# 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 870 or 1000 MHz**
- **12 Amperes of Power Passing Capability**
  12 A @ 90 VAC


440 Forsgate Drive, Cranbury, NJ 08512 • T: 609.860.0160 • F: 609.860.1687 • antronix.com

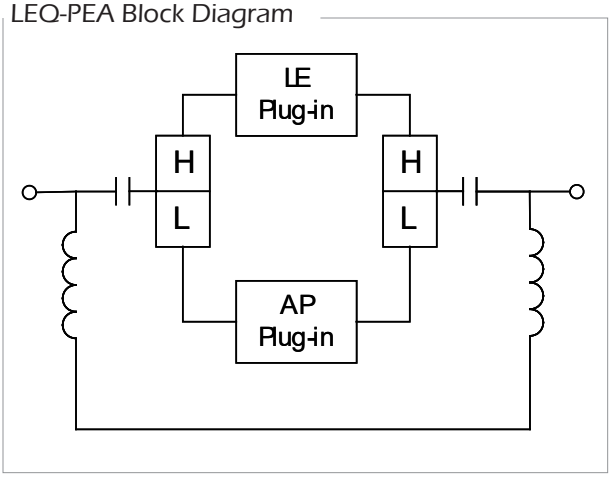
ANTRONIX®

# Electrical Specifications
# LEQ-PEA

| Model: LEQ-PEA | | LE10-08 | LE10-11 | LE86-08 |
|---|---|---|---|---|
| **Frequency Range** | | | | |
| | **Freq** (MHz) | | | |
| (MHz) | Reverse | 5-40 | 5-40 | 5-40 |
| | Forward | 54-1002 | 54-1002 | 54-870 |
| **Insertion Loss** | | | | |
| **Maximum** (dB) | 5 | 0.7 | 0.7 | 0.7 |
| | 30 | 0.8 | 0.8 | 0.8 |
| | 40 | 1.2 | 1.2 | 1.2 |
| | 54 | 8.3 | 9.5 | 8.3 |
| | 870 | — | — | 1.8 |
| | 1002 | 2.0 | 1.8 | — |
| **Flatness** | | | | |
| dB | 5-1002 | ±0.5 | ±0.5 | ±0.5 |
| **Return Loss** | | | | |
| **Minimum** (dB) | 5-10 | 14 | 14 | 14 |
| | 11-40 | 16 | 16 | 16 |
| | 54-550 | 16 | 16 | 16 |
| | 550-750 | 16 | 16 | 16 |
| | 750-870 | 16 | 16 | 15 |
| | 870-1002 | 15 | 15 | — |
| **Equalizer Value** | | | | |
| | 870 | — | — | 8 |
| | 1002 | 8 | 11 | — |

| General | |
|---|---|
| Power Passing | 12 amps @ 90 VAC |
| Nominal Impedance | 75 Ω |

LEQ-PEA Block Diagram

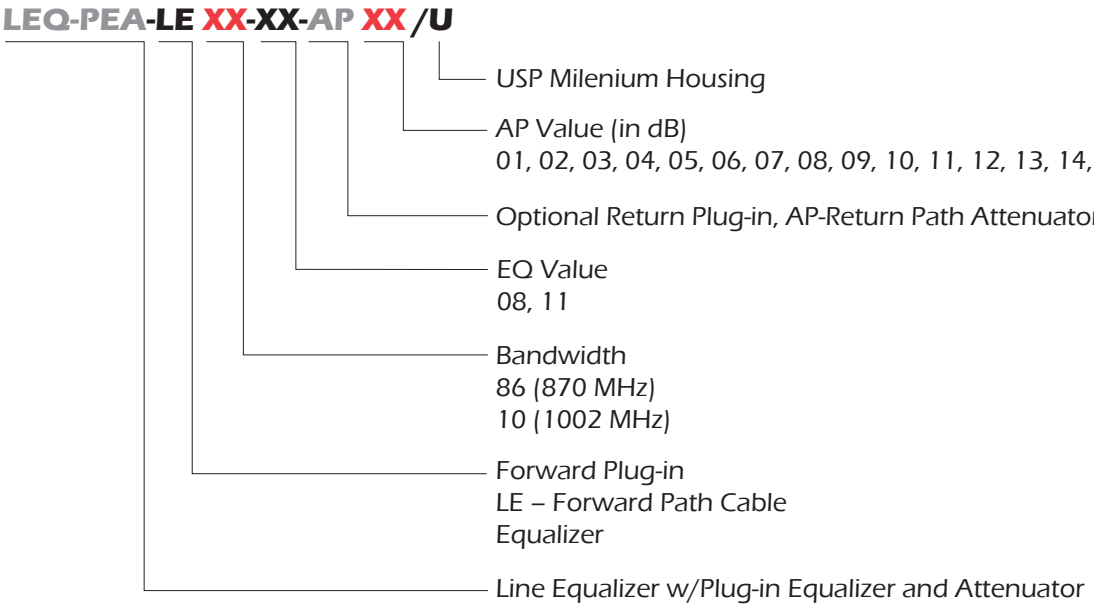





440 Forsgate Drive, Cranbury, NJ 08512 • T: 609.860.0160 • F: 609.860.1687 • antronix.com

# Specifications
# LEQ-PEA

## Ordering Information




| **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): 86 (870 MHz) or 10 (1002 MHz) |
| AP** | Return attenuator (select one): 00–16 and 18 dB |



440 Forsgate Drive, Cranbury, NJ 08512 • T: 609.860.0160 • F: 609.860.1687 • antronix.com