

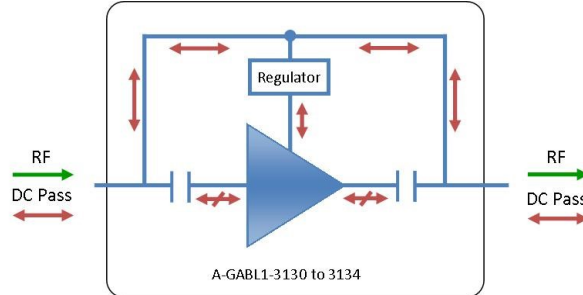


Model Number:  
**A-GABL1-3130 to 3134**

RF Components

# L-band Amplifiers

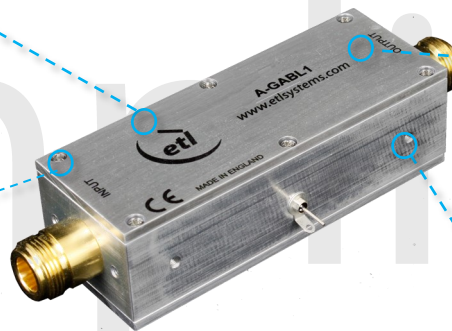
## 850 to 2150MHz



- Flat frequency versus gain characteristics over 850 to 2150MHz
  - DC pass on both ports
  - Gain options of  $\pm 10$ ,  $\pm 15$  and  $\pm 20$ ,  $\pm 25$  and  $\pm 30$  dB
  - Requires 8-24V DC from the inline RF cable.
- Available with RF connector options:
- 50  $\Omega$  SMA
  - 50  $\Omega$  N-type
  - 50  $\Omega$  BNC
  - 75  $\Omega$  BNC
  - 75  $\Omega$  F-type

**8-18V**  
External DC  
powering

**850-2150 MHz**  
Operating frequency  
range.



**Compact**

Housed in  
rugged compact  
enclosure

**Flexible  
Mounting**

Tapped screw &  
through hole  
mounting options

RF Parameters						
A-GABL1-3130	S5S5	N5N5	B5B5	B7B7	F7F7	
Frequency Range	850-2150 MHz					
RF Connectors	50 $\Omega$ SMA	50 $\Omega$ N-Type	50 $\Omega$ BNC	75 $\Omega$ BNC	75 $\Omega$ F-Type	
Gain (dB)	20 $\pm$ 1.5	20 $\pm$ 1.5	20 $\pm$ 1.5	20 $\pm$ 1.5	20 $\pm$ 1.5	
Gain vs. Frequency Variation (dB)	Typ.	$\pm$ 0.5	$\pm$ 0.5	$\pm$ 0.5	$\pm$ 0.7	$\pm$ 1.0
	Max	$\pm$ 0.7	$\pm$ 0.7	$\pm$ 0.8	$\pm$ 1.0	$\pm$ 1.25
Input Return Loss (dB)	Typ.	15	15	14	12	12
	Min	10	10	10	8	8
Output Return Loss (dB)	Typ.	20	20	20	14	14
	Min.	14	14	14	10	10
Output P1dB GCP** (dB)	Typ.	12	12	12	12	12
	Min.	8	8	8	8	8
Output IP3 (dBm)	Typ.	22	22	22	22	22
Noise Figure (dB)	Typ.	9	9	9	9	9

\*\*1dB Gain Compression Point (1dB GCP) is in relation to output power.  
Gain measured at centre of frequency band

**Broadcast**



**Marine Oil & Gas**



**SNG & VSAT**



**Satellite Teleport**





RF Parameters						
A-GABL1-3131	S5S5	N5N5	B5B5	B7B7	F7F7	
Frequency Range	850-2150 MHz					
RF Connectors	50Ω SMA	50Ω N-Type	50Ω BNC	75Ω BNC	75Ω F-Type	
Gain (dB)	10±1.0	10±1.5	10±1.5	10±1.5	10±1.5	
Gain vs. Frequency Variation (dB)	Typ.	±0.3	±0.3	±0.4	±0.6	±0.8
	Max	±0.7	±0.7	±0.8	±0.8	±1.0
Input Return Loss (dB)	Typ.	20	20	19	17	17
	Min.	14	14	14	12	12
Output Return Loss (dB)	Typ.	22	22	22	18	16
	Min.	18	18	18	14	12
Output P1dB GCP** (dB)	Typ.	15	15	15	15	15
	Min.	10	10	10	10	10
Output IP3 (dBm)	Typ.	25	25	25	25	25
Noise Figure (dB)	Typ.	10	10	10	10	10

RF Parameters						
A-GABL1-3132	S5S5	N5N5	B5B5	B7B7	F7F7	
Frequency Range	850-2150 MHz					
RF Connectors	50Ω SMA	50Ω N-Type	50Ω BNC	75Ω BNC	75Ω F-Type	
Gain (dB)	15±1.5	15±1.5	15±1.5	15±1.5	15±1.5	
Gain vs. Frequency Variation (dB)	Typ.	±0.5	±0.5	±0.5	±0.7	±1.0
	Max	±0.7	±0.7	±0.8	±1.0	±1.25
Input Return Loss (dB)	Typ.	20	20	19	17	17
	Min.	14	14	14	12	12
Output Return Loss (dB)	Typ.	22	22	22	18	16
	Min.	18	18	18	14	12
Output P1dB GCP** (dB)	Typ.	15	15	15	15	15
	Min.	10	10	10	10	10
Output IP3 (dBm)	Typ.	25	25	25	25	25
Noise Figure (dB)	Typ.	10	10	10	10	10

**Broadcast**



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RF Components

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RF Parameters						
A-GABL1-3133	S5S5	N5N5	B5B5	B7B7	F7F7	
Frequency Range	850-2150 MHz					
RF Connectors	50Ω SMA	50Ω N-Type	50Ω BNC	75Ω BNC	75Ω F-Type	
Gain (dB)	25±1.5	25±1.5	25±1.5	25±1.5	25±1.5	
Gain vs. Frequency Variation (dB)	Typ.	±0.7	±0.7	±0.8	±1.0	±1.2
	Max	±0.9	±0.7	±0.8	±1.0	±1.25
Input Return Loss (dB)	Typ.	15	15	14	12	12
	Min	10	10	10	8	8
Output Return Loss (dB)	Typ.	20	20	20	14	14
	Min	14	14	14	10	10
Output P1dB GCP** (dB)	Typ.	15	15	15	15	15
	Min	10	10	10	10	10
Output IP3 (dBm)	Typ.	25	25	25	25	25
Noise Figure (dB)	Typ.	8	8	8	8	8

RF Parameters						
A-GABL1-3134	S5S5	N5N5	B5B5	B7B7	F7F7	
Frequency Range	850-2150 MHz					
RF Connectors	50Ω SMA	50Ω N-Type	50Ω BNC	75Ω BNC	75Ω F-Type	
Gain (dB)	30±2	30±2	30±2	30±2	30±2.5	
Gain vs. Frequency Variation (dB)	Typ.	±0.7	±0.7	±0.8	±1.0	±1.2
	Max	±0.9	±0.7	±0.8	±1.0	±1.25
Input Return Loss (dB)	Typ.	12	12	11	12	12
	Min	10	10	10	8	8
Output Return Loss (dB)	Typ.	20	20	20	14	14
	Min	14	14	14	10	10
Output P1dB GCP** (dB)	Typ.	15	15	15	15	15
	Min	10	10	10	10	10
Output IP3 (dBm)	Typ.	25	25	25	25	25
Noise Figure (dB)	Typ.	8	8	8	8	8

**Broadcast**



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RF Components

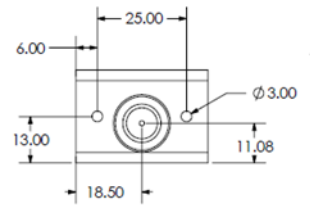
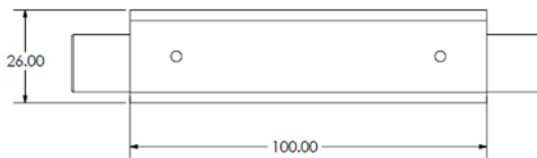
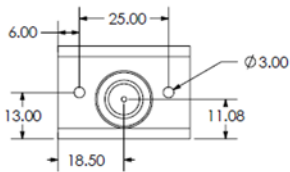
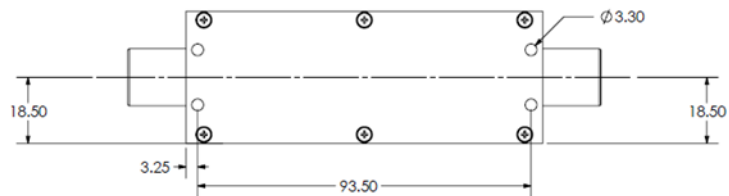
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Environmental		
Operating Temperature		0°C to +55°C
Storage Temperature		-20°C to +75°C
Location		Indoor use Only
Humidity	Max	85% non-condensing
Altitude	Max	10,000 feet

Max Operating Parameters		
Input RF Power		+16 dBm (40mW)
DC Voltage		24V on any RF port
DC Current	Max	500mA max DC pass between the RF ports
DC Consumption		

**!** Operation beyond these limits may cause instantaneous and permanent damage.

**Physical Dimensions (mm)**



Note: The specification is subject to regular reviews and will be updated from time to time as part of our continuing product development and improved specification accuracy.

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