LINE EXTENDER AMPLIFIER LEX80

The LEX80 is an advanced bi-directional amplifier typically deployed in the line portion of the RF network, providing RF signal gain with minimal distortions. It has an amplifier module with a power supply range 40-90Vac at 50/60Hz. Configurable as a single output device, LEX80 offers high gain, compatible plug-in accessories, two diplex filters, and an optional second output via a modular splitter or directional coupler. LEX80 amplifiers incorporate high quality push-pull and parallel GaAs hybrids to provide the highest output and lowest distortion levels possible. A regulated power supply along with a die casting aluminum alloy heat sink case provides the reliability required for operation in the most hostile environments. LEX80 has two test points, one for forward input and one for forward output, directly accessible from the housing cover, which simplifies the maintenance. It also has the optional accessories CTF and Therm for compensating the loss of cable caused by the change of temperature in both forward and return path.

Specifications

Forward Path

Pass band		54 ~ 870MHz	
Return Loss		≥16dB	
Flatness		±0.75dB	
Gain*		38dB	
Gain Adjustment		0dB to -20dB plug-in adjustable, 1dB per step	
Equalizer		0dB to -18dB plug-in adjustable, 2dB per step	
Interstage Equalizer Slope		9±1dB	
Noise Figure		9dB	
Test Points		-20±1dB	
RF Impedance		75Ω	
(79NTSC analogue channel loading with 320MHz compressed data loading**)			
Reference frequency		870/550/54 MHz	870/550/54 MHz
Output level		43/44/37 dBmV	46/48/44 dBmV
Distortion	CTB	≤-72dBc	≤-63dBc
	CSO	≤-72dBc	≤-68dBc
	XMOD	≤-62dBc	≤-54dBc

Return Path

Pass band	5~42MHz
Return Loss	≥16dB
Flatness	±0.75dB
Gain	24dB
Gain Adjustment	0dB to -12dB plug-in adjustable, 1dB per step
Equalizer	0dB to -12dB plug-in adjustable, 1dB per step
Test Points	-20±1dB
RF Impedance	75Ω

General

Power		60VAC (50/60Hz),
Power consumption		≤25W
AC current	@90V	0.28A
	@80V	0.31A
	@70V	0.35A
	@60V	0.41A
	@50V	0.50A
	@40V	0.69A
RF Connector		F
Dimensions (L x W x H)		255 mm x 195 mm x 120 mm
Weight		3.4Kgs
Operating Temperature:		-20ºC to +50ºC

** Based on one single output. 34dB operation gain for two equal outputs*

** QAM carriers are –6dB relative to the analog CW carriers

Order information

Model Number: LEX80-[A]-[B]-[C]-[D]-[E]-[F]-[G]-[H]

A 870 MHz

B WRP: With Return Path

C 2GA: 2 GaAs Forward Hybrids

D PH: Philips/PDI Hybrids

E Diplex filter (MHz): 35/47, 42/54, 65/87

F Gain Reverse (dB): 24

G Power: 60 VAC
220VAC

H

SP100	Splitter (2 equal outputs)	DC100-8	Coupler (-8dB for second output)
DC1	Coupler (1single output)	DC100-10	Coupler (-10dB for second output)
		DC100-12	Coupler (-12dB for second output)

Example: LEX80-870-WRP-2GA-PH-4254-22-60-SP100

Line Extender 870MHz (2 equal outputs), incorporating 2 GaAs Philips/PDI hybrids forward path, with 1 Philips return path hybrid (22dB gain), 42/54 MHz diplex filters, and powered by 60Vac

Note: Specific customer options are available upon request.

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