

# Features and Benefits

**ANTRONIX®**

## Line Equalizer w/Plug-in LEQ-PEA

The LEQ-PEA equalizer provides 12 amperes of current capacity and the flexibility of both a forward and a reverse path signal conditioning plug-in. The flexibility of an additional forward equalizer allows for easy system redesigns. System studies have shown that the addition of reverse band attenuation in strategic locations provides optimal support of reverse band services. Various plug-in combinations are available to accommodate the forward and reverse path equalization requirements of any system.

Antronix has designed the LEQ-PEA to withstand the most severe environmental conditions with the multi-step painting process. Additionally, the LEQ-PEA can withstand 6 kV combination wave surge per IEEE C62.41 Category B3.



- **Separate Plug-ins for the Forward and Return Paths**
- **6 kV Combination Surge Withstand on Input/Output Ports**  
Surge withstand per IEEE C62.41 Category B3.
- **Forward Path Plug-in**  
Allows the system designer to make adjustments to the system design equalizing only the forward path while adding minimum reverse path loss.
- **Reverse Path Return Plug-in**  
The reverse path can be optimized by adding a plug-in reverse path attenuator. By adding attenuation in the reverse path, return signals such as cable modems can be operated at higher levels for improved signal-to-noise performance while preventing clipping and distortion in the optical return laser.
- **Reverse Path Optimization**
- **Cable Equalization at 750, 870 or 1000 MHz**
- **12 Amperes of Power Passing Capability**  
12 A @ 90 VAC

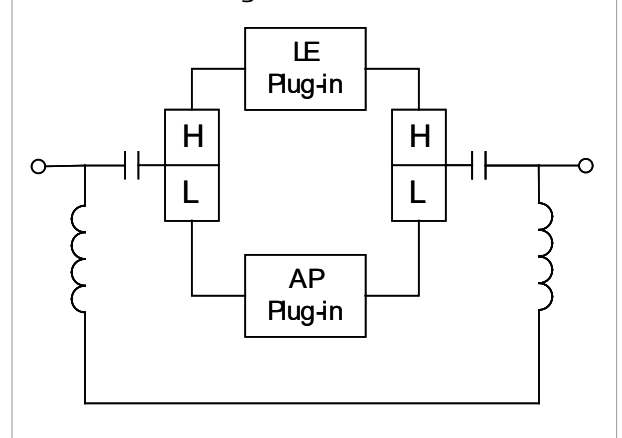
## Electrical Specifications LEQ-PEA

Model: LEQ-PEA		LE10-08	LE86-08	LE75-08	LE75-11
<b>Frequency Range</b>					
	<b>Freq (MHz)</b>				
(MHz)	Reverse	5-40	5-40	5-40	5-40
	Forward	54-1000	54-870	54-750	54-750
<b>Insertion Loss</b>					
<b>Maximum (dB)</b>	5	0.7	0.7	0.7	0.7
	30	0.8	0.8	0.8	0.8
	40	1.2	1.2	1.2	1.2
	54	8.3	8.3	8.3	9.5
	750	—	—	1.8	1.8
	870	—	1.8	—	—
	1002	1.8	—	—	—
<b>Flatness</b>					
dB	5-1002	±0.5	±0.5	±0.5	±0.5
<b>Return Loss</b>					
<b>Minimum (dB)</b>	5-10	16	14	14	14
	11-40	16	16	16	16
	54-550	16	16	16	16
	550-750	16	16	16	16
	750-870	16	15	—	—
	870-1002	16	—	—	—
<b>Equalizer Value</b>					
dB	750	—	—	8	11
	870	—	8	—	—
	1002	8	—	—	—

### General

Power Passing	12 amps @ 90 VAC
Nominal Impedance	75 Ω

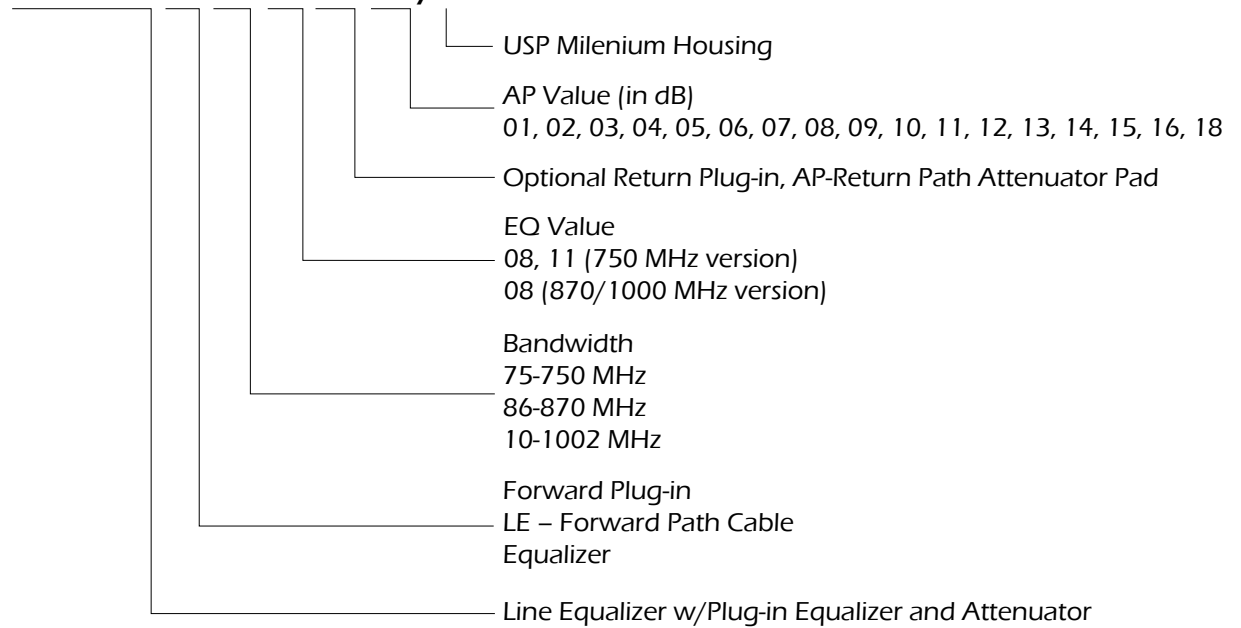
LEQ-PEA Block Diagram



## Specifications LEQ-PEA

### Ordering Information

**LEQ-PEA-LE XX-XX-AP XX /U**



#### For Example:

LEQ-PEA/U	Line equalizer includes one forward jumper plug-in and one reverse jumper plug-in with a USP housing
LEQ-PEA-LE86-08/U	Line equalizer includes one forward 08 dB/870 MHz equalizer plug-in and one reverse jumper plug-in. Also includes USP housing.

#### Plug-in conditioners:

LE**	Equalizer bandwidth (select one): 75 (750 MHz), 86 (870 MHz) or 10(1002 MHz)
LS**	Cable equalizer bandwidth (select one): 75 (750 MHz) or 86 (870 MHz)
AP**	Return attenuator (select one): 00–16 and 18 dB