

TTA-WBG000H

AWS | Twin TMA | AISG 2.0

- LTE ready
- Provides gain in the AWS uplink path for network balance and optimization
- Excellent noise figure performance
- AISG 2.0 compatible, fully software upgradable
- Fail safe bypass mode and full lightning protection

RF Characteristics	
Downlink (TX) Path	
Passband	2110-2170 MHz
Insertion loss	0.4 dB max, 0.25 dB typ
Return loss, all ports	18 dB min
Maximum average input power	500 W
Maximum PEP input power	5000 W
Intermodulation at antenna ports	<- 155 dBc
Uplink (RX) Path	
Passband	1710-1770 MHz
Gain	12 dB min
Return loss	18 dB min operating; 15 dB min in bypass
Noise figure over temperature range	2.0 dB max
Noise figure mid-band at 25° C	1.1 dB typical
Rejection in TX Band	80 dBc min
Rejection at 1700 MHz	25 dBc min
Rejection at 1800 MHz	25 dBc min
Bypass loss over temperature range	3.0 dB max
Bypass loss mid-band at 25° C	2.0 dB typical
Input IP3	10 dBm minimum; 14 dBm typical
General Specifications, measured in 180 kHz bandwidth	
Phase linearity	1.0° max, 0.02° typical
Group delay	5ns max, 0.8ns typical
Amplitude variation	0.2 dB max, 0.02 dB typical
Power Supply and Alarm	
Operating voltage	+7.5 to +30V DC, case is DC ground
DC supply	Through BTS connector
Current Window Alarm Mode	
CWA is the default TMA operating mode. The TMA is configured so that each BTS port is individually powered and monitored. Each BTS port sinks additional current to indicate an alarm state in its uplink path.	
Supply current, normal operation	100 ± 20 mA per port
Supply current, alarm mode	200 ± 30 mA per port (programmable)
Power consumption, normal operation	0.85W at 7.5V; 3W at 30V typical
Power consumption, alarm mode	3W at 15V per port typical



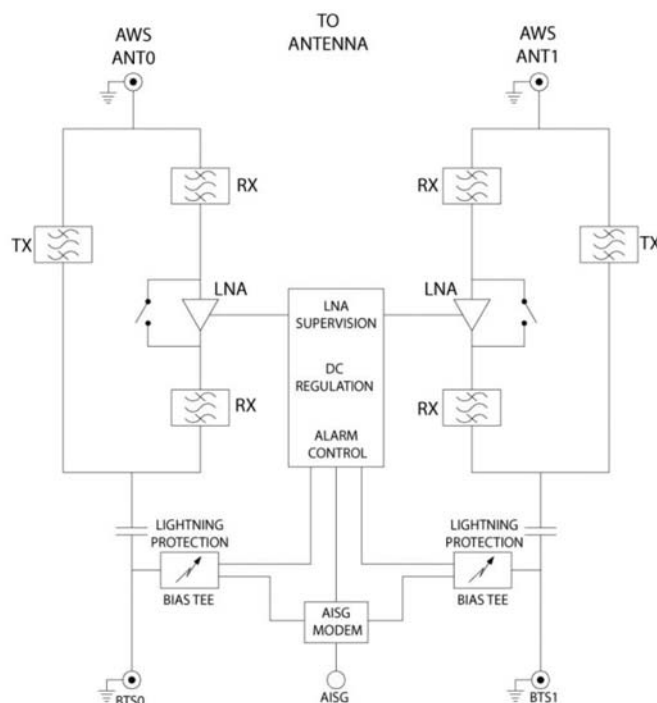
Quoted performance parameters are provided to offer typical or range values only and may vary as a result of normal manufacturing and operational conditions. Extreme operational conditions and/or stress on structural supports is beyond our control. Such conditions may result in damage to this product. Improvements to product may be made without notice.

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AISG/RET Specifications	
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	2.0 (for AISGv1.1, please contact us)
Supply current, AISG mode	200 mA at 7.5V; 65 mA at 30V typical
Power consumption, AISG mode	1.5W at 7.5V; 2W at 30V typical
AISG connector	IEC60130-9 8-pin female
AISG connector current rating	< 4A peak, 2A continuous, pin 6
Voltage drop, BTS to AISG port	1.5V max at 2A
Environmental	
Operating Temperature Range	-40 to +65 °C -40 to +149 °F
Environmental	ETSI EN 300 019 class 4.1
Environmental Sealing	IP67
Lightning Protection, RF and AISG ports	RF ports: 5kA (8/20µs) AISG port: 2kA (8/20µs)
EMC	EN301 489
MTBF	>700,000 hours
Mechanical	
Dimensions	Refer to mechanical diagram
Weight	9.0 kg 20 lbs
Finish	Painted, light grey (RAL7035)
Connectors	4 x 7/16 - DIN Long Neck Female
Mounting	Pole / wall bracket supplied with two metal clamps for use with 45-178 mm (1.8-7.0 in) diameter poles.

Electrical Block Diagram

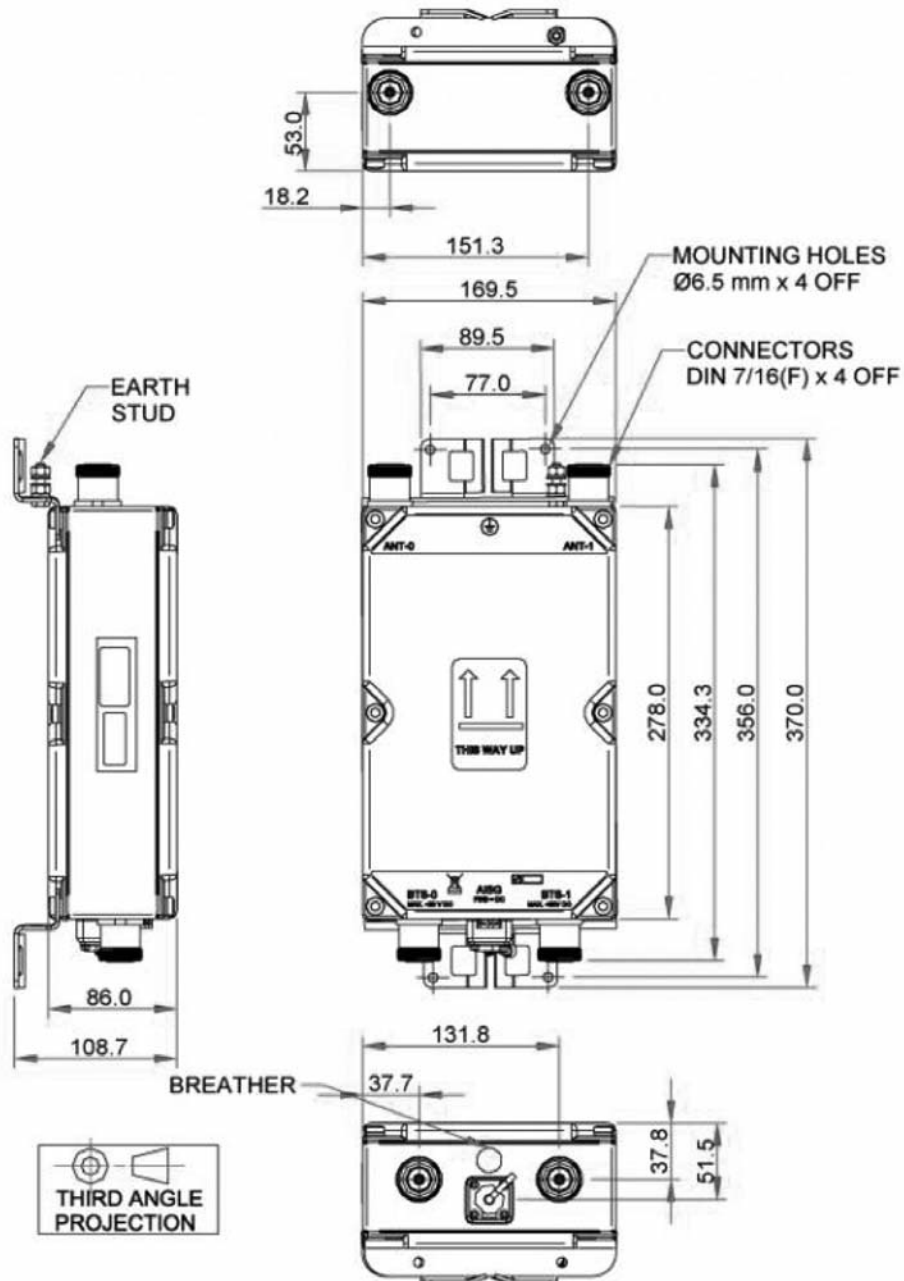


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Mechanical Diagram



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