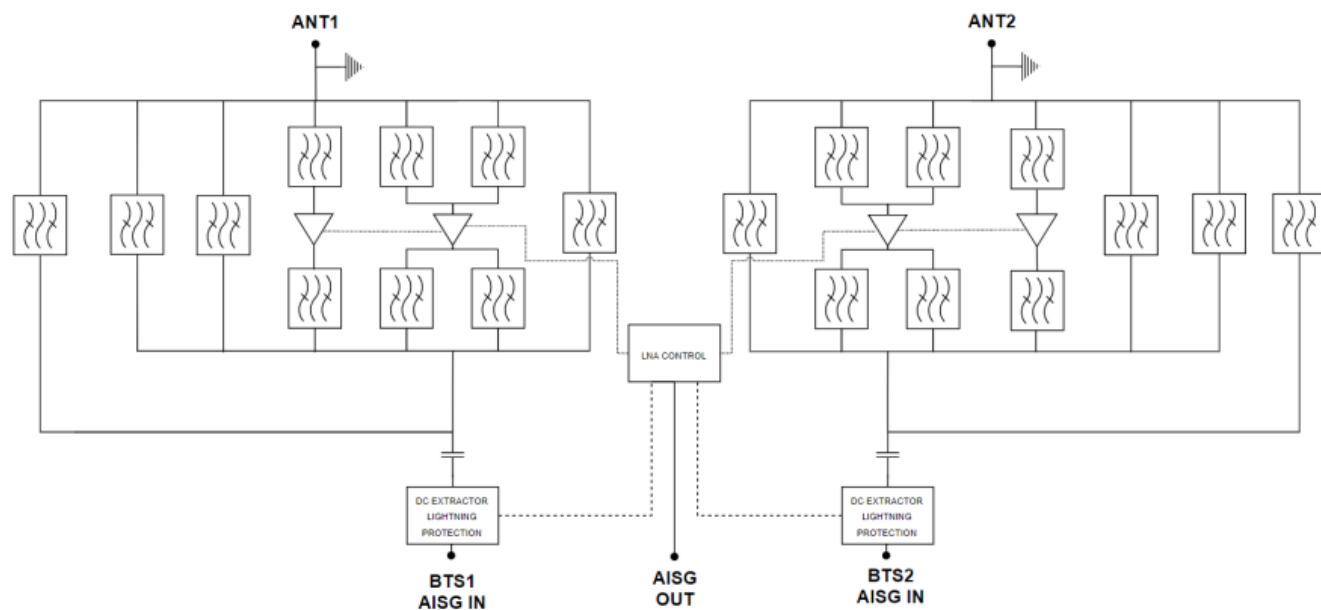
ENVIRONMENTAL	
For further details of environmental compliance, please contact Kaelus.	
Temperature range	-40°C to +65°C -40°F to +149°F
Ingress protection	IP67
Lightning protection	RF: ±5kA (8/20us), AISG: ±2.5kA (8/20us)
MTBF	>1,000,000 hours
Compliance	EMC: EN 301 489-23 Safety: IEC/EN 62368-1 Operation: ETSI EN 300 019-1-4 class 4.1E Storage: ETSI 300 019-1-1 class 1.2

MECHANICAL	
Dimensions H x D x W	226 x 111 x 341 mm 8.9 x 4.3 x 13.4in (excluding brackets and connectors)
Weight	10kg 22.05lbs
Finish	Powder coated, NCS 1502-R
Connectors	See ordering information
Mounting	Pole/wall bracket using two metal clamps, suits 40-140mm diameter poles

ORDERING INFORMATION

PART NUMBER	CONFIGURATION	OPTIONAL FEATURES	CONNECTORS	AISG MODE
MI-18501	TWIN, 2 in / 2 out	BASE MODEL	7/16 (F) 1xAISG	COMMON MODE TWOTWO (*)
MI-18502	TWIN, 2 in / 2 out	BASE MODEL	7/16 (F) 1xAISG	COMMON MODE TRITWO (**)
MI-18506	TWIN, 2 in / 2 out	BASE MODEL	7/16 (F) 2xAISG	INDEPENDENT
MI-18531	TWIN, 2 in / 2 out	BASE MODEL	4.3-10 (F) 1xAISG	COMMON MODE TWOTWO (*)
MI-18532	TWIN, 2 in / 2 out	BASE MODEL	4.3-10 (F) 1xAISG	COMMON MODE TRITWO (**)
MI-18536	TWIN, 2 in / 2 out	BASE MODEL	4.3-10 (F) 2xAISG	INDEPENDENT
(*) TWOTWO: the TMA is identified as 2 logic units with 2 subunits each				
(**) TRITWO: the TMA is identified as 3 logic units with 2 subunits each				

ELECTRICAL BLOCK DIAGRAM



MECHANICAL BLOCK DIAGRAM

