



# MI-146nn TMA Twin 800/900



\*This photo is showing MI-14601

## 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

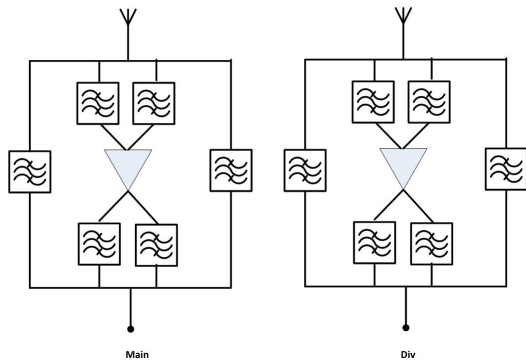
## Specifications

Downlink (TX) Path		800	900
Frequency Band		791 - 821 MHz	925 - 960 MHz
Insertion Loss		0.5 dB*	0.5 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		832 - 862 MHz	880 -915 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		<2.4 dB*	<2.4 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 301 489-23	
Safety standards		EN 60950	
MTBF		1 Mh/TMA min.	
Mechanical			
Dimensions (WxHxD)		230X245X160 mm   9.06x9.65x6.30 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		9.0 l	
Weight gross / net		9.8 kg / 9.0 kg   21.61 lb / 19.84 lb	
Colour		NCS 1502-R	
Bracket		Included	
Shipping Information			
Carton Size		390x290x230 mm   15.35x11.41x9.06 in	
Carton Qty/Pallet		32	
* typical			

## Selection Guide

Model number	AISG		Connector (F)		
	Common Mode	Independent	7/16	4.3-10	AISG
MI-14601	X	ONETWO		X	1x
MI-14602	X	TWOTWO		X	1x
MI-14606			X	X	2x
MI-14631	X	ONETWO			1x
MI-14632	X	TWOTWO			1x
MI-14636			X	X	2x

## Block Diagram



## Mechanical Drawing

\*This picture is showing MI-14601

