

TMA2146 | MI-137

TWIN TMA 800

Designed to be deployed with 800MHz systems, this Tower Mounted Amplifier provides gain in the 800MHz band and improves system noise figure, thereby saving operational and capital expenditure

FEATURES

- Improved base station sensitivity through gain in the 800MHz band
- Fail safe bypass mode with lightning protection
- High linearity and low noise performance
- Small light weight and easy to install



TECHNICAL SPECIFICATIONS

BAND	800
DOWNLINK	
Passband	791 - 821MHz
Insertion loss	0.5dB typical
Return loss	20dB typical, 18dB minimum
Maximum input power	200W
Intermodulation products	-160dBc maximum with 2 x 43dBm carriers in RX band at ANT
UPLINK	
Passband	832 - 862MHz
Gain	12dB nominal
Return loss	16dB minimum
Bypass return loss	12dB minimum
Bypass loss	1.7dB typical
Noise figure	1.3dB typical
Output IP3	+25dBm typical
Maximum input power with no damage	+12dBm
ELECTRICAL	
Impedance	50Ohms
AISG MODE OF OPERATION (AUTO SELECTED ON VALID AISG 2.0 FRAMES)	
AISG signals can be applied to the BTS ports. The TMA unit switches to AISG mode when valid frames are detected on either port. Each LNA is controlled uniquely by its sub-unit number.	
DC supply voltage	+9.0V to +30V DC
AISG version	2.0
Power consumption, AISG mode	<2W
AISG connector, current rating	IEC60130-9, 8-pin female

ENVIRONMENTAL	
For further details of environmental compliance, please contact Kaelus.	
Temperature range	-40°C to +65°C +40°F to +149°F
Ingress protection	IP67
Lightning protection	RF: ±5kA maximum (8/20us), AISG: ±2kA maximum (8/20us)
MTBF	>1,400,000 hours
Compliance	EMC: EN 301 489-50 Safety: EN 62368-1 Operation: ETSI EN 300 019 class 4.1E Storage: ETS 300 019-1-1 class 1.3E Transport: ETS 300 019-1-2 class 2.3 RoHS

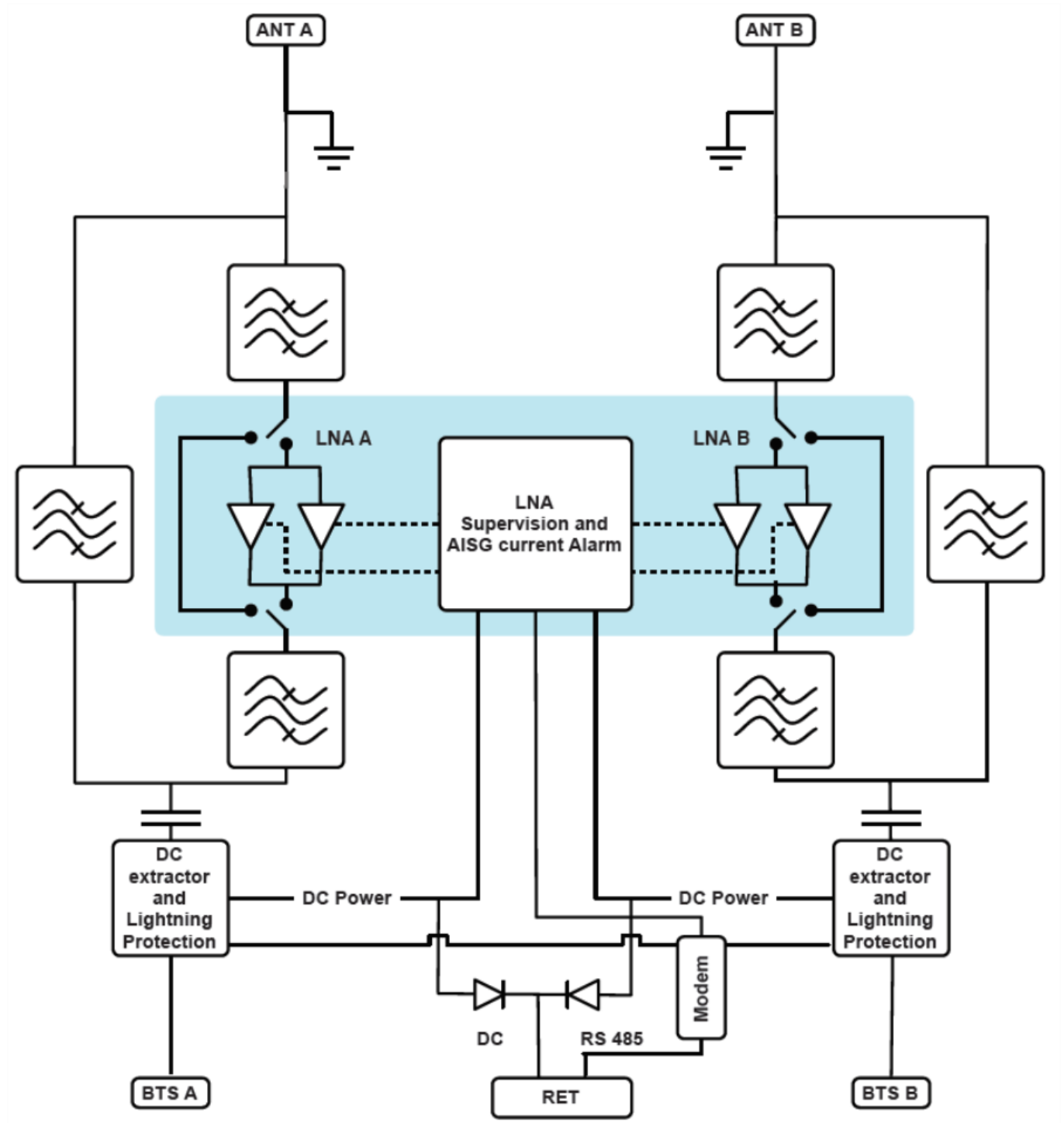
MECHANICAL	
Dimensions H x D x W	230 x 245 x 68 mm 9.05 x 9.65 x 2.68 in
Weight	5.7 kg 12.57 lbs
Finish	Powder coated, NCS 1502-R
Connectors	DIN 7-16 (F) long neck or 4.3-10 (F) long neck (see ordering information) AISG (F)
Mounting	Poll/wall bracket supplied with two metal clamps 40-140mm diameter poles

SHIPPING INFORMATION	
Carton size	380 x 300 x 160 mm
Gross weight (including packaging)	5.0kg
Carton Qty / Pallet	48

ORDERING INFORMATION

PART NUMBER	CONFIGURATION	OPTIONAL FEATURES	CONNECTORS	AISG MODE
TMA2146F01V1-1	TWIN, 2 in / 2 out	BASE MODEL - KAEIUS BRAND	4.3-10 (F)	Refer to AISG MODE OF OPERATION section
TMA2146F01V2-1	TWIN, 2 in / 2 out	BASE MODEL - KAEIUS BRAND	7-16 (F)	Refer to AISG MODE OF OPERATION section
MI-13731	TWIN, 2 in / 2 out	BASE MODEL - MICRODATA BRAND	4.3-10 (F)	Refer to AISG MODE OF OPERATION section
MI-13701	TWIN, 2 in / 2 out	BASE MODEL - MICRODATA BRAND	7-16 (F)	Refer to AISG MODE OF OPERATION section

ELECTRICAL BLOCK DIAGRAM



MECHANICAL BLOCK DIAGRAM

