

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

MI-171nn TMA Quad LB BP/PCS/AWS





This picture is showing MI-17101

Specifications

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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	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*				
Bypass path Low Band					
Frequency Band	617 - 869 MHz				
Insertion Loss	0.2 dB	0.2 dB			
Continuous Average Power	200 W (53 dBm)	200 W (53 dBm)			
Intermodulation, 2x43 dBm TX Carrier BTS port	165 dBc* dBm in RX band, ANT port				
Power Supply and Alarm		AISG - Mode			
DC		9-30 V DC			
Power		< 4 W			
Alarm		3GPP/AISG 2.0			
Environmental					
Operating Temperature Range	-40 to +65°C -40	-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				
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	9.7			
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)		
	Comr	non Mode	4 ANT 2 BTS	8 ANT 4 BTS	AISG
MI-17131	х	ONETWO ¹	x		1x
MI-17132	х	TWOTWO ²	x		1x
MI-17141	х	ONETWO ¹		x	2x
MI-17142	x	TWOTWO ²		х	2x

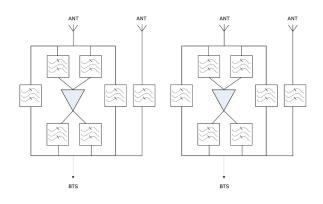
 $^1\text{ONETWO:}$ the TMA is identified as 1 logic unit with 2 subunits $^2\text{TWOTWO:}$ the TMA is identified as 2 logic units with 2 subunits each

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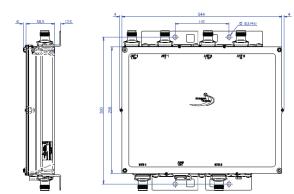
MI-171nn TMA Quad LB BP/PCS/AWS

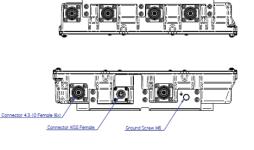
Block Diagram



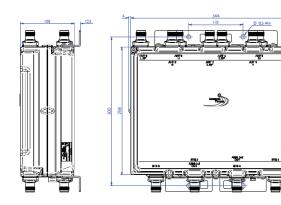
Mechanical Drawing This picture is showing MI-15301

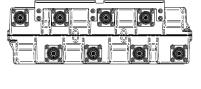
Twin version

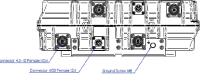




Quad version







All values in spec are subject to change without notice

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