

ST-LE86 860MHZ Line Extender System-Tec Series



SYSTEM INDUSTRIAL TECHNOLOGY
TELECOMMUNICATIONS

System Industrial Technology System Tec

Series line extender, model ST-LE86*/* is a high performing and reliable bi-directional Amplifier solution for today's advanced HFC Networks. The ST-LE86*/* has been designed to optimally balance performance, functionality, and cost effectiveness.

This bidirectional Amplifier has a favorable flatness, low noise factor and small distortion. It is designed with structured design method that is backward, duplex filter and plugged in Equalizers.

FORWARD

The ST-LE-86 Series output amplifier offers high gain, high output levels, ergonomic plug-in accessories, leading distortion performance, and multiple duplex filter options. The ST-LE86*/* has a forward bandwidth of 860 MHz and provides maximum full gains of either 27 dB or 31 dB.

The amplifier deploys enhanced Phillips hybrid technology that provides improved distortion performance in CTB and CSO performance over traditional Gallium Arsenide technology. The amplifier is easily set-up via ergonomically designed modular gain and equalization controls. The amplifier comes standard with an active return path that provides 21 dB of station gain. To add to its reliability and performance, the SLE87*-* is housed within a chromate aluminum die-cast housing.

ENHANCED

The ST-LE86 also offers high gain. This allows the operator to hold existing amplifier locations during system upgrades thereby reducing system costs.



BENEFITS INCLUDE

- 870 MHz - The same as featured throughout STARLINE amplifier products.
- 35 dB and 40 dB forward gain models without SIT.LE-BODE control
- 28 dB and 32 dB forward operational gain with optional SIT.LE-BODE control
- Ergonomic modular plug-ins for gain and equalization control
- Reverse path gain of 19 dB
- 65/85 MHz and 42/54 MHz frequency splits can be supported via modular duplex filters – additional frequency splits may be supported
- Supports Automatic Gain Control via separate modular plug-in
- Internal modular splitter (SP) is available for a second output
- Modular Power Supply design for rapid field service
- 10 Ampere continuous AC bypass
- All directional coupler -20 dB test points
- Robust die cast aluminum housing for efficient thermal and environmental performance
- Supports optional ingress control and HMS compliant status monitoring



Specifications

RF PERFORMANCE - Forward

Passband Frequency.....	47 to 870 MHz (Dependent upon Split)
Gain.....	31 dB
Operational Gain.....	27 dB or 31 dB
Noise Figure.....	9 dB (at 870 MHz)
Interstage Slope.....	8 dB (52 to 870 MHz)
Reference Frequency.....	870/550/52 MHz
Output Level(s).....	45 dBmV (at 550 MHz) with 12 dB total slope Channel
Loading.....	79 NTSC Analog
CTB.....	75 dBc
CSO.....	75 dBc
Flatness.....	± 1.0 dB Fminforward to Fmaxforward
Return Loss.....	17 dB



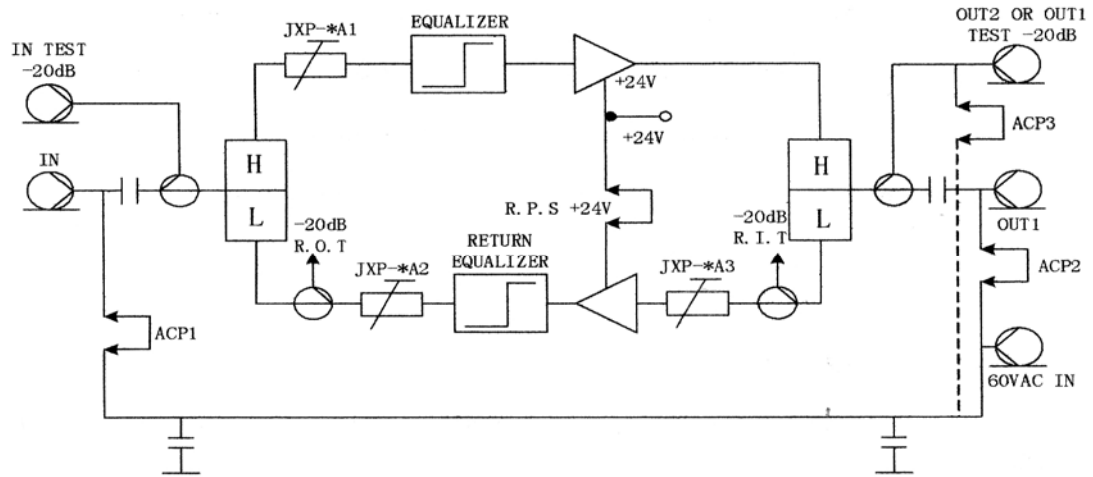
RF PERFORMANCE – Reverse

Passband Frequency.....	5 to 45 MHz
Gain.....	21 dB
Noise Figure.....	6.0 dB
Reference Frequency.....	40 MHz
Output Level.....	43 dBmV
Channel Loading.....	4 NTSC Analog
XM.....	74 dBc
STB.....	82 dBc
SSO.....	77 dBc
Flatness... ..	± 0.5 dB Fminreverse to Fmaxreverse Return
Loss.....	15 dB

GENERAL

AC Input Voltage.....	38-90 VAC	AC Bypass Current.....	10 A
AC Current Draw			
@ 90 VAC.....	0.41 A		
@ 75 VAC.....	0.47 A		
@ 60 VAC.....	0.51 A		
@ 53 VAC.....	0.58 A		
@ 45 VAC.....	0.62 A		
@ 38 VAC.....	0.70 A		
Connector Type.....	5/8-24 UNEF		
Operating Temperature.....	-40 to +60 °C (-40 to +140 °F)		
Dimensions.....	10.75 in x 8.0 in x 4.5 in (LxWxD)		
	273 mm x 203 mm x 114 mm		
Weight.....	7.0 lb (3.2 kg)		

BLOCK DIAGRAM



NOTE:-20dB OUT TEST can be used as backward level input port

