



MI-190nn TMA Quad PCS/AWS



This picture is showing Quad version

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		PCS	AWS
Frequency Band		1930 - 1990 MHz	2110 - 2200 MHz
Insertion Loss		0.5 dB*	0.3 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		1850 - 1910 MHz	1695 -1780 MHz
Gain		12 dB +- 1.0* dB	12 dB +- 1.0* dB
Noise Figure		1.3 dB*	1.1 dB*
Insertion Loss, Bypass mode		2.2 dB*	1.5 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	
Storage		ETS 300 019-1-1 Class 1.2	
Ingress Protection		IP67	
Miscellaneous			
EMC		FCC part 15	
Safety standards		IEC/EN 62368-1	
MTBF		1.2 Mh/TMA min.	
Mechanical		Twin	Quad
Dimensions (WxHxD)		344x258x58.5 mm 12.87x10.16x2.3 in	344x258x109 mm 12.87x10.16x4.29 in
Volume		5.2 l	9.7 l
Weight		6.5 kg 14.33 lb	11 kg 24.25 lb
Connectors (See Selection Guide)		AISG Female 8 pin circular	
Mounting (Supporter Pole Diameter: 40-140mm)		Hose clamps, arbitrary orientation	
Colour		NCS 1502-R	
Bracket		Included	
*typical			

Selection Guide

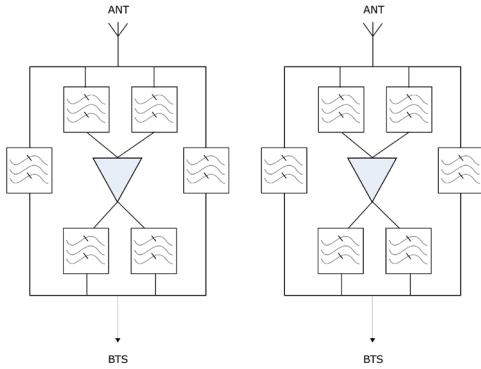
Model number	AISG		Connector (4.3-10 Female, long neck)		
	Common Mode		4 ANT 2 BTS	8 ANT 4 BTS	AISG
MI-19031	X	ONETWO ¹	X		1x
MI-19032	X	TWOTWO ²	X		1x
MI-19041	X	ONETWO ¹		X	2x
MI-19042	X	TWOTWO ²		X	2x

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

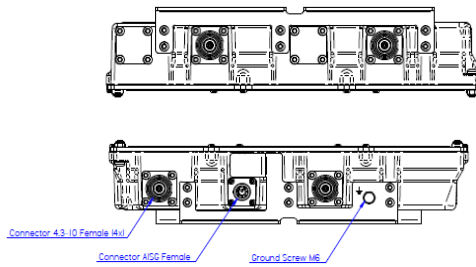
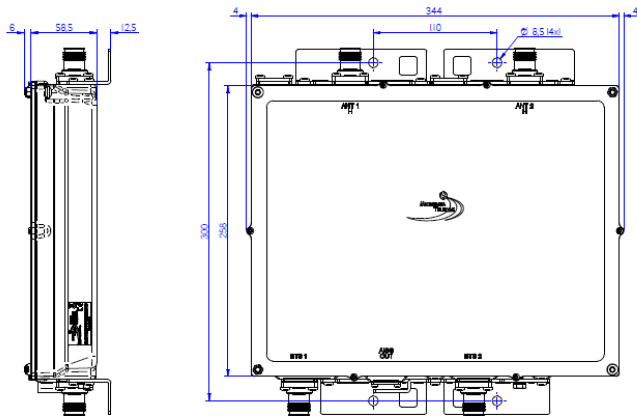
Block Diagram

Twin version



Mechanical Drawing

Twin version.



Quad version.

