

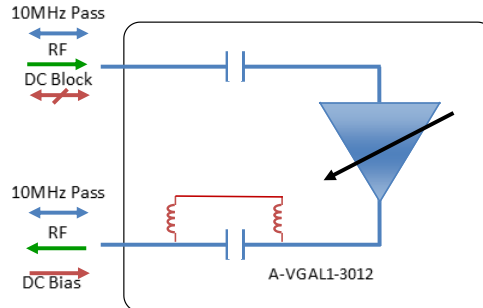


RF Components

# Variable Gain L-Band Amplifier

850 - 2150 MHz

Model Number:  
**A-VGAL1-3012**



- 0 to 30dB gain settable in 1dB steps
- Built in regulator
- Requires 24V on input RF port
- 10MHz pass on both ports. RF Input is DC blocked and Output is DC bias

Available with RF connector options:

- 50  $\Omega$  SMA
- 50  $\Omega$  N-type
- 50  $\Omega$  BNC
- 75  $\Omega$  BNC
- 75  $\Omega$  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-VGAL1-3012-XXXX	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)	0 - 30	0 - 30	0 - 30	0 - 30	0 - 30
Gain vs Freq. variation (dB)	Typ. $\pm 0.8$	$\pm 0.8$	$\pm 1.0$	$\pm 1.2$	$\pm 1.2$
	Max $\pm 1.2$	$\pm 1.2$	$\pm 1.4$	$\pm 1.5$	$\pm 1.5$
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

**Broadcast**



**Marine Oil & Gas**



**SNG & VSAT**



**Satellite Teleport**

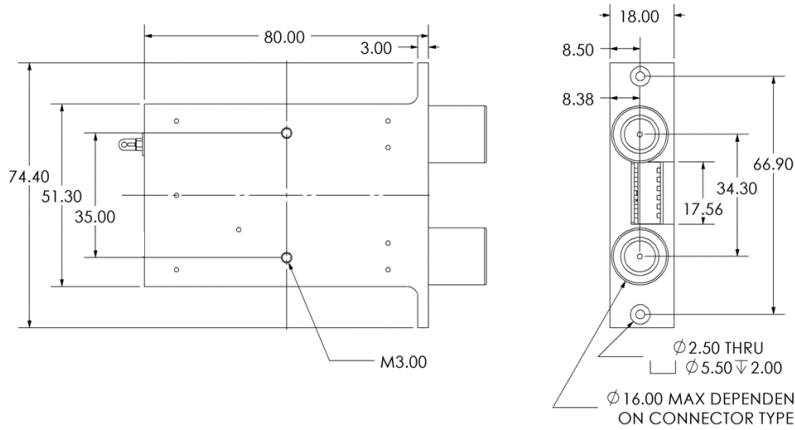




RF Components

Model Number:  
**A-VGAL1-3012**  
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 on input RF port
DC Current	500mA

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

Gain Setting							Notes
Switch Settings	1	2	3	4	5	6	
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.

ETL SYSTEMS LIMITED  
 Coldwell Radio Station  
 Madley  
 Hereford  
 England HR2 9NE

TELEPHONE  
 +44 (0)1981 259020  
 EMAIL  
 info@etlsystems.com

FACSIMILE  
 +44 (0)1981 259021  
 WEB  
 www.etlsystems.com

