



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
Input Power	+10dBm	+10dBm
Power Supply and Alarm		AISG - Mode
DC		24 V DC nominal (9-30 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	5 kA 8/20 μs (ANT, BTS) 3 kA (RET port)	
Miscellaneous		
EMC	EN 301 489-50	
Safety standards	IEC/EN 62368-1	
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 gross/net	12.7 kg / 11.80 kg 28.0 lb / 26.01 lb	
Colour	NCS 1502-R	
Bracket	Included	
Versions	Downlink (Tx)	Uplink (Rx)
MI-17501 MI-17504 MI-17506 MI-17531 MI-17534 MI-17536	743 - 788	703 - 733
MI-17502 MI-17505 MI-17507 MI-17532 MI-17535 MI-17537	753 - 798	713 - 743
MI-17503 MI-17509 MI-17508 MI-17533 MI-17539 MI-17538	758 - 803	718 - 748

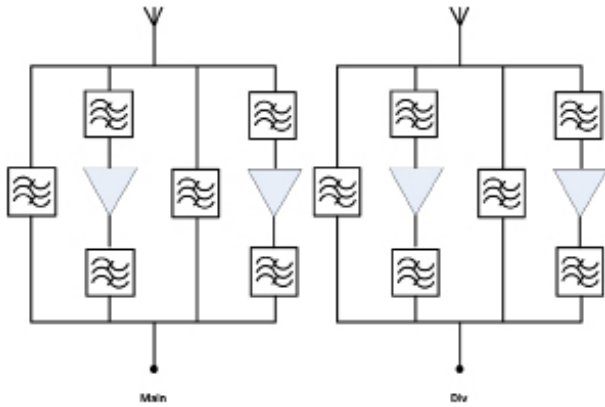
Selection Guide

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-17504 MI-17505 MI-17509	X	TWOTWO ²	X		1x
MI-17506 MI-17507 MI-17508			X	X	2x
MI-17531 MI-17532 MI-17533	X	ONETWO ¹		X	1x
MI-17534 MI-17535 MI-17539	X	TWOTWO ²		X	1x
MI-17536 MI-17537 MI-17538			X	X	2x

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

²TWOTWO: the TMA is identified as 2 logic units with 2 subunits each

Block Diagram



Mechanical Drawing

*This picture is showing MI-17506

