



pcsLNA1 *(Preliminary Data Sheet)*

Aethercomm's pcsLNA1 was designed for use in world wide cell sites. Its frequency range has been optimized for use from 1710 to 1920 MHz. It can be used in the following systems:

PCS, DCS, DECT & PHS.

PcsLNA1 is a low cost, low noise amplifier which offers high gain, good stability over temperature, extremely low noise, high OIP3 and excellent input and output return loss. This amplifier operates from 5 to 15 Vdc at 225 mA. Size is 1.5" by 3" and can be resized for special packaging requirements.

This is an example of an Aethercomm standard product. We can design and manufacture high performance amplifiers for any application from DC to 50 GHz.

- **0.8 dB noise figure**
- **+44 dBm OIP3**
- **Low cost**
- **>20 dB return loss from -35 to +85C**



Worst Case Performance from 1710-1920 MHz

Parameter	-35C	+25C	+85C
Noise Figure (dB)	0.6	0.8	1.0
Input Return Loss (dB)	-25.0	- 25.0	- 25.0
Output Return Loss (dB)	- 25.0	- 25.0	- 25.0
OIP3 (dBm)	45.0	44.0	43.0
IIP3 (dBm)	18.2	19.0	18.7
P1dB (dBm)	28.0	27.0	26.0
PSat (dBm)	29.5	28.5	27.5

Gain Stability over Temperature

Frequency (MHz)	Typ Gain -35C (dB)	Typ Gain +25C (dB)	Typ Gain +85C (dB)	W/C Gain Change (dB)
1710	26.8	26.0	24.3	0.8
1780	26.7	25.9	24.2	0.8
1850	26.5	25.7	24.1	0.8
1910	26.3	25.5	23.8	0.8

Typical gain slope from 1710 to 1910 MHz <0.003 dB/MHz.

If you need a low cost, low noise, ultralinear, high gain amplifier, check out Aethercomm's cellLNA series and pcsLNA series of amplifiers. We offer sub 1 dB noise figures with OIP3's approaching 50 dBm. We can temperature compensate your amplifier for less than +/- 0.25 dB gain variation from -40 to +85C.

Aethercomm is expert in the design, development and manufacturing of RF, microwave and millimeterwave amplifiers, transmitters, receivers and other communication systems components utilized by commercial wireless, military and satellite communications customers.