



*This photo is showing MI-14706

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		2100	2600
Frequency Band		2110 - 2170 MHz	2620 - 2690 MHz
Insertion Loss		0.30 dB*	0.35 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		-125 dBm in RX band, ANT port	-117 dBm in RX band, ANT port
Uplink (RX) Path			
Frequency Band		1920 - 1980 MHz	2500 -2570 MHz
Gain		12 dB nominal	12 dB nominal
Return Loss		≥ 16 dB	≥ 16 dB
Noise Figure		1.4 dB*	1.5 dB*
Insertion Loss, Bypass mode		1.9 dB*	2.0 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 (8 - 31 V DC)
Power			< 4 W
Alarm			AISG 2.0 (TWO mode default)
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)		154X184X110 mm 6.06x7.24x4.33 in	
Connectors (See Selection Guide)		2x ANT, 2x BTS, AISG Female 8 pin circular	
Mounting (Supporter Pole Diameter: 40-140mm)		Wall mount bracket	
Volume		3.1 l	
Weight gross / net		4.9 kg / 4.3 kg 10.80 lb / 9.48 lb	
Colour		NCS 1502-R	
Bracket		Included	
* typical			

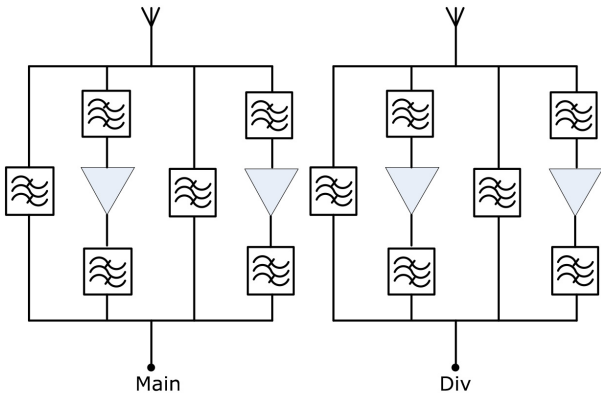
Selection Guide

Model number	AISG		Connector (F)		
	Common Mode	Independent	7/16	4.3-10	AISG
MI-14701	X	ONETWO ¹	X		1x
MI-14702	X	TWOTWO ²	X		1x
MI-14706			X		2x
MI-14731	X	ONETWO ¹		X	1x
MI-14732	X	TWOTWO ²		X	1x
MI-14736				X	2x

¹ONETWO: the TMA is identified as 1 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-14701

