

These high performance low noise amplifiers include an inter-stage filter and are designed to be antenna mounted.

STANDARD FEATURES

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



OPTIONS

- 50 dB Gain
- SMA or N female output connector
- 20 dBm output $P_{1\text{dB}}$ compression point

Model Numbers -

Model Number	Passband	20 dB Rejection points	Noise temperature
AC-3442-6002175	3400-4200	3350 and 4250	33 typical, 38 maximum
AC-3742-6002175	3700-4200	3650 and 4250	33 typical, 38 maximum
AC-4042-6002175	4000-4200	3980 and 4220	38 typical, 43 maximum
AC-3448-6002175	3400-4800	3275 and 4925	38 typical, 43 maximum
AC-4548-6002175	4500-4800	4450 and 4850	33 typical, 38 maximum

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C Band SATCOM LNAs

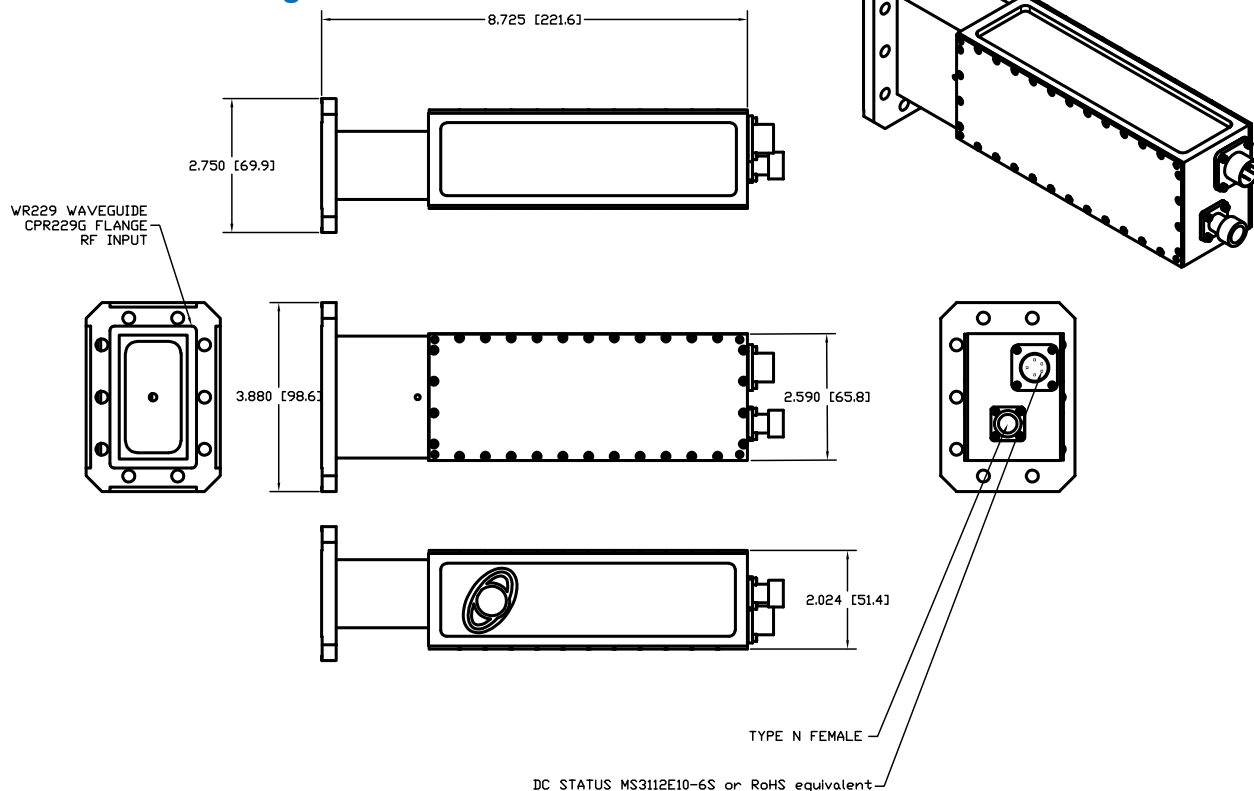
Parameter	Notes	Limits	Units
Frequency Range	See model number table		
Noise Temperature Selection	See model number table		
Gain	50 dB min. optional	60 min., 64 typ.	dB
Gain Flatness	Full Band, Band 01	+/-0.5	dB
	Full Band, Band 02/03	+/-1.0	dB
Gain Slope	Per 40 MHz	+/-0.2	dB
Gain Stability vs. Time	Short 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, 800 MHz band width	1.20typ., 1.25 max.	:1
	Input, >800 MHz band width	1.3 max	:1
	Output	1.25 typ., 1.50 max.	:1
Power Output	Standard	+10 min., +15 typ.	dBm
@ 1 dB Compression	Optional (High Power)	+20 min., +22 typ.	dBm
Third Order Output	Standard	+20 min., +25 typ.	dBm
Intercept Point	Optional (High Power)	+30 min., +32 typ.	dBm
Typical Group Delay	AC-3442-6002175	15/3400-4200 MHz	ns
	AC-3742-6002175	10/3700-4200 MHz	
	AC-4042-6002175	20/4000-4200 Mhz	
	AC-3448-6002175	10/3400-4800 MHz	
	AC-4548-6002175	11/4500-4800 MHz	
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 +35	VDC
	Input Power (+10 dBm output)	1.9 nom.	Watts
	Input Power (+20 dBm output)	2.7 nom.	Watts
Mechanical Characteristics			
Size		See Outline on Page 3	
Weight		1.2 nom.	lbs.
Connectors	RF Input	WR75 WG (WR75 Cover Flange)	
	RF Output	Type N Female	
	Power/Alarm	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.

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CBand SATCOM LNAs

Outline: Standard Configuration



Typical performance

