

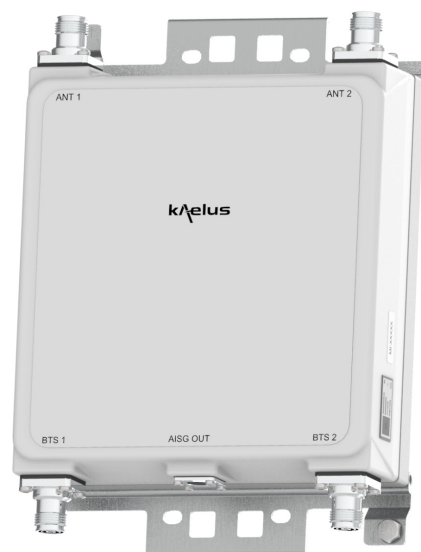
MI-163

TMA TWIN 900 E-GSM

Designed to be deployed in collocated 900 E-GSM systems, the Kaelus MI-163 enhances cell uplink coverage in 900 through improved system noise figure, thereby saving operational and capital expenditure.

FEATURES

- Improved base station sensitivity through gain in the 900 uplink
- Excellent noise figure performance
- Full AISG operation and RET antenna support, AISG2.0 compatible
- Small and light for minimum visual impact



TECHNICAL SPECIFICATIONS

BAND NAME		900 E-GSM
DOWNLINK		
Passband		925 - 960MHz
Insertion loss		0.55dB typical, 0.8dB maximum
Return loss		20dB typical, 18dB minimum
Maximum input power		200W (average)
Intermodulation products		-160dBc in RX band at ANT
UPLINK		
Passband		880 - 915MHz
Gain		12dB
Return loss		18dB typical, 16dB minimum
Bypass return loss		14dB typical, 12dB minimum
Bypass loss		2.7dB maximum
Noise figure		1.4dB typical
Output IP3		25dBm typical
ELECTRICAL		
Impedance		50Ohms
POWER SUPPLY AND ALARM (CURRENT WINDOW ALARM MODE, DEFAULT)		
Current window alarm mode (CWA) is the default operating mode and can be configured to specific customer requirements. Please contact Kaelus for more information.		
DC supply voltage		+9 to +15V DC
DC supply current, normal mode		100- 130mA @ 12V
DC supply current, alarm mode		170 - 180 mA (9 -15V input)
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.		
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	IEC61312-1, RF: ±5kA (8/20us), AISG: ±2.5kA (8/20us)
MTBF	>1,400,000 hours
Compliance	EMC: EN 301 489-8 Safety: EN 62368-1 Operation: ETSI EN 300 019-1-4 class 4.1E Storage: ETS 300 019-1-1 class 1.2

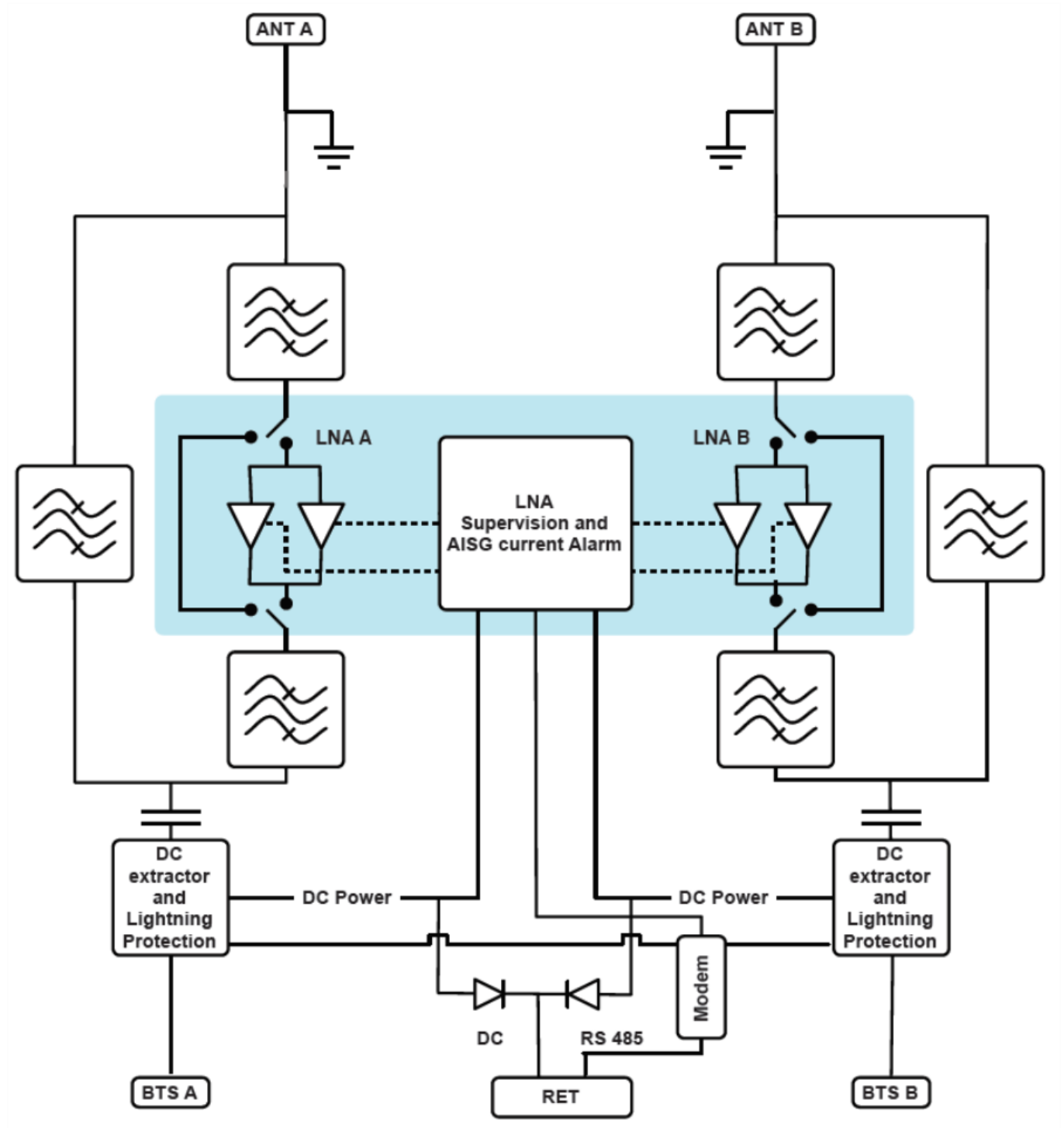
MECHANICAL	
Dimensions H x D x W	246 x 68 x 231 mm 9.7 x 2.7 x 9in (excluding brackets and connectors)
Weight	4.7kg 10.4lbs
Finish	Powder coated, NCS 1502-R
Connectors	4.3-10 (F) long neck or 7/16(F) AISG (F)
Mounting	Pole/wall bracket using two metal clamps, suits 40-140mm diameter poles

SHIPPING INFORMATION	
Carton size	375 x 299 x 169mm 14.76 x 11.77 x 6.65in
Gross weight (including packaging)	5.5kg 12.13lb
Carton Qty / Pallet	48

ORDERING INFORMATION

PART NUMBER	CONFIGURATION	OPTIONAL FEATURES	CONNECTORS	AISG MODE
MI-16301	TWIN, 2 in / 2 out	BASE MODEL	7/16 (F)	Refer to AISG MODE OF OPERATION section
MI-16331	TWIN, 2 in / 2 out	BASE MODEL	4.3-10 (F)	Refer to AISG MODE OF OPERATION section,

ELECTRICAL BLOCK DIAGRAM



MECHANICAL BLOCK DIAGRAM

