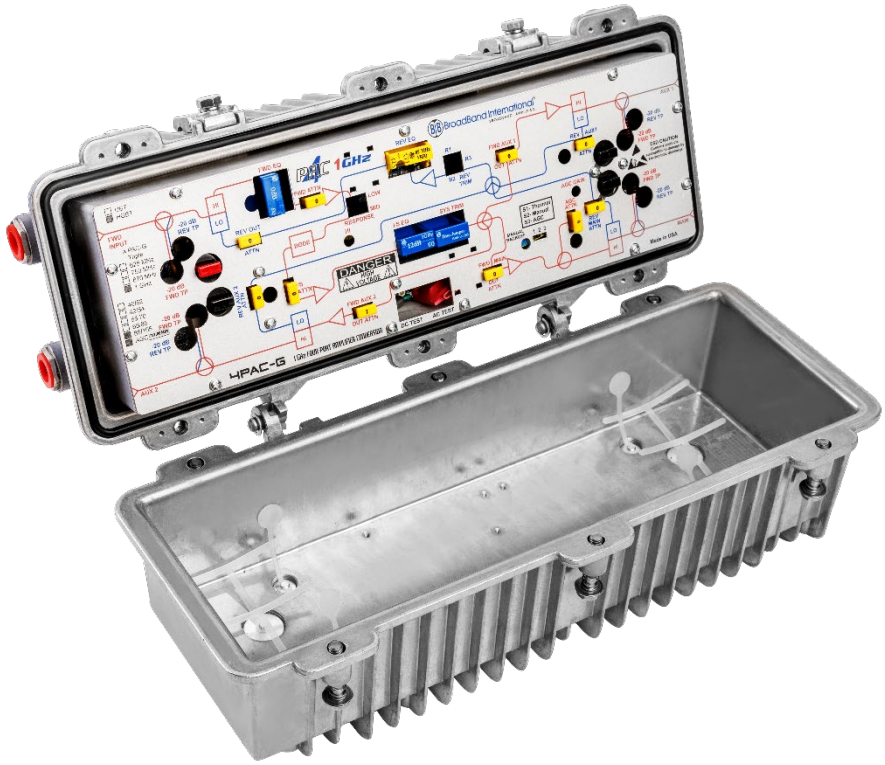
BroadBand International®
BROADBAND. AMPLIFIED.

1 GHz System Amplifiers
4PAC-G UBT (Unbalanced Triple)

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



The 4PAC-G UBT 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 standard GainMaker® style equalizers 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.

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-service-interrupting Selectable Jumper Equalizers available**

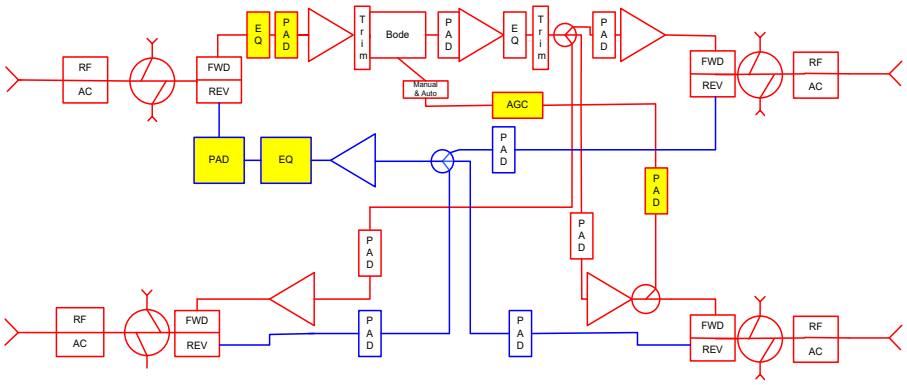
The use of plug-in hybrids makes this system amplifier easier to service than the OEM models now offered utilizing surface-mounted gain blocks. The internal losses of our design have been minimized to provide the lowest possible RF distortions. The interstage EQ and Pad set the output gain and slope 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 UBT – FAST-PAC™ Amplifier Conversion Performance to 1 GHz				
Analog Channels	**79**	**95**	**110**	**Return**
***UBT 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)	38	38	38	19
Operating Gain (dB)	34	34	34	19
Auto Gain Control Range (dB)	Auto +/-0.25 dB for +3/-5 input variance			
AC Hum Mod @ 10A (-dB)[15A max]	-65	-65	-65	N/A
Recommended Output Level	44/30	44/30	44/30	35-40
Output Slope (typical)	14	14	14	N/A
Output Hybrid Technology	GaAs PD	GaAs PD	GaAs PD	Si PP
Composite Triple Beat-Main	86	81	78	90
Cross Modulation-Main	75	73	72	82
Composite Second Order-Main	79	77	75	80
GAIN AUX Ports 1 and 2	40	40	40	19
AUX Output Level	50/36	50/36	50/26	35-40
Composite Triple Beat-AUX ports	69	67	65	90
Cross-Modulation-AUX ports	65	64	62	82
Composite Second Order-AUX ports	69	67	65	80

4PAC-G UBT	With BBI PS		AC Voltage										
	I DC		90	85	80	75	70	65	60	55	50	45	40
Thermal	1.97	AC current draw	0.9	0.92	0.96	1.01	1.07	1.13	1.21	1.31	1.43	1.57	1.75
AGC	2.03	AC current draw	0.92	0.94	0.98	1.03	1.09	1.16	1.24	1.34	1.46	1.61	1.79

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