



# MI-173nn

## TMA Twin 700/800/900



\*This photo is showing MI-17336

## General Description

Microdata Telecom's True Triple Band TMA provides network operators with a cost effective solution that delivers up to 50% improvement in uplink throughput while reducing dropped connections up to 20%.

The lower interference achieved with Microdata Telecom Triple Band TMA shifts the traffic to higher coding schemes which further improves network performance and capacity.

The PIM buffer effect of Microdata Telecom TMAs will enable profitable use of spectrum previously avoided due to PIM contamination.

## Features & Benefits

- Active LNA on all bands
- Market leading PIM performance ( -160 dBc across the product portfolio)
- Efficiently prepare your sites for future expansions
- Fully utilize the capabilities of your ultra-wideband antennas
- Triplexed BTS Port that enable antenna and feeder sharing
- Small and light for minimum visual impact
- Reduce tower loading with up to 75%
- Full AISG operation and RET (Remote Electrical Tilt) antenna support

## Specifications

Downlink (TX) Path	700	800	900
Frequency Band	758 - 788 MHz	791 - 821 MHz	925-960
Insertion Loss	0.5 dB*	0.5 dB*	0.5 dB*
Return Loss	≥ 18 dB	≥ 18 dB	≥ 18 dB
Continuous Average Power	200 W (53 dBm)	200 W (53 dBm)	200 W (53 dBm)
Intermod, 2x43 dBm TX@ BTS	-117 dBm in RX band, ANT port	-117 dBm in RX band, ANT port	-117 dBm in RX band, ANT port
Uplink (RX) Path			
Frequency Band	703 - 733 MHz	832 - 862 MHz	880-915 MHz
Gain	12 dB nominal	12 dB nominal	12 dB nominal
Return Loss	≥ 16 dB	≥ 16 dB	≥ 16 dB
Noise Figure	1.4 dB*	1.4 dB*	1.4 dB*
Insertion Loss, Bypass mode	2.2 dB*	2.2 dB*	2.2 dB*
Return Loss, Bypass mode	≥ 12 dB	≥ 12 dB	≥ 12 dB
Output IP3	25 dBm*	25 dBm*	25 dBm*
Power Supply and Alarm	AISG - Mode		
DC	24 V DC nominal (9-31 V DC)		
Power	< 4 W		
Alarm	3GPP/AISG 2.0		
Environmental			
Operating Temperature Range	-40 to +65°C   -40 to +149°F		
Operation	ETS 300 019-1-4, Class 4.1 E		
Storage	ETS 300 019-1-1, Class 1.2		
Ingress Protection	IP67		
Miscellaneous			
EMC	EN 301 489-23		
Safety standards	IEC/EN 62368-1		
MTBF	1 Mh/TMA min.		
Mechanical			
Dimensions (WxHxD)	335x266x149 mm   13.19x10.47x5.87 in		
Connectors (See Selection Guide)	2x ANT, 2x BTS, AISG Female 8 pin circular		
Mounting	Hose clamps, arbitrary orientation Supporter Pole Diameter: 40-140mm		
Volume	13.3 l		
Weight	14.0 kg   30.86 lb		
Colour	NCS 1502-R		
Bracket	Included		
	* typical		

## Selection Guide

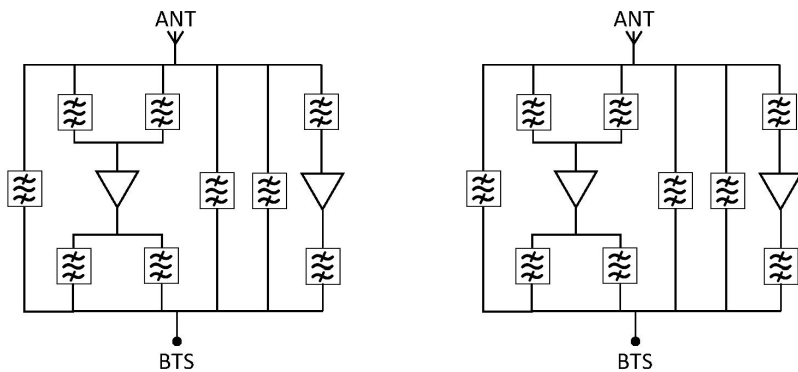
Model number	AISG		Connector (F)		
	Common Mode	Independent	7/16	4.3-10	AISG
MI-17301	X	TWOTWO <sup>1</sup>	X		1x
MI-17302	X	TRITWO <sup>2</sup>	X		1x
MI-17303	X	ONETWO <sup>3</sup>	X		1x
MI-17306			X	X	2x
MI-17331	X	TWOTWO <sup>1</sup>		X	1x
MI-17332	X	TRITWO <sup>2</sup>		X	1x
MI-17333	X	ONETWO <sup>3</sup>		X	1x
MI-17336			X	X	2x

<sup>1</sup>TWOTWO: the TMA is identified as 2 logic unit with 2 subunits each

<sup>2</sup>TRITWO: the TMA is identified as 3 logic units with 2 subunits each

<sup>3</sup>ONETWO: the TMA is identified as 1 logic unit with 2 subunits

## Block Diagram



## Mechanical Drawing

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