

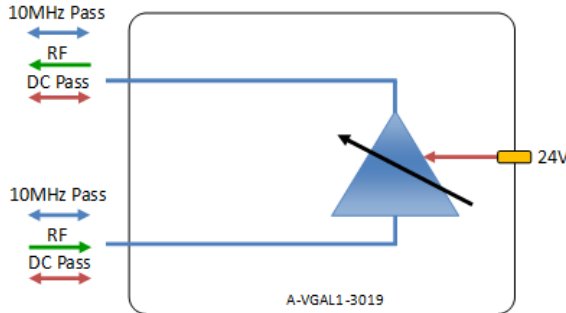


RF Components

# Variable Gain L-Band Amplifier

850 - 2150 MHz

Model Number:  
**A-VGAL1-3019**



- 0 to 30dB gain settable in 1dB steps
- Built in regulator
- Requires 24V external powering
- All ports 10 MHz & DC pass

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

**850-2150 MHz**  
Operating frequency range. L-Band ready

RF Parameters					
A-VGAL1-3019-XXXX	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)	0 - 30	0 - 30	0 - 30	0 - 30	0 - 30
Gain vs Freq. variation (dB)	Typ. ± 0.8	± 0.8	± 1.0	± 1.2	± 1.2
	Max ± 1.2	± 1.2	± 1.4	± 1.5	± 1.5
Input Return Loss (dB)	Typ. 20	20	20	14	14
	Min 15	15	15	10	10
Output Return Loss (dB)	Typ. 20	20	20	14	14
	Min 15	15	15	10	10
Output P1dB GCP** (dB)	Typ. 15	15	15	15	15
	Min 12	12	12	12	12
Output IP3 (dBm)	Typ. 30	30	30	30	30
Noise Figure (dB)	Typ. 8	8	8	8	8

\*\*Gain Compression Point (measured at max gain)

**Broadcast**



**Marine Oil & Gas**



**SNG & VSAT**



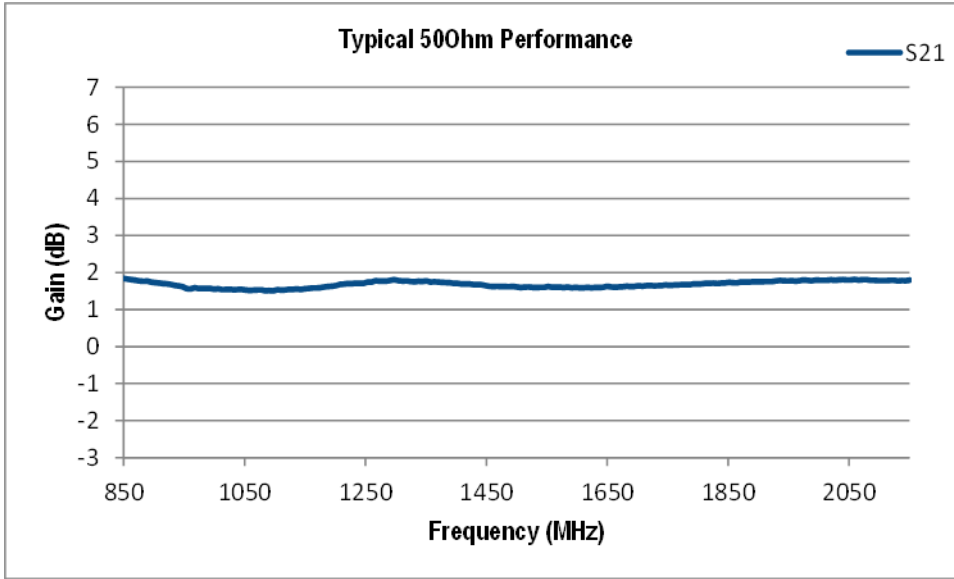
**Satellite Teleport**



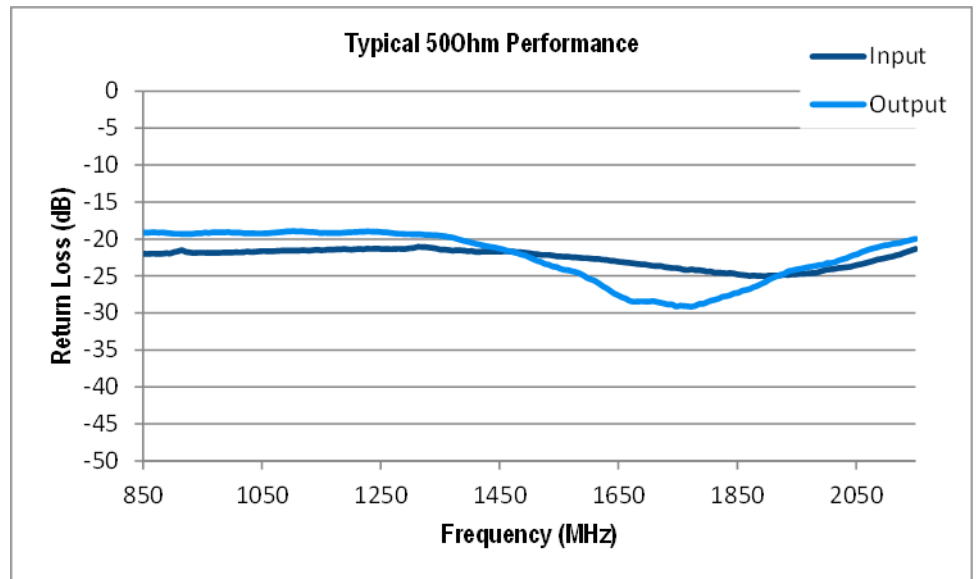


RF Components

Model Number:  
**A-VGAL1-3019**



Gain (dB)



Return Loss (dB)

**Broadcast**



**Marine Oil & Gas**



**SNG & VSAT**



**Satellite Teleport**

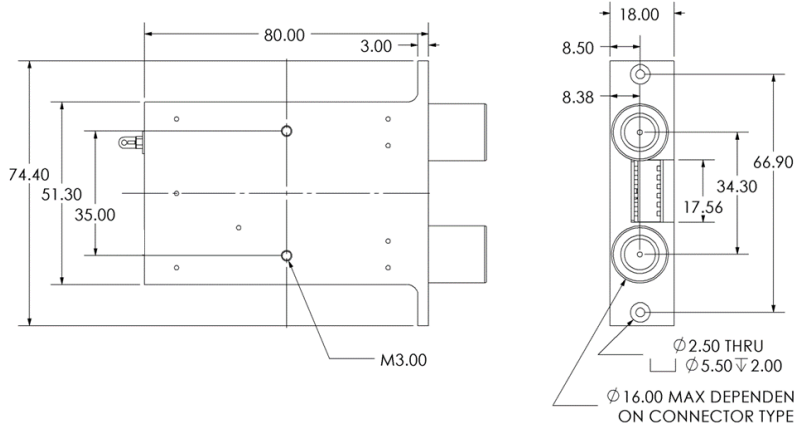




RF Components

Model Number:  
**A-VGAL1-3019**  
Variable Gain L-Band Amplifier

**Physical Dimensions (mm)**



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

Max Operating Parameters	
Input RF Power	+24dBm (40mW)
DC Voltage	Requires 24V external powering
DC Current	500mA

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

Gain Setting							
Switch Settings	1	2	3	4	5	6	Notes
Attenuation	16	8	4	2	1	n/a	Attenuation settings when the selected switch is at ON state
DC Injection	n/a	n/a	n/a	n/a	n/a	0 for DC OFF 1 for DC ON	Options A-VGAL1-3015 only
Max Gain	1	1	1	1	1	n/a	Max gain (0dB attenuation setting)
Min Gain	0	0	0	0	0	n/a	Min gain (31dB attenuation setting)



**VGA Mounting Panel**  
Now available for mounting in our Scorpion 19" 1U chassis Model: SCP-1U-10

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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