



MI-175nn TMA Twin 700/900



*This photo is showing MI-17536

General Description

Microdata Telecom's 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 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
- Diplexed 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	900		
Frequency Band		see table below	925 - 960 MHz		
Insertion Loss		0.4 dB*	0.4 dB*		
Return Loss		≥ 18 dB	≥ 18 dB		
Continuous Average Power		200 W (53 dBm)	200 W (53 dBm)		
Intermodulation, 2x43 dBm TX Carrier BTS port		-117 dBm in RX band, ANT port	-117 dBm in RX band, ANT port		
Uplink (RX) Path					
Frequency Band		see table below	880 -915 MHz		
Gain		12 dB nominal	12 dB nominal		
Return Loss		≥ 16 dB	≥ 16 dB		
Noise Figure		1.1 dB*	1.1 dB*		
Insertion Loss, Bypass mode		1.7 dB*	1.7 dB*		
Return Loss, Bypass mode		≥ 12 dB	≥ 12 dB		
Output IP3		>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 4.1E			
Storage		ETS 300 019-1-1 Class 1.2			
Ingress Protection		IP67			
Lightning Protection		10 kA 8/20 μs (ANT, BTS) 5 kA common mode (RET port)			
Miscellaneous					
EMC		EN 301 489-8			
Safety standards		EN 60950			
MTBF		1 Mh/TMA min.			
Mechanical					
Dimensions (WxHxD)		245x265x147 mm 9.65x10.43x5.79 in			
Connectors (See Selection Guide for specification)		2x ANT, 2x BTS, AISG Female 8 pin circular			
Mounting (Supporter Pole Diameter: 40-140mm)		Hose clamps, arbitrary orientation			
Volume		9.5 l			
Weight		< 12.0 kg			
Colour		NCS 1502-R			
Bracket		Included			
Versions		Downlink (Tx)	Uplink (Rx)		
MI-17501	MI-17506	MI-17531	MI-17536	743 - 788	703 - 733
MI-17502	MI-17507	MI-17532	MI-17537	753 - 798	713 - 743
MI-17503	MI-17508	MI-17533	MI-17538	763 - 803	723 - 753

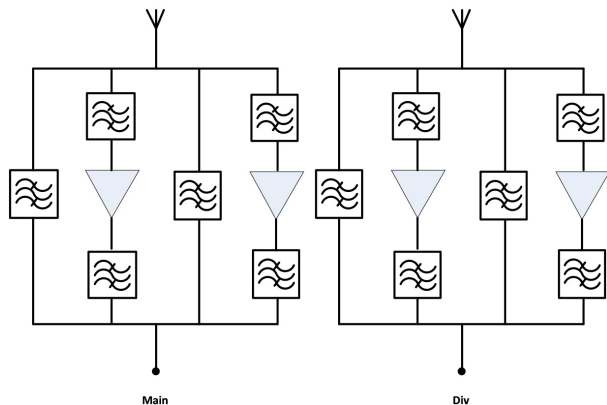
* typical

Selection Guide

Model number			AISG		Connector (F)			
			Common Mode	Independent	7/16	4.3-10	AISG	
MI-17501	MI-17502	MI-17503	X	ONETWO ¹		X		1x
MI-17506	MI-17507	MI-17508			X	X		2x
MI-17531	MI-17532	MI-17533	X	ONETWO ¹			X	1x
MI-17536	MI-17537	MI-17538			X		X	2x

¹ONETWO: the TMA is identified as a logic unit with 2 subunits

Block Diagram



Mechanical Drawing

*This picture is showing MI-17506

