

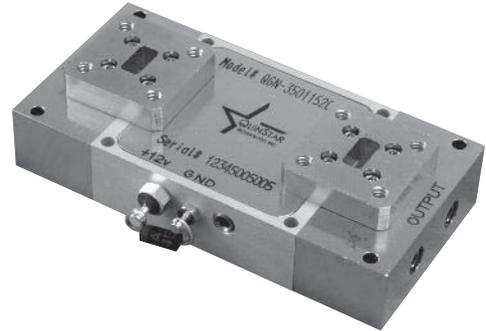


Millimeter-Wave General Purpose Amplifiers

QGN

Characteristics

- ◆ 18-110 GHz Coverage
- ◆ Wide Range of Frequency and Gain Options
- ◆ Choice of Packages & Interfaces



Product Description

QuinStar Technology's series QGN amplifiers are ideally suited for most common applications requiring high RF gain over a relatively narrow bandwidth. The amplifiers are offered with nominal gains of 20 to 50 dB typically, and nominal output power of 10-20 dBm, across their entire operating frequency range

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 110 GHz. Any valid combination of coaxial and waveguide input and output ports can be supplied, if desired. 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)	Power P1dB (dBm)	Gain (dB)	Gain Flatness (±dB)	Voltage (V)	Current (mA) max.	Outline (pages 40-45)
QGN-ABCD1720	18-22	17	20	1.5	12	350	J,G,E,L,S
QGN-ABCD1730	18-22	17	30	1.65	12	450	J,G,L,S
QGN-ABCD1740	18-22	17	40	1.8	12	500	J,G,L,S
QGN-ABCD1750	18-22	17	50	2	12	600	J,G,L,S
QGN-ABCD2020	18-22	20	20	1.5	12	350	J,G,E,L,S
QGN-ABCD2030	18-22	20	30	1.65	12	450	J,G,L,S
QGN-ABCD2040	18-22	20	40	1.8	12	500	J,G,L,S
QGN-ABCD2050	18-22	20	50	2	12	600	J,G,L,S
QGN-ABCD1718	22-26	17	18	1.5	12	350	J,G,L,S
QGN-ABCD1730	22-26	17	30	1.65	12	450	J,G,L,S
QGN-ABCD1740	22-26	17	40	1.8	12	500	J,G,L,S
QGN-ABCD1750	22-26	17	50	2	12	600	J,G,L,S
QGN-ABCD2020	22-26	20	20	1.5	12	600	J,G,L,S
QGN-ABCD2030	22-26	20	30	1.65	12	680	J,G,L,S
QGN-ABCD2040	22-26	20	40	1.8	12	750	J,G,L,S
QGN-ABCD2050	22-26	20	50	2	12	800	J,G,L,S
QGN-ABCD1716	26-32	17	16	1.5	12	350	J,G,L,S
QGN-ABCD1727	26-32	17	27	1.65	12	450	J,G,L,S
QGN-ABCD1737	26-32	17	37	1.8	12	550	J,G,L,S
QGN-ABCD1748	26-32	17	48	2	12	600	J,G,L,S
QGN-ABCD2020	26-32	20	20	1.5	12	600	J,G,L,S
QGN-ABCD2030	26-32	20	30	1.65	12	680	J,G,L,S
QGN-ABCD2040	26-32	20	40	1.8	12	750	J,G,L,S



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Amplifier Products 1

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QGN-ABCD2050	26-32	20	50	2	12	800	J,G,L,S
QGN-ABCD1715	33-36	17	15	1.5	12	400	J,G,L,S
QGN-ABCD1726	33-36	17	26	1.65	12	480	J,G,L,S
QGN-ABCD1737	33-36	17	37	1.8	12	560	J,G,L,S
QGN-ABCD1748	33-36	17	48	2	12	630	J,G,L,S
QGN-ABCD2020	33-36	20	20	1.5	12	600	J,G,L,S
QGN-ABCD2030	33-36	20	30	1.65	12	680	J,G,L,S
QGN-ABCD2040	33-36	20	40	1.8	12	750	J,G,L,S
QGN-ABCD2050	33-36	20	50	2	12	800	J,G,L,S
QGN-ABCD1713	36-41	17	13	1.5	12	350	J,G,L,S
QGN-ABCD1724	36-41	17	24	1.65	12	450	J,G,L,S
QGN-ABCD1735	36-41	17	35	1.8	12	550	J,G,L,S
QGN-ABCD1745	36-41	17	45	2	12	600	J,G,L,S
QGN-ABCD2020	36-41	20	20	1.5	12	600	J,G,L,S
QGN-ABCD2030	36-41	20	30	1.65	12	680	J,G,L,S
QGN-ABCD2040	36-41	20	40	1.8	12	750	J,G,L,S
QGN-ABCD2050	36-41	20	50	2	12	800	J,G,L,S
QGN-ABCD1718	41-48	17	18	1.5	12	500	J,G,L,S
QGN-ABCD1728	41-48	17	28	1.65	12	600	J,G,L,S
QGN-ABCD1738	41-48	17	38	1.8	12	700	J,G,L,S
QGN-ABCD1748	41-48	17	48	2	12	750	J,G,L,S
QGN-ABCD2018	41-48	20	18	1.5	12	1100	J,G,L,S
QGN-ABCD2028	41-48	20	28	1.65	12	1600	J,G,L,S
QGN-ABCD2038	41-48	20	38	1.8	12	1700	J,G,L,S
QGN-ABCD2048	41-48	20	48	2	12	1800	J,G,L,S
QGN-ABCD1715	48-52	17*	15	2.5	8	700	J,G,L,S
QGN-ABCD1730	48-52	17*	30	2.5	8	800	J,G,L,S
QGN-ABCD1918	48-52	19*	18	2.5t	8	1200	J,G,L,S
QGN-ABCD1935	48-52	19*	35	2.7t	8	1300	J,G,L,S
QGN-ABCD1715	52-66	17	15	2	8	700	P1
QGN-ABCD1730	52-66	17	30	2	8	800	P2,P1
QGN-ABCD2015	52-66	20	15	2t	8	1400	P2
QGN-ABCD2030	52-66	20	30	2t	8	1600	P2
QGN-ABCD1718	66-70	17	18	2.5	5	250	P1,I1
QGN-ABCD1735	66-70	17	35	2.5	5	330	P1
QGN-ABCD1918	66-70	19*	18	2t	5	550	P2
QGN-ABCD1935	66-70	19*	35	2t	5	700	P2
QGN-ABCD1720	70-74	17	20	2	5	250	P1,I1
QGN-ABCD1735	70-74	17	35	2	5	330	P1,I2
QGN-ABCD1925	70-74	19*	25	2t	5	550	P1
QGN-ABCD1935	70-74	19*	35	2t	5	700	P1
QGN-ABCD1720	74-78	17	20	2	5	500	P1
QGN-ABCD1735	74-78	17	35	2	5	600	P1
QGN-ABCD2020	74-78	20*	20	2t	5	1000	P2
QGN-ABCD2035	74-78	20*	35	2t	5	1200	P2



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QGN-ABCD1715	78-84	17*	15	3	5	350	P1
QGN-ABCD1733	78-84	17*	33	3.5	5	350	P1
QGN-ABCD2015	78-84	20*	15	3t	5	700	P2
QGN-ABCD2033	78-84	20*	33	3.5t	5	800	P2
QGN-ABCD1715	84-90	17	15	2	5	200	P1,I1
QGN-ABCD1733	84-90	17	33	2	5	400	P1,I2
QGNABCD02015	84-90	20*	15	2	5	500	P1
QGN-ABCD2030	84-90	20*	30	2t	5	800	P1
QGN-ABCD1715	90-100	17	15	2	5	500	P1,I2
QGN-ABCD1730	90-100	17	30	2	5	750	P1
QGN-ABCD2020	90-100	20*	20	2	5	1000	P1
QGN-ABCD2030	90-100	20*	30	2t	5	1500	P1
QGN-ABCD1315	100-110	13*	15	2	5	700	P1

* = Saturated power
t = typical value

Ordering Information

