

TMA2152 | MI-116

TWIN TMA 2100

Designed to be deployed with 2100MHz systems, this Tower Mounted Amplifier enhances cell uplink coverage through improved system noise figure, thereby saving operational and capital expenditure.

FEATURES

- Excellent noise figure performance
- AISG2.0 compatible
- Compact, low weight



TECHNICAL SPECIFICATIONS

BAND NAME	2100
DOWNLINK	
Passband	2110 - 2170MHz
Insertion loss	0.3dB typical
Return loss	20dB typical, 18dB minimum
Maximum input power	200W (average) / 2kW (PEP)
Intermodulation products	-168dBc in RX band at ANT
UPLINK	
Passband	1920 - 1980MHz
Gain	12dB
Return loss	18dB minimum
Bypass return loss	12dB
Bypass loss	2.0dB typical
Noise figure	1.3dB typical
Output IP3	+25dBm minimum
Maximum input power with no damage	+12dBm
RX in filter rejection @ 1805-1880	60dB minimum, 70dB typical
ELECTRICAL	
Impedance	50Ohms
POWER SUPPLY AND ALARM (CURRENT WINDOW ALARM MODE, DEFAULT)	
DC supply voltage	9V to 31V DC, case is DC ground via BTS-RF cable
DC supply current, normal mode	100-130mA maximum per port
DC supply current, alarm mode	170-180 mA per port (9-15V input)
AISG MODE OF OPERATION (AUTO SELECTED ON VALID AISG 2.0 FRAMES)	
The TMA unit switches to AISG mode when valid frames are detected on one of the BTS ports.	
DC supply voltage	9V to 31V DC
AISG version	2.0
Power consumption, AISG mode	2 W maximum

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	IEC61312-1, RF: ±5kA (8/20us), AISG: ±2.5kA common mode (8/20us)
MTBF	>1,000,000 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

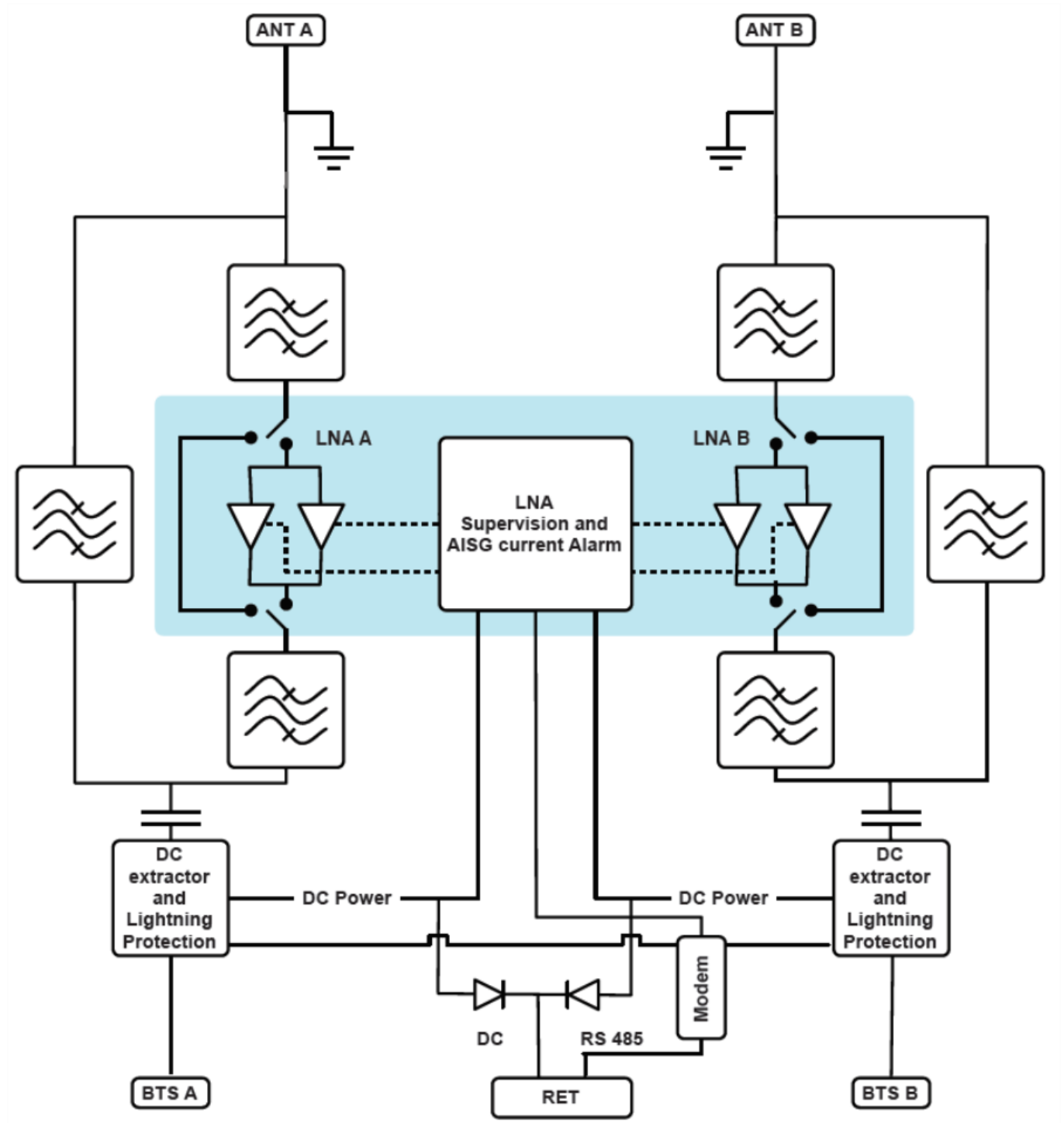
MECHANICAL	
Dimensions H x D x W	153.5 x 174 x 53mm 6.04 x 6.85 x 2.09in (excluding brackets and connectors)
Weight	2.4kg 5.29lbs
Finish	Powder coated, NCS 1502-R
Connectors	DIN 7-16 (F) long neck or 4.3-10 (F) long neck (see ordering information) AISG (F)
Mounting	Pole/wall bracket using two metal clamps, suits 40-140mm diameter poles

SHIPPING INFORMATION	
Carton size	270 x 210 x 130mm
Gross weight (including packaging)	3.6kg
Carton Qty / Pallet	72

ORDERING INFORMATION

PART NUMBER	CONFIGURATION	OPTIONAL FEATURES	CONNECTORS	DC/AISG CONFIGURATION
xx denotes customized CWA configuration				
TMA2152F01V1-1	TWIN, 2 in / 2 out	BASE MODEL	4.3-10 (F)	Refer to AISG MODE OF OPERATION section
TMA2152F01V2-1	TWIN, 2 in / 2 out	BASE MODEL	7-16 (F)	Refer to AISG MODE OF OPERATION section
MI-11631	TWIN, 2 in / 2 out	BASE MODEL	4.3-10 (F)	Refer to AISG MODE OF OPERATION section
MI-11601	TWIN, 2 in / 2 out	BASE MODEL	7-16 (F)	Refer to AISG MODE OF OPERATION section

ELECTRICAL BLOCK DIAGRAM



MECHANICAL BLOCK DIAGRAM

