



MI-17901

TMA Twin PCS/AWS

4xBTS Port



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.

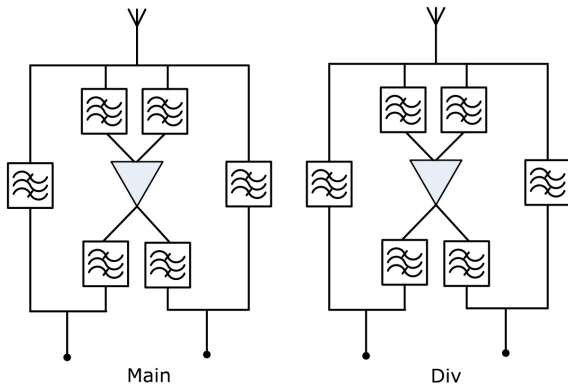
Features & Benefits

- 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 - 2155 MHz
Insertion Loss	< 0.65 dB	< 0.4 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	-116 dBm in RX band, ANT port	-125 dBm in RX band, ANT port
Uplink (RX) Path		
Frequency Band	1850 - 1910 MHz	1710 - 1755 MHz
Gain	12 dB nominal	12 dB nominal
Return Loss	≥ 16 dB	≥ 16 dB
Noise Figure	<1.5 dB	<1.3 dB
Insertion Loss, Bypass mode	<2.7 dB	<2.5 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 (DEF MODE: ONETWO)
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	
Miscellaneous		
EMC	EN 301 489-8/-23	
Safety standards	IEC/EN 62368-1	
MTBF	1 Mh/TMA min.	
Mechanical		
Dimensions (WxHxD)	224X209X109 mm 8.82X8.23X4.29 in	
Connectors	2x ANT 7/16 (F), 4x BTS 7/16 (F) 1x AISG Female 8 pin circular	
Mounting (Supporter Pole Diameter: 40-140mm)	Hose clamps, arbitrary orientation	
Volume	5.1 l	
Weight gross / net	7.2 kg / 6.5 kg 15.87 lb / 14.33 lb	
Colour	NCS 1502-R	
Bracket	Included	
* typical		

Block Diagram



Mechanical Drawing

*To be added