

These high performance low noise amplifiers are designed to be antenna mounted.

STANDARD FEATURES

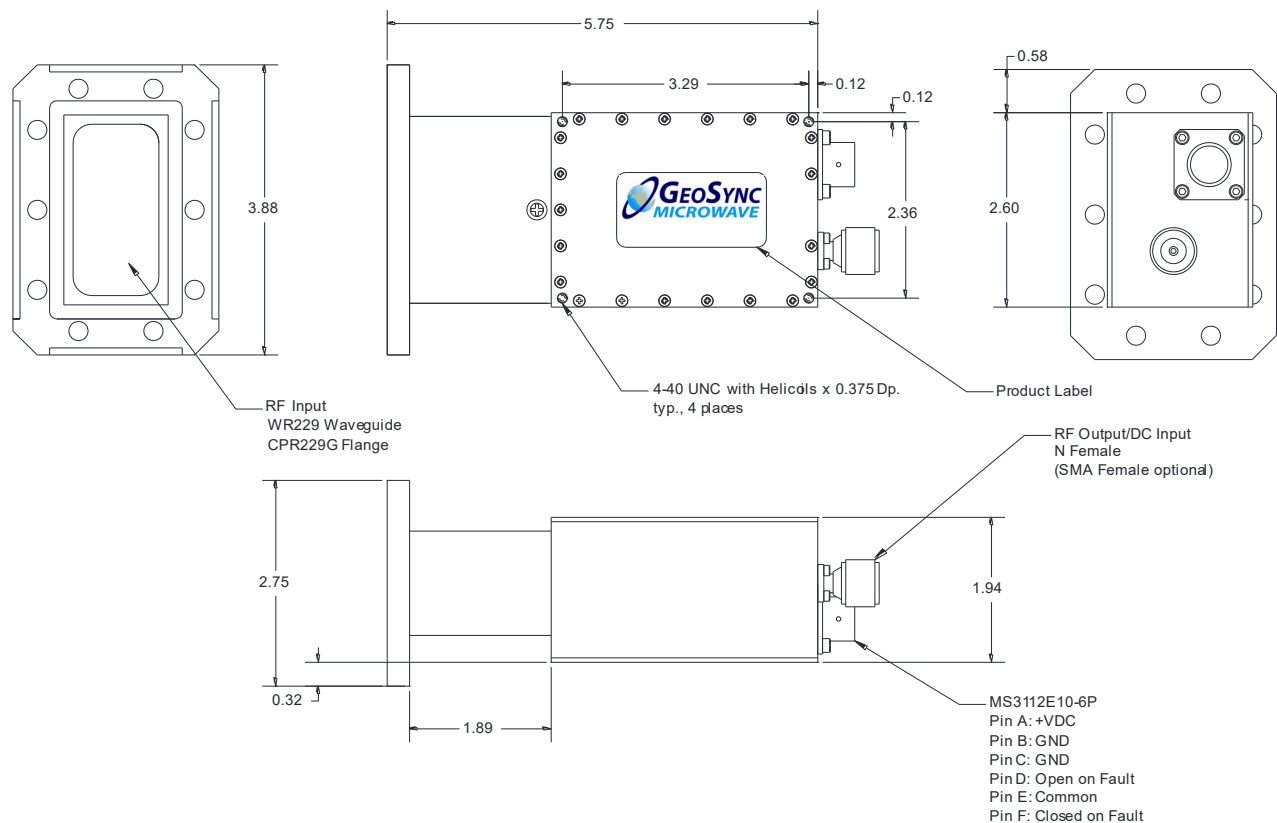
- Weatherproof enclosure
- Ultra low noise performance
- Internal voltage regulation
- Wide input voltage range
- Power thru RF connector or MS connector
- Operates from -40°C to $+70^{\circ}\text{C}$

OPTIONS

- 40, 50 dB Gain
- SMA or N female output connector
- +20 or 23 dBm output P_1 dB compression



Outline: Standard Configuration



AC 40000 Series

C Band SATCOM LNAs

Parameter	Notes	Limits	Units
Frequency Range	Band 01 Band 02 Band 03	3.6 —4.2 3.4—4.2 3.7—4.2	GHz GHz GHz
Noise Temperature Selection	At 23°C case.	30, 35, 40 max.	K
Gain	50 dB min. optional	60 min., 64 typ.	dB
Gain Flatness	Full Band, Band 01/02/03	+/-1.0	dB
Gain Slope	Per 40 MHz	+/-0.2	dB
Gain Stability vs. Time	Short Term (10 min.)	+/-0.1	dB
(Constant Temperature)	Medium Term (24 hours)	+/-0.2	dB
	Long Term (1 week)	+/-0.5	dB
Gain Stability	Versus temperature	-0.06 typ.	dB/°C
VSWR	Input, Band 01/02/03	1.25typ., 1.30 max.	:1
	Output	1.4 typ., 1.50 max.	:1
Power Output	Standard	+10 min., +15 typ.	dBm
@ 1 dB Compression	Optional (High Power)	+20 min., +22 typ.	dBm
	Optional (High Power)	+23 min., +24 typ.	dBm
Third Order Output	Standard	+20 min., +25 typ.	dBm
Intercept Point	Optional (High Power)	+30 min., +32 typ.	dBm
	Optional (High Power)	+33 min., +34 typ.	dBm
Group Delay per 40 MHz	Linear	0.01 max.	nS/MHz
	Parabolic	0.001 max.	nS/MHz ²
	Ripple	0.1 max.	nS p-p
AM/PM Conversion	At -5 dBm output power	0.05 max.	°/dB
Maximum Input Power	Damage threshold	0 max.	dBm
	Input Desens. (13.75-14.50 GHz)	-30 max.	dBm
Power Requirements	Operating Voltage	+10 to +30	VDC
	Input Power (+10 dBm output)	1.9 nom.	Watts
	Input Power (+23 dBm output)	3.3 nom.	Watts
Mechanical Characteristics			
Size		See Outline on Page 1	
Weight		1.1 nom.	lbs.
Connectors	RF Input RF Output Power/Alarm	WR75 WG (WR75 Cover Flange) Type N Female, or SMA MS3112E10-6P (mate supplied)	
Pressure Test		5 min.	Psi
Environmental			
Operating Temperature		-40 to +70	°C
Humidity	with condensation	100	%

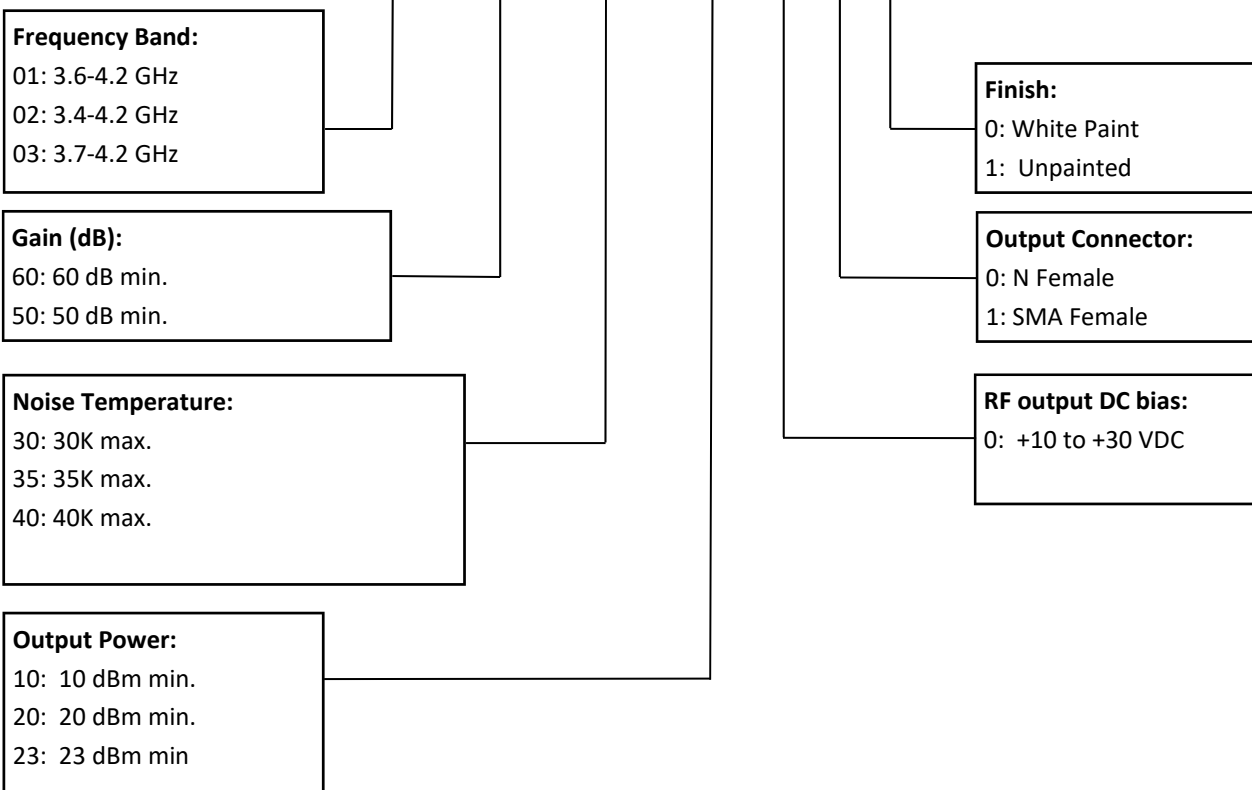
User is responsible for sealing all connectors with appropriate weatherproofing materials. Failure to seal connectors will void warranty for any damage that might occur.

AC 40000 Series

C Band SATCOM LNAs

Part Number Configurator:

AC4XXXXXXXXXXXX



Part Number Example:

AC402603010000

Freq: 3.4-4.2 GHz

Gain: 60 dB

Noise Temperature: 30K

Output Power: +10 dBm

Finish: White paint

Output Connector: N Female

No RF DC Bias