Predistortion Linearizers Can Give TWTAs an Effective 4X Power Increase with Multicarrier Traffic.

**Ku Band**

BLFE-14000H Series

- >40 dB Gain
- Full Uplink Bandwidths
- Compact Design
- Wide Dynamic Range
- For Digital, Analog, & Mixed Signals

**BLFE - 14000H OUTLINE SPECIFICATIONS**

- RF Input: 3.30
- RF Output: 25
- 4 Holes, .120 Dia
- Model No. BLFE-14000H
- Serial No. 00XX

Linearizer Technology, Inc.
3 Nami Lane, Unit C
Hamilton, NJ 08619
Phone: (609) 584-8424
Fax: (609) 631-0177
1. Option/Frequency Range
   - 14001: 13.75 to 14.5 GHz
   - 14003: 14.0 to 14.5 GHz
   - 14005: 12.75 to 14.5 GHz

2. Power Level In for TWTA Rated Power
   - HAH: -30 to -5 dBm (Extended Range Available)

3. Power Level Out for TWTA Rated Power
   - HAH: Adj. from 7 dBm to 17 dBm
   - HAM: Adj. from 2 dBm to 12 dBm
   - HAL: Adj. from -10 dBm to 0 dBm

4. Output Backoff (From Single Carrier Rated Power)
   - Minimum Carrier to Intermodulation (C/I) Ratio (with TWTA)
     - 3 dB: > 25 dB
     - ≥ 4 dB: > 30 dB

5. Gain Flatness
   - < +/- 0.5 dB Over Any 500 MHz

6. Gain Slope
   - < 0.020 dB/MHz

7. Gain Stability Over Temperature
   - < ± 1 dB, -10 to 50 º C (optional < ± 0.5 dB)

8. Static Phase Shift
   - < ± 5 degrees to Rated Power (with TWTA)

9. Group Delay
   - < 1 ns/60 MHz

10. AM/PM Conversion
    - < 2 deg/dB to Rated Power (with TWTA) (<1 deg/dB typical)

11. Spurious/Noise
    - < -135 dBw/4 KHz (at 0 dB gain)

12. Input/Output VSWR
    - < 1.35

13. Power
    - 15 Volts dc, < 400 mA*

14. RF Interface
    - 2 SMA Female Connectors

*except 14005

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**Pin Designation**

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<thead>
<tr>
<th>DB15P Pin #</th>
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<tbody>
<tr>
<td>1</td>
<td>+15 Vdc Input</td>
<td>9</td>
<td>15 Vdc Return (Ground)</td>
</tr>
<tr>
<td>2</td>
<td>Phase Adj. (+)</td>
<td>10</td>
<td>Phase Adjust Wiper</td>
</tr>
<tr>
<td>3</td>
<td>Gain/MAG Return</td>
<td>11</td>
<td>Gain Adj. (+)</td>
</tr>
<tr>
<td>4</td>
<td>Gain Wiper</td>
<td>12</td>
<td>Not Used</td>
</tr>
<tr>
<td>5</td>
<td>Not Used</td>
<td>13</td>
<td>Bypass Switch</td>
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<tr>
<td>6</td>
<td>Not Used</td>
<td>14</td>
<td>Phase Return</td>
</tr>
<tr>
<td>7</td>
<td>Not Used</td>
<td>15</td>
<td>MAG Adj. Wiper</td>
</tr>
<tr>
<td>8</td>
<td>MAG Adjust (+)</td>
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