

MI-190

TMA TWIN PCS/AWS

Designed to be deployed in collocated PCS and AWS systems, the Kaelus MI-190 enhances cell uplink coverage in PCS and AWS through improved system noise figure, thereby saving operational and capital expenditure.



FEATURES

- Improved base station sensitivity through gain in the PCS and AWS uplink
- Internal diplexing on the antenna port of PCS and AWS bands: 2 or 4 Antenna ports(See ordering info)
- Excellent noise figure performance
- Full AISG operation and RET antenna support, AISG2.0 compatible
- Small and light for minimum visual impact
- Available as a twin or quad configuration

TECHNICAL SPECIFICATIONS

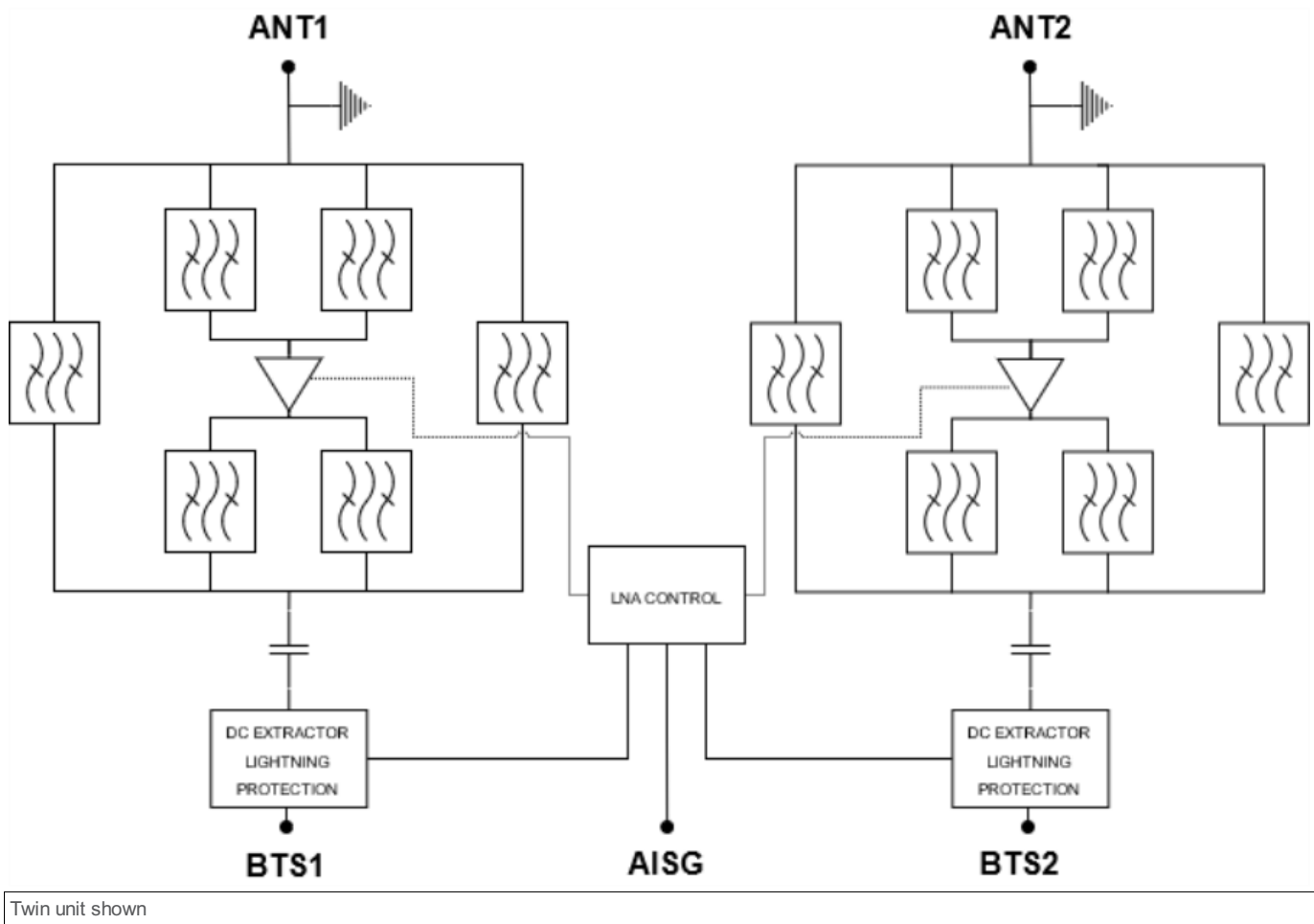
BAND NAME	PCS	AWS
DOWNLINK		
Passband	1930 - 1990MHz	2110 - 2200MHz
Insertion loss	0.5dB typical	0.3dB typical
Return loss	20dB typical, 18dB minimum	
Maximum input power	200W (average)	
Intermodulation products	-165dBc typical in RX band at ANT	
UPLINK		
Passband	1850 - 1910MHz	1695 - 1780MHz
Gain	12dB +/- 1dB typical	
Return loss	16dB	
Bypass loss	2.2dB typical	1.5dB typical
Noise figure	1.3dB typical	1.1dB typical
Output IP3	25dBm typical	
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.		
DC supply voltage	24 V DC Nominal +9.0V to +30V DC	
AISG version	2.0	
Power consumption, AISG mode	< 4W	
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	
MTBF	>1,200,000 hours	
Compliance	EMC:FCC part 15 Safety: IEC/EN 62368-1 Operation: ETSI EN 300 019-1-4 class 4.1E Storage: ETS 300 019-1-1 class 1.2	

MECHANICAL		
Feature	TWIN	QUAD
Dimensions H x D x W	258 x 58 x 344mm 10.1 x 2.3 x 13.5in	258 x 109 x 344mm 10.1 x 4.3 x 13.5in
Weight	6.5kg 14.33lbs	11kg 24.25lbs
Finish	Powder coated, NCS 1502-R	
Mounting	Pole/wall bracket using two metal clamps, suits 40-140mm diameter poles	

ORDERING INFORMATION

PART NUMBER	CONFIGURATION	OPTIONAL FEATURES	CONNECTORS	AISG MODE
MI-19031	TWIN, 2 in / 4 out	BASE MODEL	4.3-10 (F) 1xAISG	ONETWO (*)
MI-19032	TWIN, 2 in / 4 out	BASE MODEL	4.3-10 (F) 1xAISG	TWOTWO (*)
MI-19041	TWIN, 4 in / 8 out	BASE MODEL	4.3-10 (F) 2xAISG	ONETWO (*)
MI-19042	TWIN, 4 in / 8 out	BASE MODEL	4.3-10 (F) 2xAISG	TWOTWO (*)
(*) ONETWO: the TMA is identified as 1 logic unit with 2 subunits				
(**) TWOTWO: the TMA is identified as 2 logic units with 2 subunits each				

ELECTRICAL BLOCK DIAGRAM



MECHANICAL BLOCK DIAGRAM

