



Model Number:  
**A-GABL1- 3140 to 3143**

RF Components

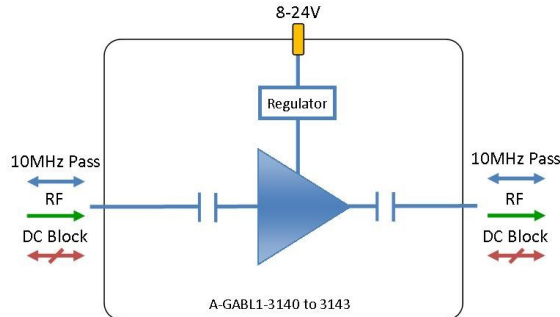
# L-band Amplifiers

## 850 to 2150MHz

- Flat frequency versus gain characteristics over 850 to 2150MHz
- 10MHz pass and DC block on both ports
- Gain options of +10, +15,+20 and +25dB
- Requires 8-24V DC from external source

Available with RF connector options:

- 50 Ω SMA
- 50 Ω N-type
- 50 Ω BNC
- 75 Ω BNC
- 75 Ω F-type



### Compact

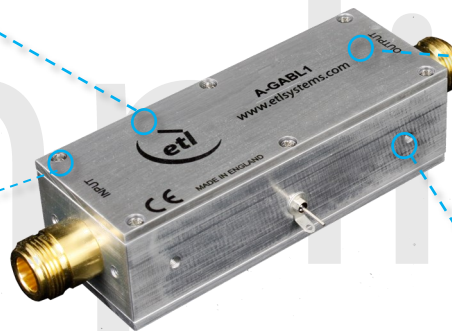
Housed in rugged compact enclosure

### Flexible Mounting

Tapped screw & through hole mounting options

**8-24V**  
External DC powering

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



RF Parameters						
A-GABL1-3140	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)	20±1.0	20±1.0	20±1.5	20±1.5	20±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.	16	16	12	10	10
	Min.	12	12	10	6	6
Output Return Loss (dB)	Typ.	18	18	12	10	10
	Min.	14	14	10	6	6
Output P1dB GCP** (dB)	Typ.	17	17	15	15	15
	Min.	14	14	12	12	12
Output IP3 (dBm)	Typ.	25	25	25	25	25
Noise Figure (dB)	Typ.	8	8	8	8	8

\*\*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-GABL1-3141	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±1.5	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.	15	15	12	10	10
	Min.	10	10	10	6	6
Output Return Loss (dB)	Typ.	15	15	12	10	10
	Min.	10	10	10	6	6
Output P1dB GCP** (dB)	Typ.	15	15	15	15	15
	Min.	12	12	12	12	12
Output IP3 (dBm)	Typ.	27	27	27	27	27
Noise Figure (dB)	Typ.	12	12	12	12	12

RF Parameters						
A-GABL1-3142	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.	±0.3	±0.3	±0.4	±0.6	±0.8
	Max	±0.7	±0.7	±0.8	±0.8	±1.0
Input Return Loss (dB)	Typ.	19	19	18	16	16
	Min.	14	14	14	10	10
Output Return Loss (dB)	Typ.	19	19	18	16	16
	Min.	14	14	14	10	10
Output P1dB GCP** (dB)	Typ.	15	15	15	15	15
	Min.	12	12	12	12	12
Output IP3 (dBm)	Typ.	28	28	28	28	28
Noise Figure (dB)	Typ.	10	10	10	10	10

**Broadcast**



**Marine Oil & Gas**



**SNG & VSAT**



**Satellite Teleport**



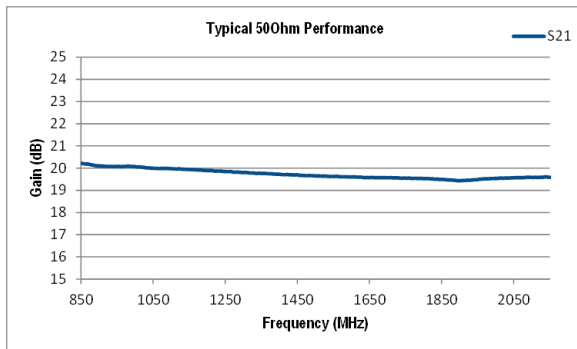


RF Components

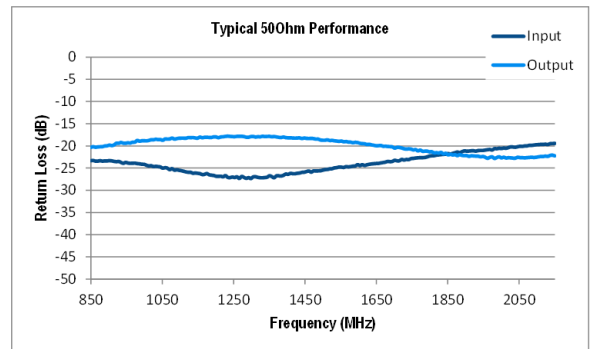
Model Number:  
**A-GABL1-3140 to 3143**  
*L-band Amplifiers*

RF Parameters						
A-GABL1-3143	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±2.0	25±2.0	25±2.0	25±2.0	25±2.0	
Gain vs. Frequency Variation (dB)	Typ.	±0.5	±0.5	±0.5	±0.8	±1.0
	Max	±0.8	±0.8	±0.9	±1.2	±1.25
Input Return Loss (dB)	Typ.	19	19	18	16	16
	Min.	14	14	14	10	10
Output Return Loss (dB)	Typ.	19	19	18	16	16
	Min.	14	14	14	10	10
Output P1dB GCP** (dB)	Typ.	12	12	12	12	12
	Min.	10	10	10	10	10
Output IP3 (dBm)	Typ.	23	23	23	23	23
Noise Figure (dB)	Typ.	8	8	8	8	8

**A-GABL1-3140**



Gain (dB)



Return Loss (dB)

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.

**Broadcast**



**Marine Oil & Gas**



**SNG & VSAT**



**Satellite Teleport**

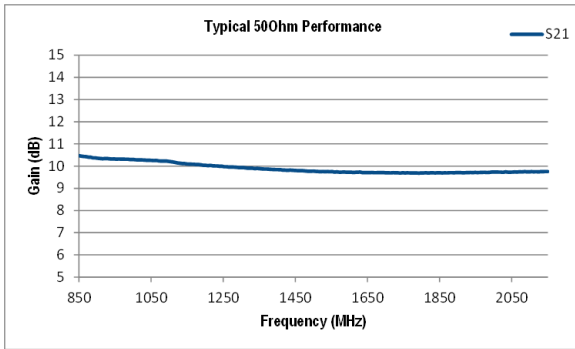




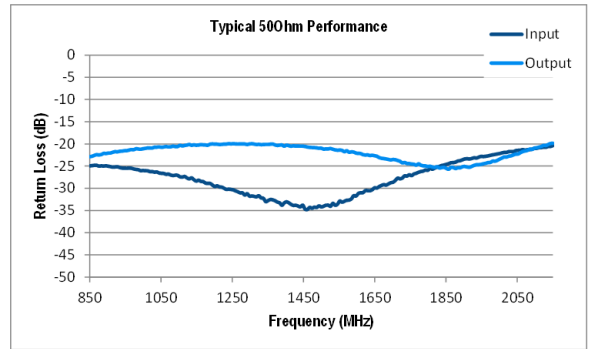
RF Components

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*L-band Amplifiers*

**A-GABL1-3141**

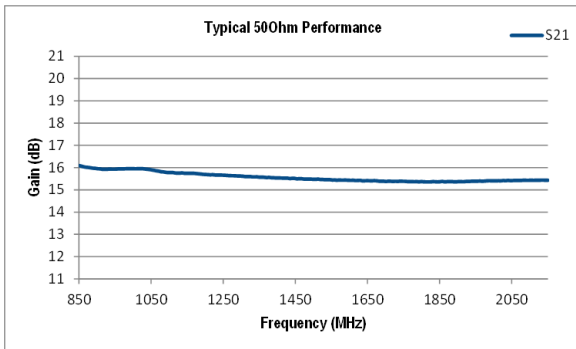


Gain (dB)

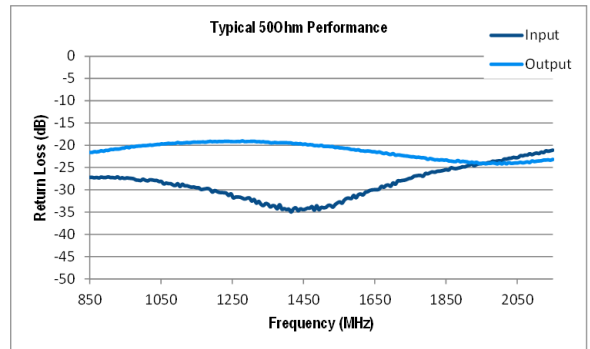


Return Loss (dB)

**A-GABL1-3142**



Gain (dB)



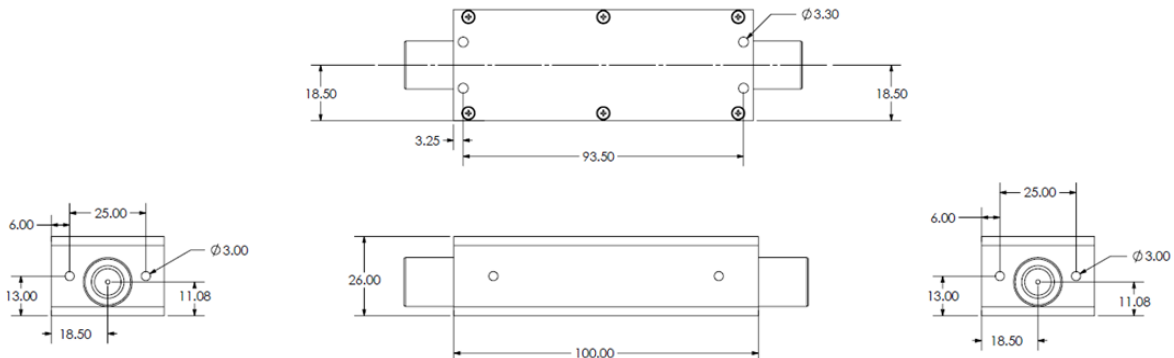
Return Loss (dB)

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
Current Consumption	185mA max.

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

**Physical Dimensions (mm)**



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