



# Model Number S59101

## 3.5 GHz TowerTop Amplifier

Rev.B  
1/4/04



### Features:

- Rugged Design
- Weatherproof
- Low Noise
- Low TX Loss

### Applications:

- Fixed Wireless
- Base Station

### Package size:

(See outline)

Specifications:	RX	TX
<b>-1 Passband</b>	3400-3430 MHz	3500-3530 MHz
<b>-2 Passband</b>	3425-3450 MHz	3525-3550 MHz
<b>-3 Passband</b>	3450-3475 MHz	3550-3575 MHz
<b>-4 Passband</b>	3475-3500 MHz	3575-3600 MHz
<b>Return Loss</b>	> 18 dB > 12 dB LNA Bypass mode	> 18 dB
<b>Noise Figure</b>	2.4 dB < 3.5 dB Loss LNA Bypass mode	
<b>Gain</b>	15 +/-1 dB	
<b>1dB Compression Point</b>	> 7dBm	
<b>Insertion Loss</b>		0.75 dB
<b>Loss flatness</b>		> 0.1 over 1.75 MHz
<b>Group Delay</b>	< 100 ns	< 120 ns
<b>Attenuation of RX Passband</b>		50 dB Minimum
<b>RX Attenuation of the TX Passband</b>	70 dB at the input and output of the LNA	
<b>2 tone 3<sup>rd</sup> order IMD</b>		< -70 dB (2 +46 dBm signals separated by 250 KHz)
<b>Bypass Switch Time</b>	< 10ms	
<b>Supply Voltage</b>	+7 to +32 VDC	
<b>TTA Operating Current</b>	105 to 185 mA	
<b>Alarm mode Current (In Milliamps)</b>	200-330 (Minor Alarm) >340 (Major Alarm) <90 (Major Alarm)	
<b>Operating Temperature</b>	-40 to +55C	
<b>Lightning Protection</b>	EN61000-4-5: 1995, Table A.1, Classes 1-5 (Class 5 Test Voltage 4KV), Including 10 / 700 micro sec	



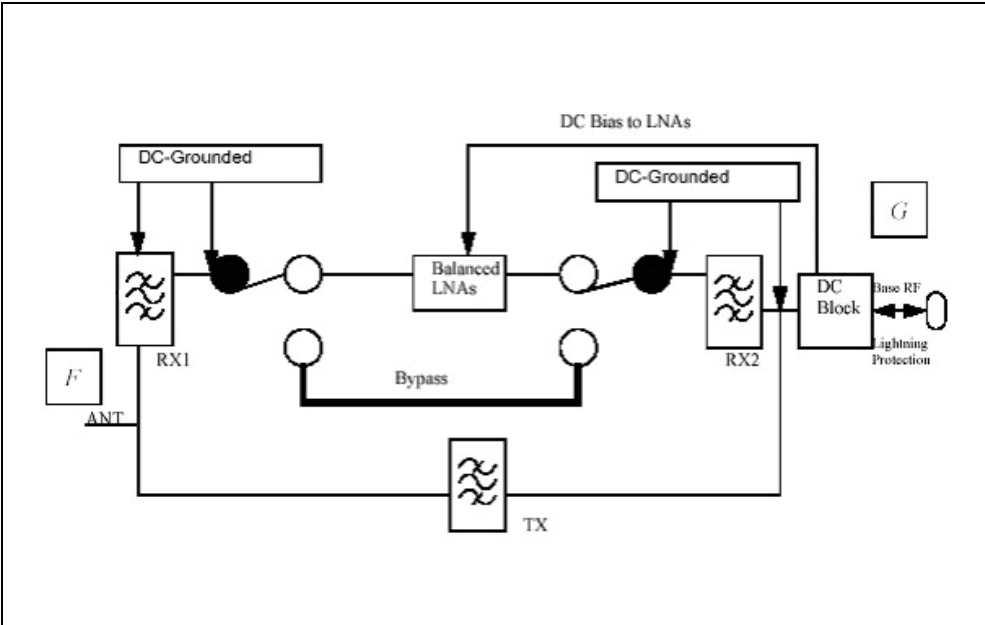
# Delta Microwave

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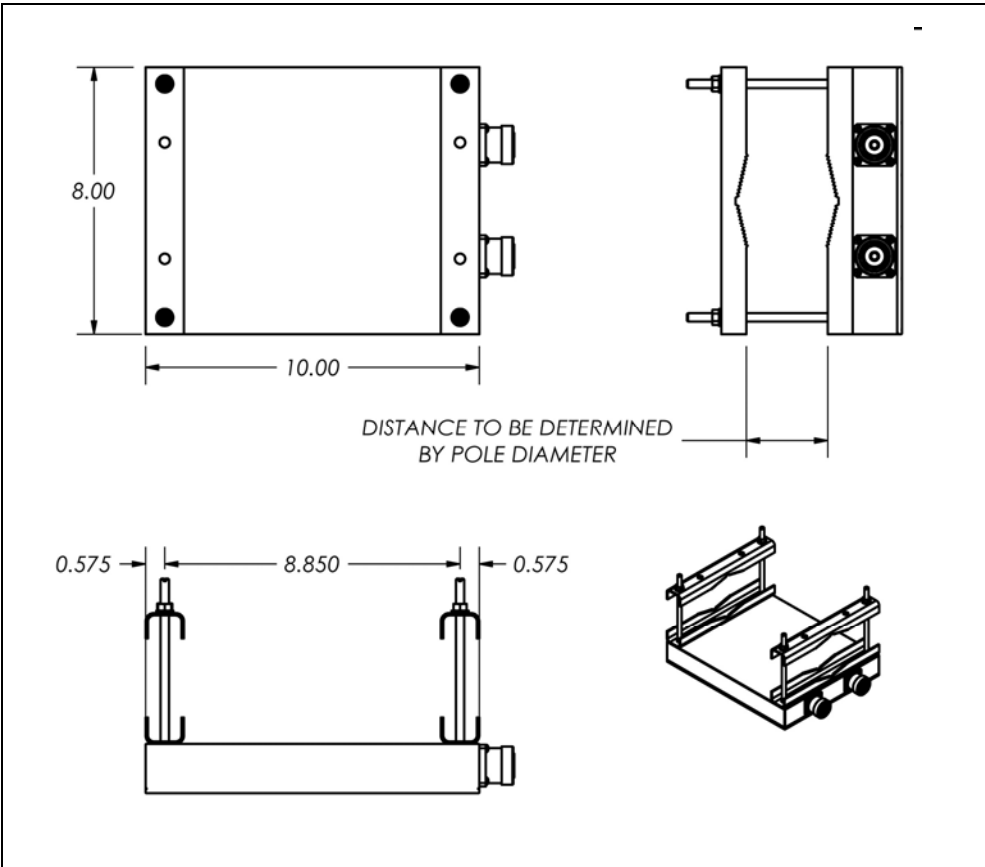
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# TTA Block Diagram



# Outline



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Delta Microwave reserves the right to change specifications without notice. Please verify specification revision letter upon order placement.