

1 GHz System Amplifiers 4PAC-G LGD (Low Gain Dual)

Replaces/Upgrades Cisco®/Scientific Atlanta® 550/625/750/870 MHz Systems



The 4PAC-G LGD enhanced system amplifier module from Broadband International[®] is designed to drop into any existing SA II, III or GainMaker[®] system amplifier housing. The forward bandwidth is up to 1 GHz and may be optimized for any bandwidth from 550 to 1 GHz. This is accomplished by alignment of the interstage response network and by the type of cable equalizers utilized. Performance may be optimized by the choice of hybrids to achieve different operating gains.

The amplifier accepts any standard GainMaker[®] style equalizer and long JXP style pads. The unit can be ordered with a high efficiency power supply that is built into the back of the amplifier or will accept the standard power plug from any existing GainMaker[®] power pack. The use of plug-in hybrids makes this system amplifier easier to service than the OEM models now offered utilizing surface-mounted gain blocks.

Features:

- Specified bandwidth performance from 550 MHz up to 1 GHz
- Utilizes GainMaker[®] style plug-in equalizers and pads
- Multiple options for return path bandwidth and removable diplex filters
- Plug-in hybrid technology
- Choice of utilizing built-in power pack or OEM lid mount power supply
- Patented non-serviceinterrupting
 Selectable Jumper
 Equalizers available

1 GHz LGD – 4-Port Amplifier Modules for Upgrading Cisco®/Scientific Atlanta 550/625/750/870 MHz systems



The interstage EQ and Pad set the output gain and slope for maximum performance. RF test points are provided at both input and output ports. The forward output RF test port may also be utilized as a reverse sweep input port with suitable RF sweep test equipment. All the test ports are directional couplers with a resistive pad to provide an accurate -20 dB reference level.

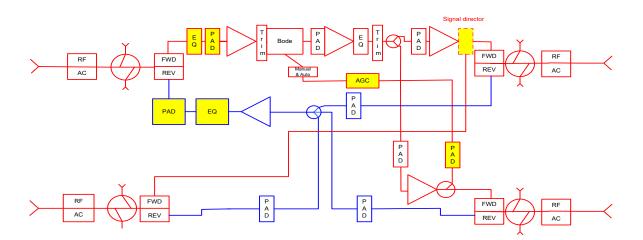
4PAC-G LGD – FAST-PAC Amplifier Conversion Performance to 1 GHz										
Analog Channels	79	95	110	Return						
*** LGD Network Amplifier ***										
Frequency Response (dB)	+/- 0.5	+/- 0.5	+/- 0.5	+/- 0.5						
Return Loss (-dB)	16	16	16	16						
Noise Figure (-dB)	8	8	8	12						
Full Gain (dB)	37	37	37	19						
Operating Gain (dB)	33	33	33	19						
Auto Gain Control Range (dB)	Auto +/-0.2	PAD								
AC Hum Mod @ 10A (-dB)[15A max]	-65	-65	-65	N/A						
Recommended Output Level	49/35	49/35	49/35	35-40						
Output Slope (typical)	14	14	14	N/A						
Output Hybrid Technology	GaAs PD	GaAs PD	GaAs PD	Si PP						
Composite Triple Beat	80	74	66	-90						
Cross-Modulation	75	69	64	-82						
Composite Second Order	80	76	72	-80						



4	PAC-G LGD	With BBI PS AC Voltage												
		I DC		90	85	80	75	70	65	60	55	50	45	40
	Manual	1.54	AC current draw	0.75	0.76	0.81	0.83	0.89	0.93	1	1.09	1.18	1.32	1.45
	AGC	1.60	AC current draw	0.77	0.78	0.83	0.85	0.91	0.96	1.03	1.12	1.21	1.36	1.49

4PAC-G LGD Diagram and Ordering Information

The following Required Accessories highlighted in yellow must be ordered separately (all other pads and equalizers are provided)



The Broadband International 4PAC-G amplifier can be configured in many different frequencies and options. Please consult your account representative for assistance with specific plug-in options.