

MI-173

TMA TWIN 700/800/900

Designed to be deployed in co-located 700, 800 and 900 MHz systems with wideband antennas, this Tower Mounted Amplifier provides gain in all the bands.

FEATURES

- Improved base station sensitivity through gain in the 700, 800 and 900 uplink
- 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	700	800	900
DOWNLINK			
Passband	758-788MHz	791-821MHz	925-960MHz
Insertion loss	0.5dB 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	703-733MHz	832-862MHz	880-915MHz
Gain	12dB		
Return loss	16dB		
Bypass return loss	12dB		
Bypass loss	2.2dB typical		
Noise figure	1.4dB typical		
Output IP3	25dBm typical		
(*) Limited to 500W (average) combined power at the common 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. Each LNA is controlled uniquely by its sub-unit number.			
DC supply voltage	24 V DC nominal +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 +155°F
Ingress protection	IP67
MTBF	>1,000,000 hours
Compliance	EMC: EN 301 489-23 Safety: 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	265 x 149 x 335mm 10.45 x 5.87 x 13.18in (excluding brackets and connectors)
Weight	14kg 30.86lbs
Finish	Powder coated, NCS 1502-R
Mounting	Pole/wall bracket using two metal clamps, suits 40-140mm diameter poles

SHIPPING INFORMATION

ORDERING INFORMATION

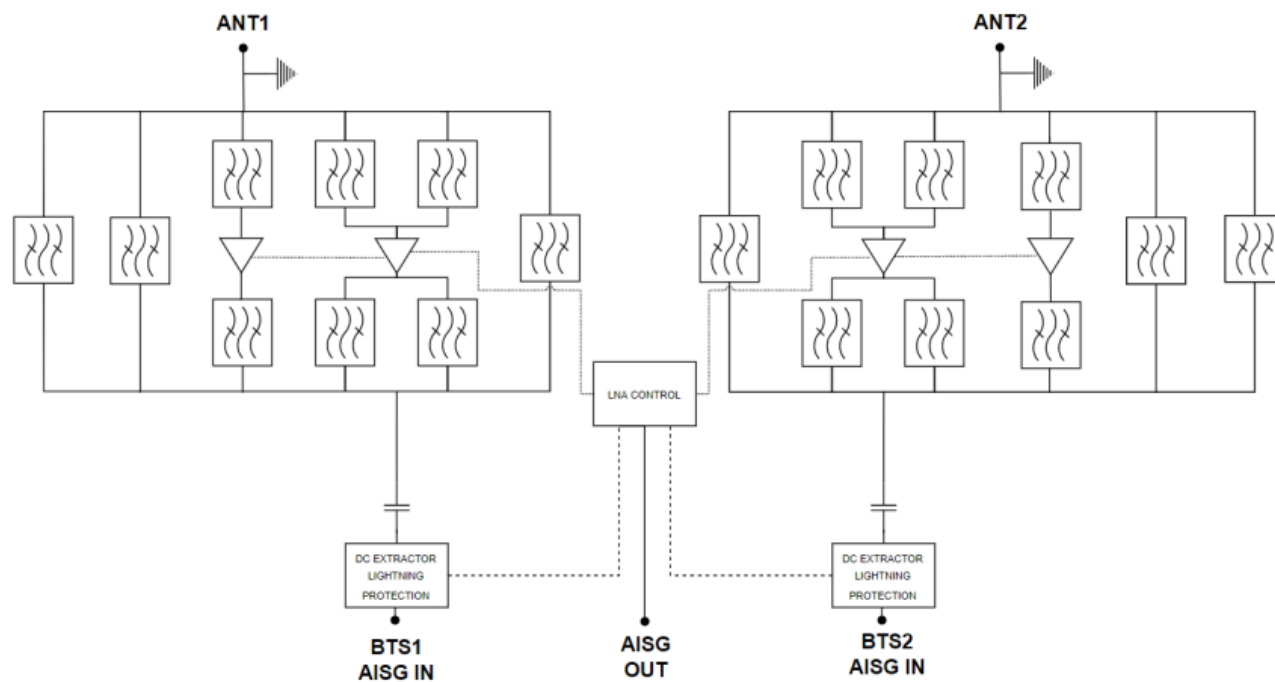
PART NUMBER	CONFIGURATION	OPTIONAL FEATURES	CONNECTORS	AISG MODE
MI-17301	TWIN, 2 in / 2 out	BASE MODEL	7/16 (F) 1 x AISG	TWOTWO
MI-17302	TWIN, 2 in / 2 out	BASE MODEL	7/16 (F) 1 x AISG	TRITWO
MI-17303	TWIN, 2 in / 2 out	BASE MODEL	7/16 (F) 1 x AISG	ONETWO
MI-17306	TWIN, 2 in / 2 out	BASE MODEL	7/16 (F) 2 x AISG	INDEPENDENT MODE
MI-17331	TWIN, 2 in / 2 out	BASE MODEL	4.3-10 (F) 1 x AISG	TWOTWO
MI-17332	TWIN, 2 in / 2 out	BASE MODEL	4.3-10 (F) 1 x AISG	TRITWO
MI-17333	TWIN, 2 in / 2 out	BASE MODEL	4.3-10 (F) 1 x AISG	ONETWO
MI-17336	TWIN, 2 in / 2 out	BASE MODEL	4.3-10 (F) 2 x AISG	INDEPENDENT MODE

Note: in the AISG mode "ONETWO " the multi band TMA is seen as 1 logic units with 2 subunits each and it is only required to connect to one of the two BTS ports. Either port can be used.

Note: in the AISG mode "TWOTWO " the multi band TMA is seen as 2 logic units with 2 subunits each and it is only required to connect to one of the two BTS ports. Either port can be used.

Note: in the AISG mode "TRITWO " the multi band TMA is seen as 3 logic units with 2 subunits each and it is only required to connect to one of the two BTS ports. Either port can be used.

ELECTRICAL BLOCK DIAGRAM



MECHANICAL BLOCK DIAGRAM

