



# MI-165nn TMA Twin 800/900 MHz



This picture is showing MI-16506

## 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	800	900
Frequency Band	791 - 821 MHz	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	-116 dBm in RX band, ANT port	-116 dBm in RX band, ANT port
Uplink (RX) Path		
Frequency Band	832 - 862 MHz	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	≥ 12 dB	≥ 12 dB
Output IP3	>25 dBm	>25 dBm
Power Supply and Alarm	Current Alarm Mode	AISG - Mode
DC	9 - 15 V	24 V DC nominal (9-31 V DC)
Power	<165 mA @12V	< 4 W
Alarm	Factory config. max 320 mA	3GPP/AISG 2.0 or AISG 1.1
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	
Miscellaneous		
EMC	EN 301 489-8	
Safety standards	IEC/EN 62368-1	
MTBF	1 Mh/TMA min.	
Mechanical		
Dimensions (WxHxD)	230X245X155 mm   9.06x9.65x6.10 in	
Connectors (See Selection Guide)	4x ANT, 2x BTS, AISG Female 8 pin circular	
Mounting (Supporter Pole Diameter: 40-140mm)	Hose clamps, arbitrary orientation	
Volume	8.7 l	
Weight	9.5 kg   20.94 lb	
Colour	NCS 1502-R	
Bracket	Included	
Shipping Information		
Shipping weight (or Gross weight, including packaging)	10.0 kg	
Carton Size	TBD	
Carton Qty/Pallet	14	

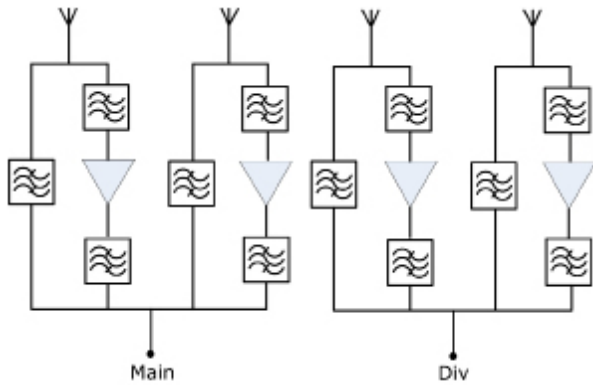
## Selection Guide

Model number	AISG		Connector (F)		
	Common Mode	Independent	7/16	4.3-10	AISG
MI-16501	X	ONETWO <sup>1</sup>	X		1x
MI-16502	X	TWOTWO <sup>2</sup>	X		1x
MI-16506			X		2x
MI-16531	X	ONETWO <sup>1</sup>		X	1x
MI-16532	X	TWOTWO <sup>2</sup>		X	1x
MI-16536			X	X	2x

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

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

## Block Diagram



## Mechanical Drawing

\*This picture is showing MI-12756

