



LEA1 1002 MHz One or Two Output Line Extender Amplifiers

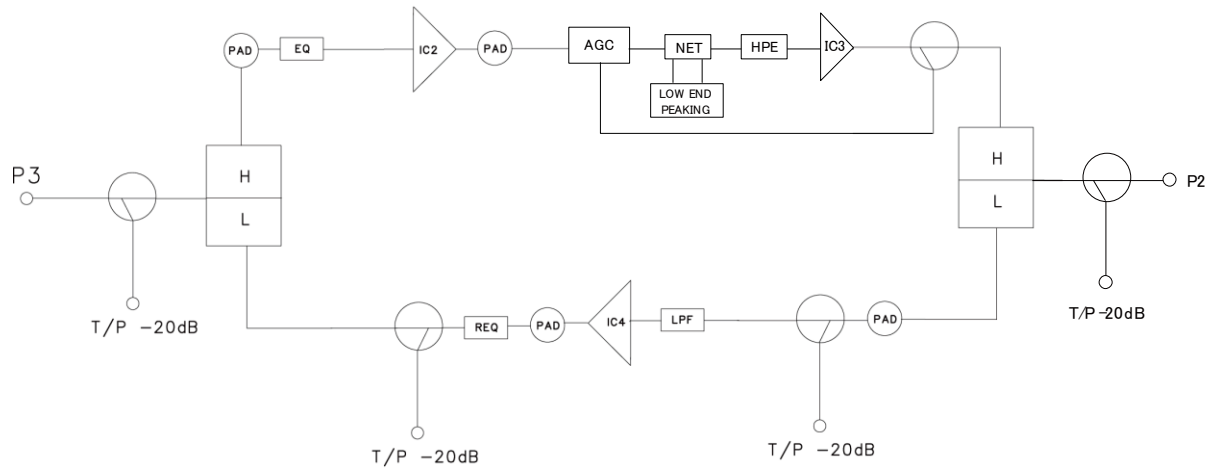
The LEA1 is a one or two output line extender amplifier. This amplifier provides high quality RF distribution for HFC (hybrid fiber coaxial) or fiber deep networks. All amplifiers support two-way operation at various standard frequency splits available.

Features

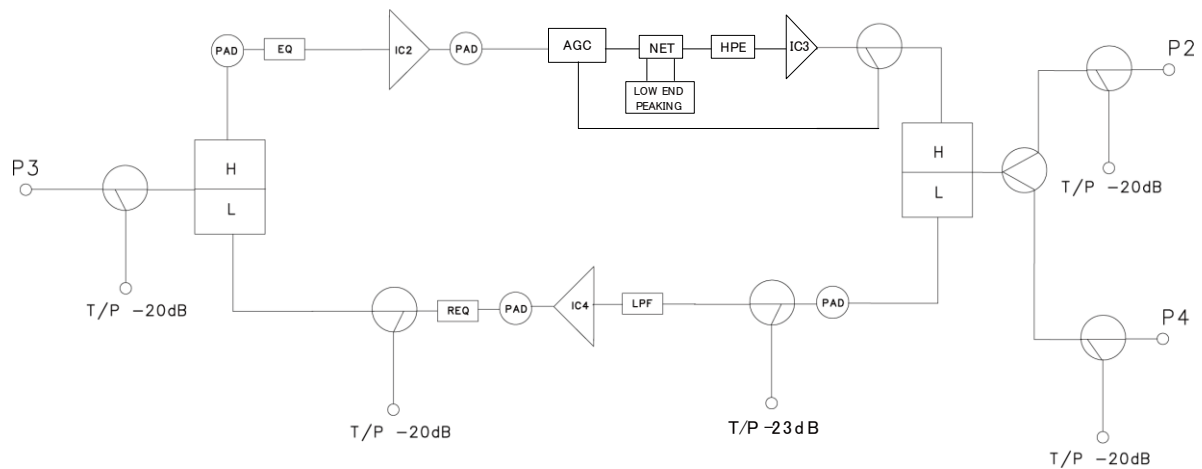
- ◆ Operating bandwidth 1002 MHz
- ◆ 40-90 VAC cable power
- ◆ -20 dB directional test points at the input and output port and after the return signal amplifier
- ◆ Pad Adjustable EQs & REQs
- ◆ Attenuator pad & equalizer guides to aid in proper insertion of plug-ins
- ◆ Two-way operation
- ◆ 10 Amp power passing
- ◆ Compact size

BLOCK DIAGRAMS

LEA1 Amplifier Block Diagram (JXP Platform) (One Output)



LEA1 Amplifier Block Diagram (JXP Platform) (Two Outputs)



SPECIFICATIONS

ACI		LEA1 1002 MHz		
STATION PARAMETERS:				
DESCRIPTION	CONDITIONS	UNITS	SPECIFICATIONS	NOTES
Forward Bandwidth		MHz	54 ~ 1002	
Flatness		dB	± 0.5	
Gain Control Range		dB	0 to 20.0	In 0.5 dB step
Slope Control Range		dB	-9.0 to +18.0	
Operation Gain with AGC/Thermal PAD	Min.	dB	1 output = 32 2 outputs = 28	
Return Loss	Min.	dB	16	
Test Point		dB	-20 ± 1	
Frequency		MHz	@54 / 550 / 750 / 870 / 1002	
Output Level	@1002 MHz	dBmV	1 output = 50 2 outputs = 46	
Station Slope		dB	0 / 9.0 / 12.6 / 14.8 / 17.2	
Distortion: 550 MHz analog channel loading, 79 channels +450 MHz digital channel loading, 256 QAM at -6 dBc relative to its associated visual carrier				
Composite Triple Beat (CTB)		dBc	-75	
Composite Second Order (CSO)		dBc	-67	
Cross Modulation (XMOD)		dBc	-67	
Noise Figure		dB	< 10.0	
Surge Protection		kv	4	
REVERSE SPECTRUM				
Reverse Bandwidth		MHz	5 ~ 42	
Operation Gain	Min.	dB	18	
Return Loss	Min.	dB	16	
Input Test Point		dB	- 20 ± 1 / -23 ± 1	-20 dB for 1 output; -23 dB for 2 outputs
Output Test Point		dB	- 20 ± 1	
Station Slope	Max.	dB	1.0	
Output Level	Flat	dBmV	39	

DESCRIPTION	CONDITIONS	UNITS	SPECIFICATIONS	NOTES
Distortions				
Channel loading		Channel	6	
Composite Triple Beat (CTB)		dBc	-77	
Composite Second Order (CSO)		dBc	-77	
Cross Modulation (XMOD)		dBc	-70	
Noise Figure		dB	< 10.0	
Maximum		W	24	
AC voltage input range		VAC	40-90	
Power Requirement				
Current Capacity		A	10	
Hum modulation		dBc	-60	
Physical				
Dimensions	W x H x L	In (cm)	6.7 x 4.5 x 9.25 (17 x 11.5 x 23.5)	
Weight		Lbs. (kg)	6.6 (3)	
Environmental				
Operating temperature		°F (°C)	- 40 to + 140 (- 40 to + 60)	

