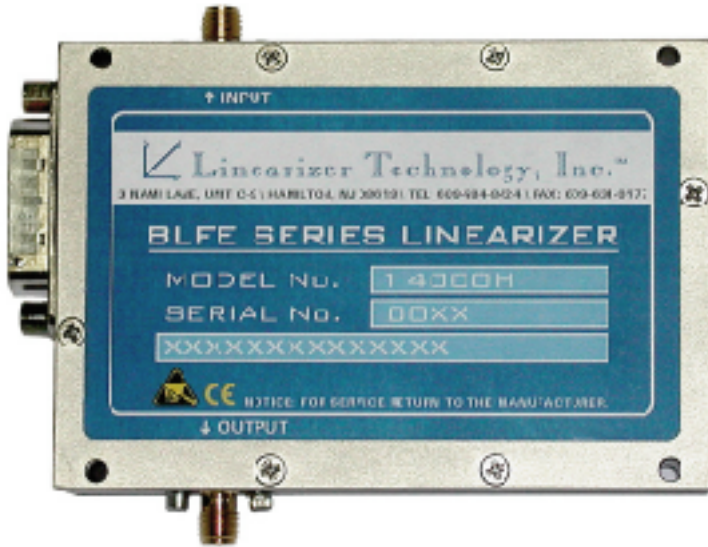


Predistortion Linearizers Can Give TWTAs an Effective 4X Power Increase with Multicarrier Traffic.

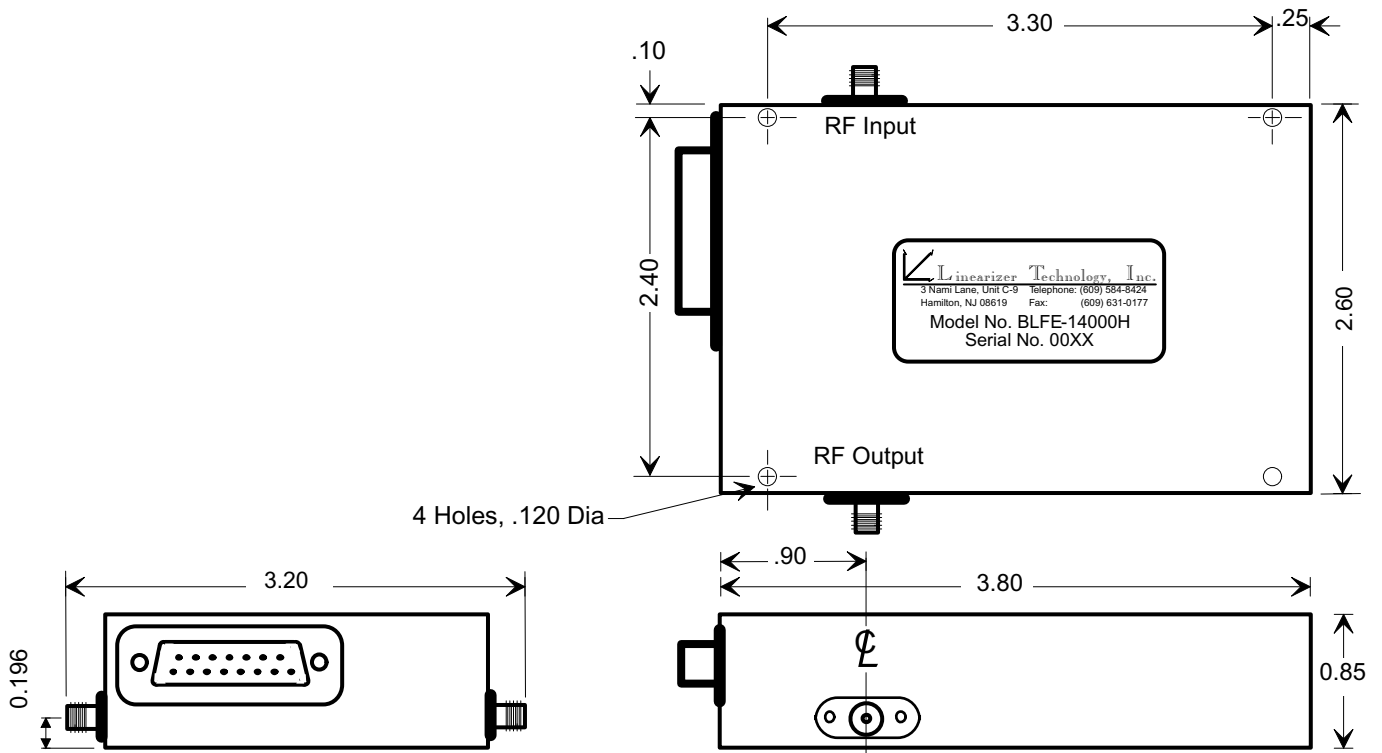
# FRONT END LINEARIZER

*Ku Band*  
**BLFE-14000H**  
*Series*



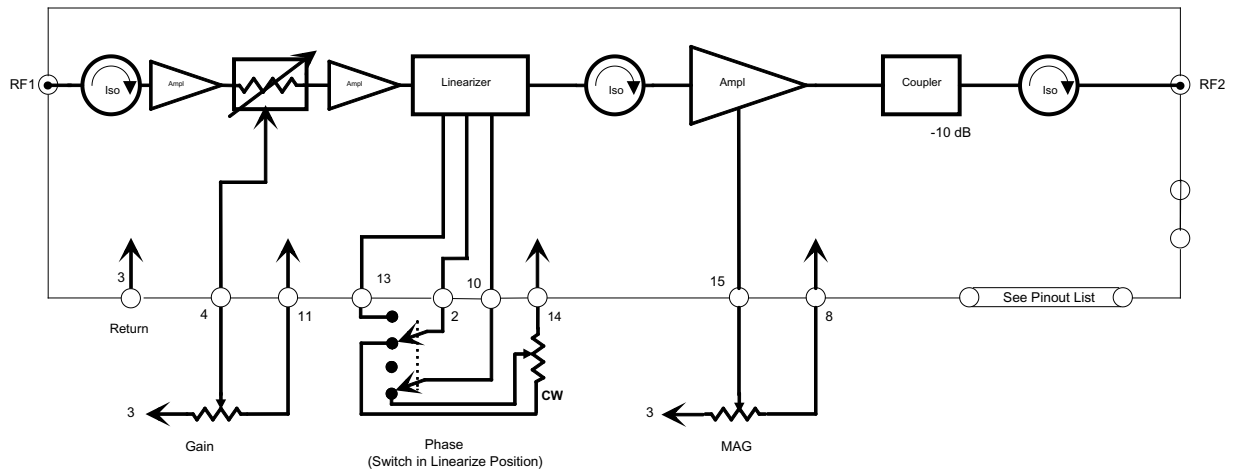
- >40 dB Gain
- Full Uplink Bandwidths
- >25 dB Adj. Attn.
- Compact Design
- Wide Dynamic Range
- For Digital, Analog, & Mixed Signals

## BLFE - 14000H OUTLINE SPECIFICATIONS



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	□ □	□ □	□	□	HA_ □ □	-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 ° 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



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