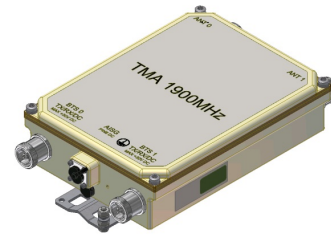


TMA2035F00V1-1

TWIN TMA 1900

A full band 1900MHz tower mounted amplifier, the Kaelus TMA2035 provides a field upgradeable TMA with BTS compatibility and AISG functionality, a truly future proofed TMA with low noise figure performance.



FEATURES

- Dual duplexed TMA providing improved base station sensitivity through excellent noise performance and high linearity
- Hardware and software configuration using AISG “personality” upload
- High reliability with full lightning protection and a fail-safe bypass mode
- AISG and current dump compatible
- High power handling

TECHNICAL SPECIFICATIONS

DOWNLINK (TX) PATH	
Passband	1930 - 1990MHz
Insertion loss	0.5dB typical
Return loss	18dB minimum
Maximum input power	300W (average) / 3kW (PEP)
UPLINK (RX) PATH	
Passband	1850 - 1910MHz
Nominal gain	12dB typical
Gain variation over frequency, temperature	±1dB maximum
Noise figure	1.2dB typical
Return loss	18dB minimum operating, 14dB minimum in bypass
Bypass loss	2.5dB typical
Output IP3	+28dBm typical
Maximum input power with no damage	+12dBm maximum
ELECTRICAL	
Impedance	50ohms
Intermodulation products	-153dBc maximum with 2 x 20W carriers (in RX band)
POWER SUPPLY AND ALARM (CURRENT WINDOW ALARM MODE, DEFAULT)	
Current window alarm mode (CWA) is the default TMA operating mode and can be configured to specific customer requirements. The generic personality (F00V1) is configured so that both channels are independently powered and monitored via the respective BTS port. The BTS port sinks additional current to indicate an alarm state in its uplink path. Normal operating and alarm current values are configured independently and are alterable via a field-loadable personality file.	
DC supply voltage	8V to 30V DC, case is DC ground
DC supply	Each BTS powered individually (programmable)
DC supply current, normal mode	100 ± 20mA per port (programmable)
DC supply current, alarm mode	180 ± 20mA per port

AISG MODE OF OPERATION (AUTO SELECTED ON VALID AISG 2.0 FRAMES)	
AISG signals can be applied to either BTS1 or BTS2 port. The TMA unit switches to AISG mode when valid frames are detected on one of the BTS ports. Both LNA's take DC power from the port with AISG frames or, if DC is present on both ports, both channels supply equal power to the TMA.	
DC supply voltage	+8V to +30V DC
AISG version	2.0 (1.1 optional)
Supply current, AISG mode	55mA at 30V, 135mA at 12V
AISG connector, current rating	IEC60130-9, 8-pin female, < 4A peak, 2A continuous, pin 6
Field firmware upgradable	Yes

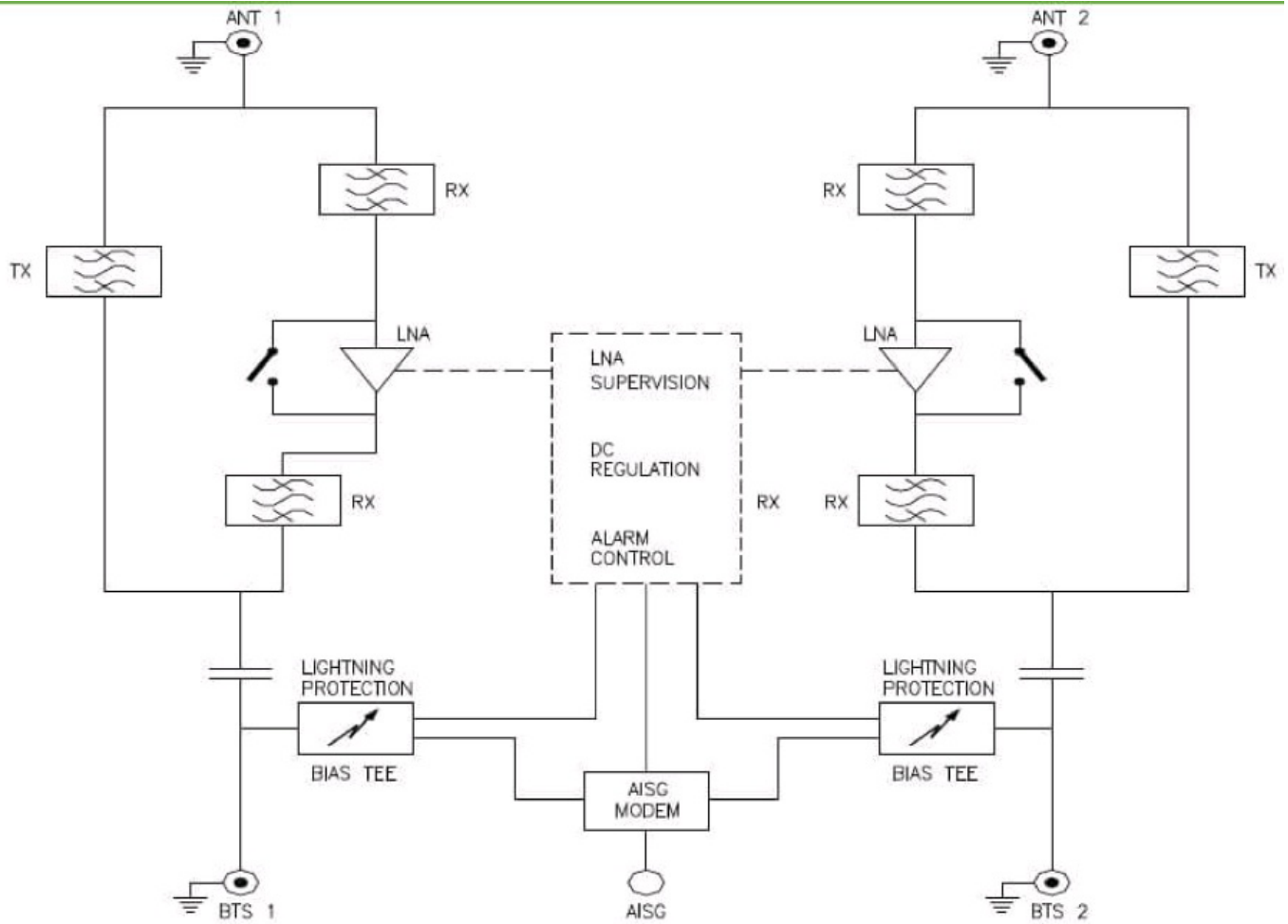
ENVIRONMENTAL	
For further details of environmental compliance, please contact Kaelus.	
Temperature range	-40° to +65°C -40° to +149°F
Ingress protection	IP67
Lightning protection	IEC61312-1, RF: ±5kA maximum (8/20us), AISG: ±2kA maximum (8/20us)
MTBF	>700,000 (hours)
Compliance	EMC:EN301 489, ETSI EN 300 019 class 4.1, RoHS

MECHANICAL	
Dimensions H x D x W	270 x 73 x 200mm 10.63 x 2.87 x 7.87in
Weight	6kg 13.2lbs
Finish	Painted, light grey (RAL7035)
Connectors	DIN 7-16 (F) x 4 long neck, AISG (F) x 1
Mounting	Pole/wall bracket supplied with two metal clamps 45-178mm diameter poles

ORDERING INFORMATION

PART NUMBER	DESCRIPTION
xx Denotes customized CWA configurations	
TMA2035F00V1-1	Twin TMA, 1900MHz full band, dual duplex, with AISG, generic CWA configuration
TMA2035FxxV1-1	Twin TMA, 1900MHz full band, dual duplex, twin TMA, with AISG

ELECTRICAL BLOCK DIAGRAM



MECHANICAL BLOCK DIAGRAM

