



MI-183nn

TMA Twin 1800/2100 L-band Bypass



*This picture is showing MI-1830n

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	L-band	1800	2100
Frequency Band	1427- 1496 MHz	1805 - 1880 MHz	2110 - 2170 MHz
Insertion Loss	0.25 dB*	0.5 dB*	0.3 dB*
Return Loss	> 18 dB	> 18 dB	> 18 dB
Continuous Average Power	200 W (53 dBm)	200 W (53 dBm)	200 W (53 dBm)
Intermodulation, 2x43 dBm BTS port		-117 dBm in RX band, ANT port	-125 dBm in RX band, ANT port
Uplink (RX) Path			
Frequency Band		1710 - 1785 MHz	1920 -1980 MHz
Gain		12 dB nominal	12 dB nominal
Noise Figure		1.4 dB*	1.3 dB*
Insertion Loss, Bypass mode		2.0 dB*	2.0 dB*
Return Loss		> 16 dB	> 16 dB
Output IP3		25 dBm*	25 dBm*
Power Supply and Alarm		Current Alarm Mode	AISG - Mode
DC		9 - 15 V	24 V DC nominal (9-31 V DC)
Power		<165 mA @12V	< 4 W
Alarm		Factory config. max 320 mA	3GPP/AISG 2.0 or AISG 1.1
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 301 489-8		
Safety Standards	IEC/EN 62368-1		
MTBF	1 Mh/TMA min.		
Mechanical			
Dimensions (WxHxD)	244x224x115 mm 9.61x8.82x4.53 in		
Connectors	See Selection Guide 2x ANT, 2x BTS, AISG Female 8 pin circular		
Mounting	Hose clamps, arbitrary orientation (Supporter Pole Diameter: 40-140mm)		
Volume	6.3 l		
Net Weight / Gross Weight	8.0 kg/9.0 kg 17.64 lb/19.84 lb		
Colour	NCS 1502-R		
Bracket	Yes		
Shipping Information			
Carton Size	360x260x180 mm 14.17x10.24x7.09 in		
Carton Qty/Pallet	TBD		
* typical			

Selection Guide

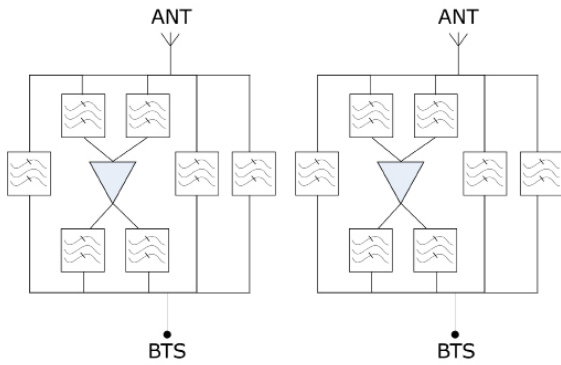
Model number	AISG		Connector (F)		
	Common Mode	Independent	7/16	4.3-10	AISG
MI-18301	X	ONETWO ¹	X		1x
MI-18302	X	TWOTWO ²	X		1x
MI-18306			X	X	2x
MI-18331	X	ONETWO ¹		X	1x
MI-18332	X	TWOTWO ²		X	1x
MI-18336			X	X	2x

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

All values in spec are subject to change without notice

Block Diagram



Mechanical Drawing

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