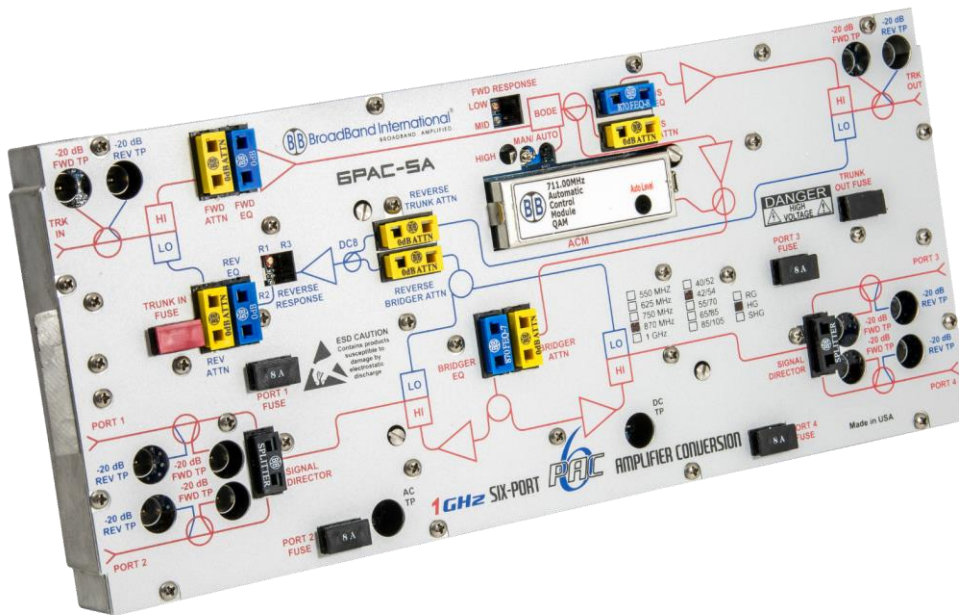


1 GHz System Amplifiers - 6PAC-S (HG)

**Replaces/Upgrades Scientific Atlanta® Slimline
450/550/625/750/870 MHz Systems**



Features:

- Specified bandwidth performance from 550 MHz up to 1 GHz
- Utilizes FastPac™ style plug-in equalizers and pads
- Multiple options for return path bandwidth with removable duplex filters
- Plug-in hybrid technology
- Excellent distortion and noise performance

The 6PAC-S enhanced system amplifier module from Broadband International® is designed to drop into any existing Scientific Atlanta® Slimline 450 or 550 MHz 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 plug-in bode network and by the type of cable equalizers deployed. All 6-port modules have a very linear trunk response and very low distortions. Performance may be customized by the choice of hybrids.

The 6PAC-S bridger section has an interstage splitter network and dual power-doubled output hybrids for higher feeder port output levels and better RF performance. Each output hybrid can be configured to drive one or two feeder line ports. A plug-in equalizer in the bridger section allows for very high output slope for the feeder lines without changing the trunk output signal levels.



Dual RF test points are provided for every cable port. The forward RF test ports may also be used as reverse sweep input ports with suitable RF sweep test equipment. All the test ports are directional couplers with a resistive pad to provide an accurate -20dB reference level and to self-terminate the test port when it is not connected to system test equipment.

The plug-in equalizers are a Broadband International® patented circuitry and space-saving design. Our BBI RF attenuator pads and equalizers have three ground pins to optimize impedance matching, as opposed to a single ground pin utilized on other types of “normal” pads and equalizers. The pads, equalizers, splitters, and RF jumpers are all color-coded for easy installation.

Numerous analog and QAM automatic control module (plug-in) are available to meet your current and future system requirements.

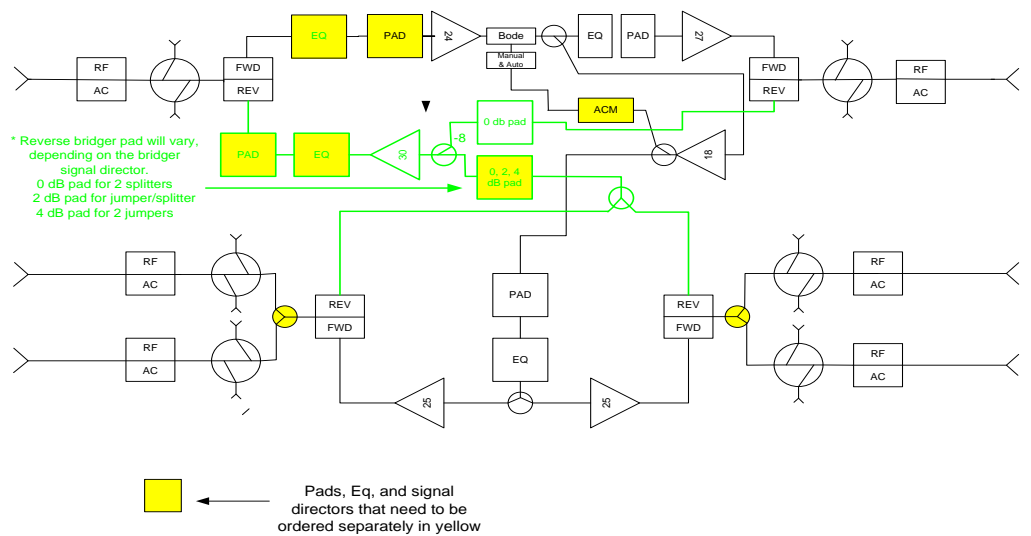
6PAC-S – FAST-PAC™ Amplifier Conversion Performance to 1 GHz				
Analog Channels	79	95	110	Return
***6PAC-S System Amplifier ***				
Frequency Response (dB)	+/- 0.5	+/- 0.5	+/- 0.5	+/- 0.5
Return Loss (-dB) 55-870 MHz/870 MHz to 1 GHz	16/14	16/14	16/14	16
Noise Figure (-dB)	8	8	8	12
Full Gain (dB) - Trunk	37	37	37	19
Operating Gain (dB) - Trunk	34	34	34	19
Man/Auto Gain Control Range (dB)	Auto +/-0.25 dB for +/-5 input variance			
AC Hum Mod @ 10A (-dB)[15A max]	-65	-65	-65	N/A
Trunk Output Level (870/55 MHz)	46/34	46/34	46/34	35-40
Trunk Output Slope (typical @ 870 MHz)	12	12	12	N/A
Output Hybrid Technology	GaAs PD	GaAs PD	GaAs PD	Si PP
Composite Triple Beat – Trunk	82	78	76	90
Cross-Modulation - Trunk	73	72	70	82
Composite Second Order - Trunk	75	74	72	80
Bridger Gain – Ports 1 to Ports 3 and 4	39	39	39	19
Bridger Output Level (870/55 MHz)	51/39	51/39	51/39	35-40
Composite Triple Beat – Bridger	72	69	67	90
Cross-Modulation – Bridger	67	66	64	82
Composite Second Order – Bridger	71	69	66	80

Powering	Voltage/Current with BBI Power Supply													
	I DC	AC Volts	90	85	80	75	70	65	60	55	50	45	40	37
Manual	1.89	AC current draw	0.92	0.95	0.99	1.04	1.08	1.14	1.23	1.32	1.43	1.59	1.8	2.11
AGC	1.95	AC current draw	0.95	0.94	0.98	1.03	1.09	1.16	1.24	1.34	1.46	1.61	1.79	2.19
Powering	Voltage/Current with 279660 OEM Power Supply)													
	I DC	AC Volts	90	85	80	75	70	65	60	55	50	45	40	37
Manual	1.89	AC current draw	N/A	N/A	1.33	1.25	1.22	1.24	1.28	1.35	1.44	1.57	1.67	1.95
AGC	1.95	AC current draw	N/A	N/A	1.36	1.27	1.27	1.3	1.35	1.39	1.49	1.62	1.76	2.07

6PAC-S Diagram and Ordering Information

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

BROADBAND INTERNATIONAL 6 PAC



The Broadband International® 6PAC-S amplifier can be configured in many different frequencies and options. Please consult your account representative for assistance with specific plug-in options.