

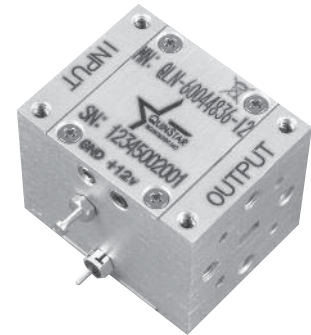


# ..... Millimeter-Wave Low Noise Amplifiers

QLN

## Characteristics

- ◆ Offered Over 18-104 GHz Range
- ◆ State-of-the-art Low Noise Performance
- ◆ Wide Selection of Gain and Noise Figures
- ◆ Low Power Consumption



## Product Description

QuinStar Technology's series QLN low noise amplifiers utilize advanced MMICs and discrete devices for state-of-the-art low noise performance in the 18-104 GHz frequency range. These amplifiers operate over up to 4 GHz bandwidth at most frequency ranges of commercial or military interest. Wide range of noise figures and gains are offered over each frequency interval.

The standard amplifier housing offers a wide range and combinations of input and output coaxial connectors or

waveguide ports. For 18 to 40 GHz amplifiers, we offer 2.9 mm coaxial connectors, and 2.4 mm for 40-50 GHz and 1.9 mm connector for frequencies beyond. Appropriate waveguide input and/or output ports are offered for the entire range from 18 to 104 GHz. Any valid combination of coaxial and waveguide input and output ports can be supplied, if desired. Integral waveguide isolators are also available for improved input and output matches. A wide range of optional features is available for these amplifiers. Please see page 39 for details of these options.

## Specifications

Model Number	Frequency Range (GHz)	Noise Figure (dB)	Gain (dB)	Gain Flatness (±dB)	Current (mA) max.	Outline (pages 40-45)
QLN-ABCD2520	18-22	2.5	20	1	100	J,E,G,L,S,D1
QLN-ABCD2540	18-22	2.5	40	1.25	180	J,E,G,L,S
QLN-ABCD2550	18-22	2.5	50	1.5	250	J,G,L,S
QLN-ABCD2520	22-26	2.5	20	1	100	J,E,G,L,S,D1
QLN-ABCD2540	22-26	2.5	40	1.25	180	J,E,G,L,S,D1
QLN-ABCD2550	22-26	2.5	50	1.5	250	J,G,L,S
QLN-ABCD2822	26-32	2.8	22	1.75	100	J,E,G,L,S,D1
QLN-ABCD2834	26-32	2.8	34	2	150	J,E,G,L,S,D1
QLN-ABCD2846	26-32	2.8	46	2.25	250	J,G,L,S
QLN-ABCD2822	32-36	2.8	22	1	100	J,E,G,L,S,D1
QLN-ABCD2834	32-36	2.8	34	1.25	150	J,E,G,L,S,D1
QLN-ABCD2846	32-36	2.8	46	1.5	250	J,G,L,S
QLN-ABCD2818	36-40	2.8	18	1.75	100	J,E,G,L,S,D1
QLN-ABCD2830	36-40	2.8	30	2	150	J,E,G,L,S,D1
QLN-ABCD2840	36-40	2.8	40	2.25	250	J,G,L,S
QLN-ABCD3522	38-42	3.5	22	2	150	J,E,G,L,S,D1
QLN-ABCD3534	38-42	3.5	34	2	200	J,E,G,L,S
QLN-ABCD3546	38-42	3.5	46	2	250	J,G,L,S
QLN-ABCD3522	40-45	3.5	22	2	150	J,E,G,L,S,D1
QLN-ABCD3534	40-45	3.5	34	2	200	J,E,G,L,S
QLN-ABCD3546	40-45	3.5	46	2	250	J,G,L,S
QLN-ABCD4518	42-46	4.5	18	1.5	150	J,E,G,L,S,D1



# Millimeter-Wave Low Noise Amplifiers

QLN

Amplifier Products

## Specifications

Model Number	Frequency Range (GHz)	Noise Figure (dB)	Gain (dB)	Gain Flatness (±dB)	Current (mA) max.	Outline (pages 40-45)
QLN-ABCD4527	42-46	4.5	27	1.75	200	J,G,L,S
QLN-ABCD4537	42-46	4.5	37	2	250	J,G,L,S
QLN-ABCD4520	46-50	4.5	20	2	180	J,E,G,L,S
QLN-ABCD4530	46-50	4.5	30	2.1	250	J,G,L,S
QLN-ABCD4540	46-50	4.5	40	2.2	300	J,G,L,S
QLN-ABCD4520	50-54	4.5	20	2	180	P1,G
QLN-ABCD4530	50-54	4.5	30	2.1	250	P1,G
QLN-ABCD4540	50-54	4.5	40	2.2	300	P1,G
QLN-ABCD4518	54-58	4.5	18	1.5	100	P1,G
QLN-ABCD4536	54-58	4.5	36	2	180	P1,G,I2
QLN-ABCD4518	58-62	4.5	18	1.5	100	P1,I1
QLN-ABCD4536	58-62	4.5	36	2	180	P1,I2
QLN-ABCD4518	62-66	4.5	18	1.5	100	P1,I1
QLN-ABCD4536	62-66	4.5	36	2	180	P1,I2
QLN-ABCD4518	66-70	4.5	18	1.5	100	P1,I1
QLN-ABCD4536	66-70	4.5	36	2	180	P1,I2
QLN-ABCD4518	70-74	4.5	18	1.5	100	P1,I1
QLN-ABCD4536	70-74	4.5	36	2	180	P1,I2
QLN-ABCD5518	74-78	5.5t	18	2	100	P1,I2
QLN-ABCD5530	74-78	5.5t	30	2.2	130	P1
QLN-ABCD5518	78-82	5.5t	18	2	100	P1,I2
QLN-ABCD5530	78-82	5.5t	30	2.2	130	P1
QLN-ABCD5518	82-86	5.5t	18	2	100	P1,I2
QLN-ABCD5530	82-86	5.5t	30	2.2	130	P1
QLN-ABCD5518	86-92	5.5t	18	2	100	P1,I2
QLN-ABCD5530	86-92	5.5t	30	2.2	130	P1
QLN-ABCD6515	92-96	6.5	15	1.5	80	P1,I1
QLN-ABCD6528	92-96	6.5	28	2	150	P1,I2
QLN-ABCD5510	96-100	5.5	10	2	50	P1,I1
QLN-ABCD5524	96-100	5.5	24	2.5	150	P1,I2
QLN-ABCD5510	100-104	5.5	10	2t	50	P1,I1
QLN-ABCD5520	100-104	5.5	20	2.5t	100	P1,I2

t = typical

## Ordering Information

