MI-187nn
TMA Twin 600/700

*The picture is showing MI-18736

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	**600**	**700**
Frequency Band	617 - 652 MHz	728 - 746 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	165 dBc* in RX band, ANT port	165 dBc* in RX band, ANT port
Uplink (RX) Path		
Frequency Band	663 - 698 MHz	698 -716 MHz
Gain	12 dB nominal	12 dB nominal
Return Loss	≥ 16 dB	≥ 16 dB
Noise Figure	1.4 dB*	1.4 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 (9-30 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	
Ingress Protection	IP67	
Miscellaneous		
EMC	EN 301 489-50	
Safety standards	IEC/EN 62368-1	
MTBF	1 Mh/TMA min.	
Lightning Protection	5 kA 8/20 µs (ANT, BTS)	
	5 kA common mode (RET port)	
Mechanical		
Dimensions (WxHxD)	246x266x159 mm | 9.69x10.47x6.26 in	
Volume	10.4 l	
Weight (including brackets)	11 kg | 24.25 lb	
Connectors (See Selection Guide for specification)	2x ANT, 2xBTS, AISG Female 8 pin circular	
Mounting (Supporter Pole Diameter: 40-140mm)	Hose clamps, arbitrary orientation	
Colour	NCS 1502-R	
Bracket	Included	
Wind load	401 N @70 m/s	
Shipping Information		
Shipping weight(or Gross weight, including packaging)	12 kg | 26.46 lb	
Carton Size	320x320x200 mm | 12.60x12.60x7.87 in	
Carton Qty/Pallet	32	
* typical		

Selection Guide

Model number	AISG			Connector (F)		
	Common Mode		Indepedent	7/16	4.3-10	AISG
MI-18701	**X**	**ONETWO[1]**		**X**		**1x**
MI-18702	**X**	**TWOTWO[2]**		**X**		**1x**
MI-18706			**X**	**X**		**2x**
MI-18731	**X**	**ONETWO[1]**			**X**	**1x**
MI-18732	**X**	**TWOTWO[2]**			**X**	**1x**
MI-18736			**X**		**X**	**2x**

[1]ONETWO: the TMA is identified as 1 logic unit with 2 subunits each
[2]TWOTWO: the TMA is identified as 2 logic units with 2 subunits each

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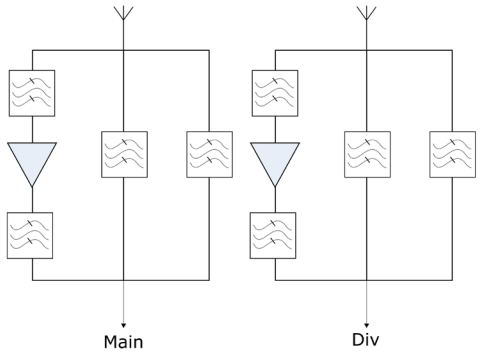
Block Diagram



Mechanical Drawing

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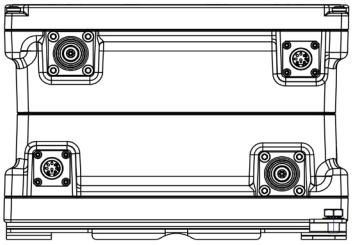

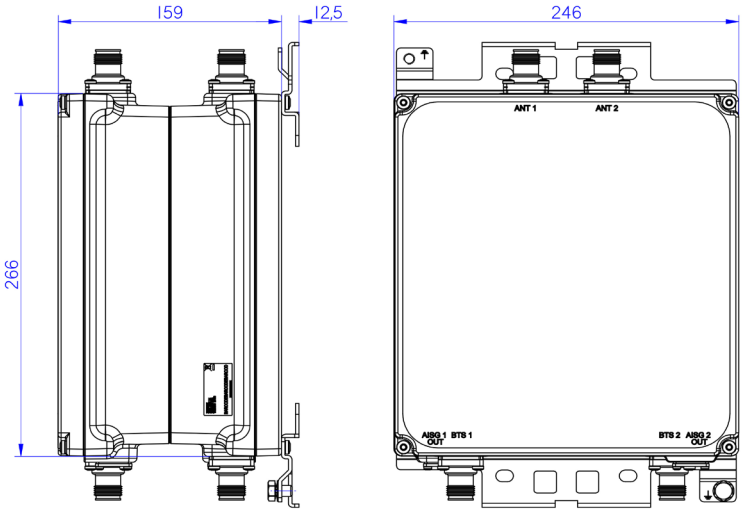

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