

TTA-UM000H

UMTS 2100 | Twin TMA | Dual Duplex | 60MHz BW

- One of the Lowest Noise Figure on the market
- Full 60 MHz uplink (Rx) bandwidth
- Useable in any orientation
- AISG and current dump compatible (AISG 2.0 upgradable)
- AISG connector for external RET antenna control by coaxial feeder
- Hardware and software configurable using AISG "personality" upload

RF Characteristics	
Downlink (TX) Path	
Frequency band	2110 -2170 MHz
Insertion Loss	0.4 dB max / 0.2 dB max across pass band
Return Loss, all ports	18 dB min (VSWR <1.3)
TX Filter rejection in RX band	50 dB min
Rejection @	920-960 MHz >75 dBc 1805-1880 MHz >65 dBc 2010-2025 MHz >25 dBc 2400-2700 MHz >65 dBc 2700-2900 MHz >75 dBc
Group delay variation per 5 MHz	5 ns max
Continuous Average Power	100 W max
Peak Envelope Power	1000 W max (at sea level)
Intermodulation (2x 43 dBm Tx Carriers at BTS port)	-120 dBm max. in Rx band, BTS port
Uplink (RX) Path (LNA Mode)	
Frequency Band	1920 - 1980 MHz
Gain	12 ± 1 dB
Gain variation over frequency	± 0.3 dB max
Noise Figure	1.1 dB typ., 1.4 dB max at 25°C 1.6 dB max at 60°C
Return Loss, normal mode, all ports	18 dB min (VSWR <1.3)
Rejection in RX input filter @ 2110-2170 MHz	>65 dBc
Rejection @	920-960 MHz >75 dBc 1805-1880 MHz >65 dBc 2010-2025 MHz >25 dBc 2400-2700 MHz >65 dBc 2700-2900 MHz >75 dBc
Group delay variation per 5 MHz	10 ns max.
Output Intercept Point	+ 18 dBm min
Maximum Input Power with no damage	+ 12 dBm
Uplink (RX) Path (Bypass Mode) Bypass is the default mode for each channel when not powered	
Insertion Loss, Bypass Mode	3.5 dB max
Return Loss, Bypass Mode, all ports	14 dB min
DC Power Supply, Alarm currents & AISG Control	
DC Supply Voltage via BTS-RF cable	+9 to +30 V DC
Current Alarm Mode (default mode)	
The TMA is configured so that each BTS port is individually powered and monitored. Each BTS port sources additional current to indicate any alarm state	
DC supply current, port BTS0 & BTS1 operating	100mA typ. (two ports powered)
DC supply current, alarm mode	180 mA (other level is possible, contact us)



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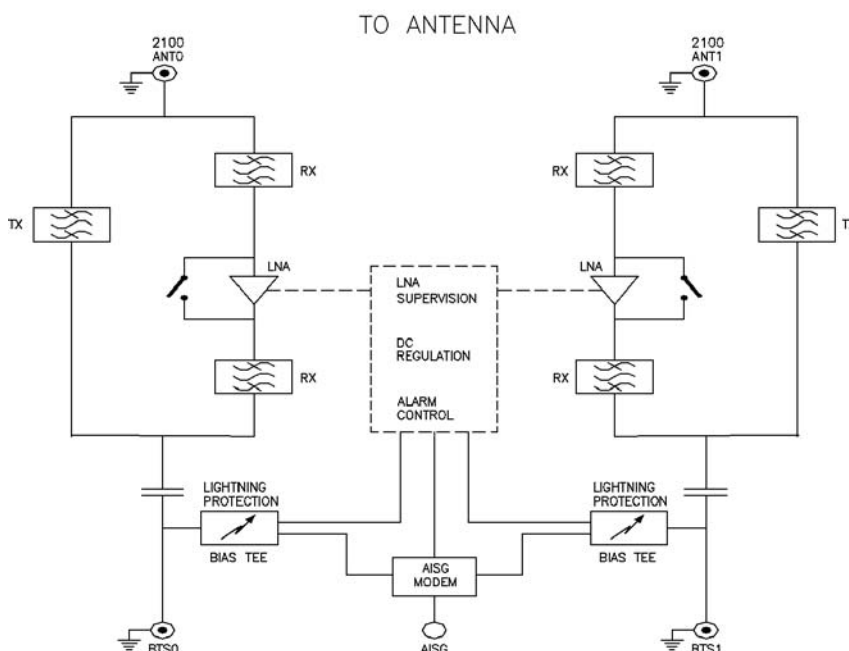
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AISG mode (auto selected on valid frames)		
AISG signals can be applied to either BTS0 or BTS1 port. The TMA unit switches to AISG mode when valid frames are detected on one of the BTS ports. The TMA unit is DC powered (common feed for both channels) only from the port supplying AISG frames.		
AISG Version	1.1	
DC supply current, total	80 mA at 30V, 175 mA at 9V typical	
AISG connector current rating	< 4A peak, 2 Amp continuous, pin 6	
Current window alarm backup	Yes	
Field Firmware upgradeable	Yes	
Environmental		
Maximum Operating Temperature Range	-40 to +60 °C	-40 to +140 °F
Environmental	ETS 300 019	
Environmental Sealing	IP67 (EN 60529)	
Safety	EN 60950	
Lightening Protection	3kA, 10/350 us pulse (IEC61312)	
MTBF	>700,000 hours	
EMC	3GPP TS 25.113	
Mechanical		
Dimensions (excluding connectors and mounting bracket)	169 (W) x 278 (H) x 72 (D) mm see diagram next page	6.7 (W) x 10.9 (H) x 2.8 (D) in
Weight	6.5 kg	14.3 lbs
Finish	Painted, light grey (RAL7035)	
Connectors	4 x 7/16 - EDIN Female	
Mounting	Pole / Wall, any orientation. Supplied with two metal clamps for 45-178 mm (1.8-7.0 in) diameter poles.	



Block Diagram

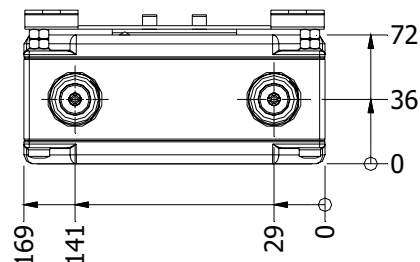
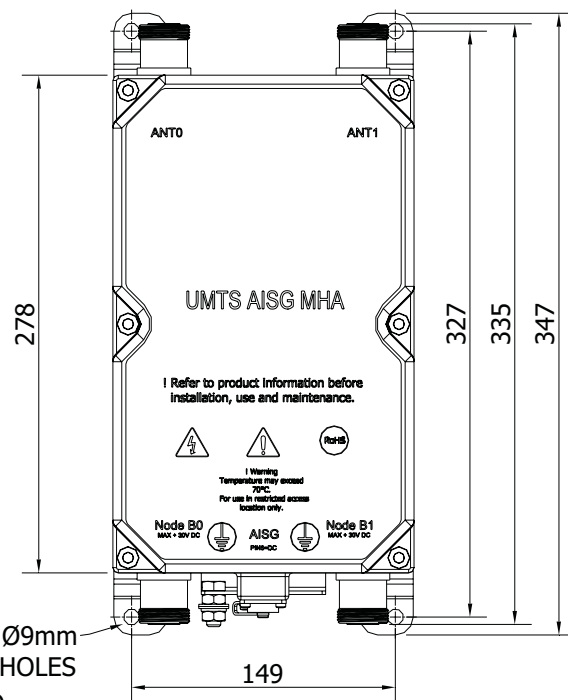
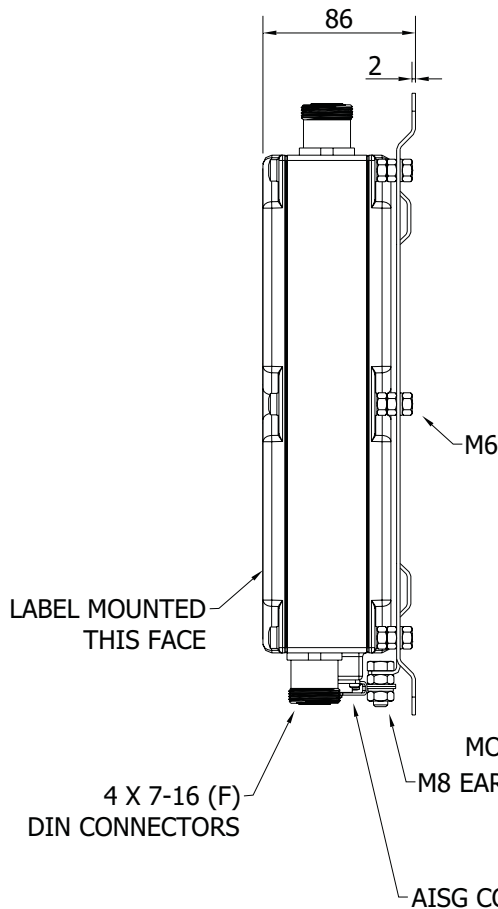
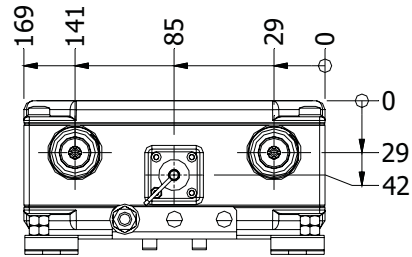
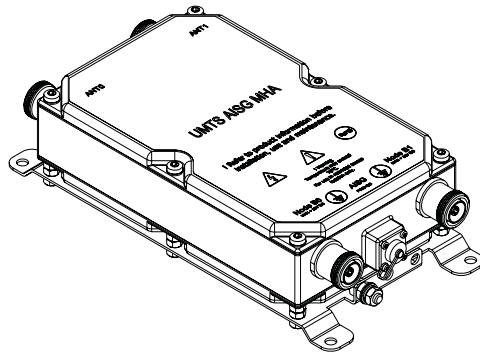


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Mechanical



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