

The **X-Series** linearizer is a set and forget linearizer module used in conjunction with a TWTA, MPM, or GaAs/GaN SSPA amplifier to provide superior HPA linearity performance. It provides RF gain, AM/PM predistortion, output level control, and RF output power to drive an amplifier to saturation. It typically provides a 4x power increase with multicarrier traffic and advanced digital modulation. The **X-Series** is available but not limited to all Satcom uplink bands L- through Ka-band.



X-Series (Models: LCL or GLFE) 1.73"
L x 1.53" W x 0.58" H
(cm) 4.39 L x 2.89 W x 1.47 H

Typical Uplink Frequency Bands

Frequency Range:	5.850 to 6.725 GHz (C)
	7.900 to 8.400 GHz (X)
	13.75 to 14.50 GHz (Ku)
	17.30 to 18.40 GHz (K)
	27.00 to 31.00 GHz (Ka)

General Performance

Input Power Level for HPA Rated Power:	-10 to 0 dBm
Output Power for HPA Saturation:	up to +15 dBm
Gain:	> 20 dB (typ.)
Gain Flatness:	< ± 0.5 dB over any 500 MHz
Gain Slope:	< 0.02 dB/MHz
Gain Stability:	< ± 0.75 dB, -20 to +85°C
Static Phase Shift to HPA Rated Power:	< ± 5 degrees
AM/PM Conversion to HPA Rated Power:	< 2 degrees/dB
Spurious/Noise:	< -135 dBw/4 KHz (max Gain)
Input and Output VSWR:	1.5:1

RF Interface:	SMA or K Female Connectors
DC Interface:	9 Pin Male D-Sub
Interface:	Analog, 0 to 5 Volts
DC Power:	+12 Volts, 300 mA (typ.)

Typical Performance w/ TWTA

Intermodulation (C/I):	>25 dBc @ 3 dB OPBO
	>30 dBc @ ≥4 dB OPBO

FEATURES/OPTIONS

Compact Package

Temperature Compensation

Extended Range -20 to +85°C

TTL MUTE Function

Contact us for additional custom features.

Increase Usable Output Power and Efficiency of your GaN Amplifier

