



# MI-180nn

## TMA Twin 1800/2100/2600



\*This photo is showing MI-18001

## 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	1800	2100	2600
Frequency Band	1805 - 1880 MHz	2110 - 2170 MHz	2620-2690
Insertion Loss	0.5 dB*	0.4 dB*	0.4 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	1710 - 1785 MHz	1920 - 1980 MHz	2500-2570 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	2.0 dB*	2.2 dB*	2.0 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		
Lightning Protection	10 kA 8/20 μs (ANT, BTS) 5 kA common mode (RET port)		
Miscellaneous			
EMC	EN 301 489-23		
Safety standards	IEC/EN 62368-1		
MTBF	1 Mh/TMA min.		
Mechanical			
Dimensions (WxHxD)	309x226X111 mm   12.17x8.90x4.37 in		
Connectors (See Selection Guide)	4x ANT (2x 1800/2100 2x 2600), 2x BTS, AISG Female 8 pin circular		
Mounting	Hose clamps, arbitrary orientation Supporter Pole Diameter: 40-140mm		
Volume	7.8 l		
Weight gross / net	11.1 kg / 10.3 kg   24.47 lb / 22.71 lb		
Colour	NCS 1502-R		
Bracket	Included		
Shipping Information			
Carton Size	390x390x220 mm   15.35x15.35x8.66 in		
Carton Qty/Pallet	36		
* typical			

## Selection Guide

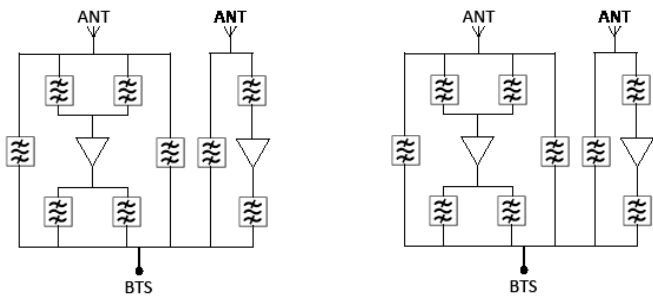
Model number	AISG		Connector (F)		
	Common Mode	Independent	7/16	4.3-10	AISG
MI-18001	X	TWOTWO <sup>1</sup>	X		1x
MI-18002	X	TRITWO <sup>2</sup>	X		1x
MI-18003	X	ONETWO <sup>3</sup>	X		1x
MI-18006			X		2x
MI-18031	X	TWOTWO <sup>1</sup>		X	1x
MI-18032	X	TRITWO <sup>2</sup>		X	1x
MI-18033	X	ONETWO <sup>3</sup>		X	1x
MI-18036			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

\*This picture is showing MI-18006

