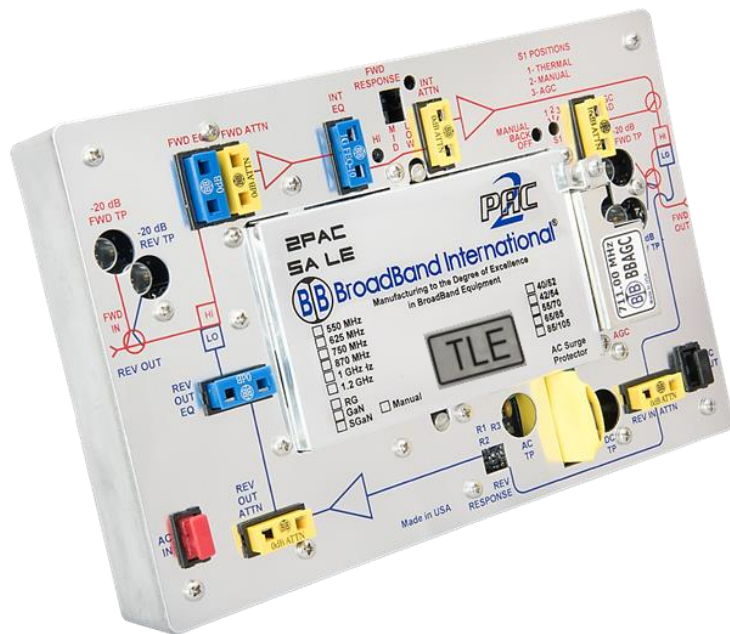


1 GHz Line Extenders – 2PAC-S (TLE)

Replaces/Upgrades Scientific Atlanta®/Cisco® 550/625/750/870/1000 MHz Systems



The 2PAC-S enhanced system amplifier module from Broadband International® is designed to drop into any existing Scientific Atlanta®, II, III, or GainMaker® line extender housing. The forward bandwidth is up to 1 GHz and may be optimized for any bandwidth from 550 MHz to 1 GHz. This is accomplished by alignment of the interstage response network and by the type of cable equalizers utilized. The placement of the amplifiers is typically designed for 13 dB or greater input levels. The reverse is a passive design. The amplifier accepts any standard FAST-PACT™ style equalizers and pads.

The use of plug-in GaAs 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 2PAC-S is designed as a drop in solution for older 400 to 870 MHz systems.

Features:

- Specified bandwidth performance from 550 MHz to 1 GHz
- Utilizes FAST-PACT™ style plug-in equalizers and pads
- Multiple options for return path bandwidth
- Plug-in diplex filters for future reverse split changes
- Must be ordered as AGC controlled amplifier
- Developed for existing long trunk spacing and eliminates re-spacing!
- Added as a booster amplifier between existing amplifiers

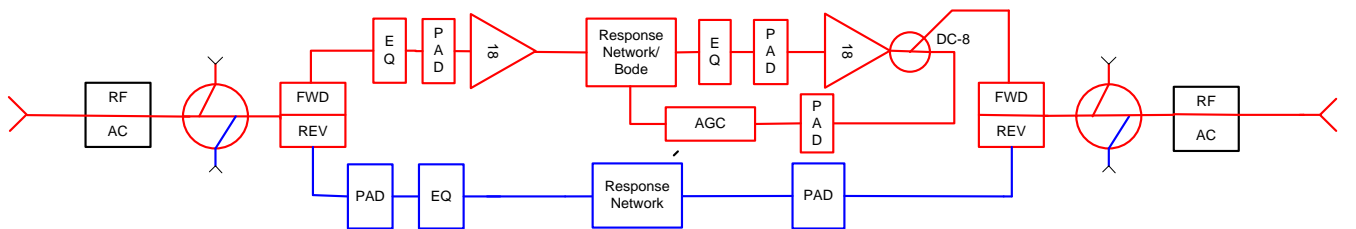


2PAC-S (TLE) – FAST-PAC™ LE Amplifier Conversion Performance to 1 GHz				
Analog Channels	79	95	110	Return
2PAC-S TLE Line Extender	-20 dB (+-1 dB) Dual Test Points on ALL Ports			
Frequency Response (dB)	+/- 0.75	+/- 0.75	+/- 0.75	+/- 0.5
Return Loss (-dB)	16	16	16	16
Noise Figure (-dB)	8	8	8	N/A
Operational Gain - AGC	16	16	16	-3
Slope Range (dB)	8 (+EQ)	8 (+EQ)	8 (+EQ)	EQ
AC Hum Mod @ 10A (-dB)[15A max]	-65	-65	-65	-65
Output Level	Varied	Varied	Varied	40
Output Slope	Varied	Varied	Varied	N/A
Input Hybrid Technology	GaAs PP	GaAs PP	GaAs PP	N/A
Output Hybrid Technology	GaAs PD	GaAs PD	GaAs PD	N/A
Composite Triple Beat (AGC)	86	81	78	N/A
Cross-Modulation (AGC)	75	73	72	N/A
Composite Second Order (AGC)	79	77	75	N/A

2PAC-S	TLE	AC Voltage											
		I DC	90	85	80	75	70	65	60	55	50	45	40
Manual	0.70	AC current draw	0.36	0.38	0.39	0.41	0.44	0.47	0.50	0.54	0.59	0.66	0.74
AGC	0.80	AC current draw	0.39	0.42	0.44	0.47	0.49	0.52	0.57	0.61	0.67	0.74	0.83

2PAC-S (TLE) Diagram:

BROADBAND INTERNATIONAL TLE 2 PAC



The Broadband International® 2PAC-S amplifier can be configured in many different frequencies and options. Please consult your account representative for assistance with specific plug-in options.