

## GW-A-Series

### Coaxial Low Noise Amplifier 6 GHz to 40 GHz

#### Applications

- 1-Satellite communications
- 2-Radar applications
- 3-5G systems and millimeter wave
- 4-Communication systems
- 5- Test and measurements

#### General description

Gigawave's low-noise amplifiers (LNAs) are based on GaAs PHEMT MMIC technology, operating within the 6 GHz to 40 GHz frequency range. These amplifiers are ideal for applications that require minimal noise in the X, K, and Ka bands. The coaxial LNA delivers a saturated output power ranging from 2 dBm to 25 dBm, while providing a small signal gain of 20 dB to 50 dB, with excellent  $\pm 1$  dB gain flatness. Designed to operate with a single positive DC power supply, these LNAs are unconditionally stable over a temperature range of  $-40^{\circ}\text{C}$  to  $85^{\circ}\text{C}$ . Gigawave offers various specifications tailored to customer application requirements. Detailed part numbers and electrical specifications are provided on the following section.

#### Electrical Specifications

P/N	Frequency (GHz)	Gain (dB)	Flatness ( $\pm$ dB)	N.F.(dB) max	P1dB out (dBm)	VSWR (max)	Current @+12V (mA)
GW-A618-30	6.0-18.0	30	1.5	1.8	16	2:01	120
GW-A618-40	6.0-18.0	40	1	1.8	17	2:01	150
GW-A618-60-17	6.0-18.0	60	2	1.8	17	2:01	200
GW-A620-30	6.0-20.0	30	2	3	15	2:01	150
GW-A620-40	6.0-20.0	40	2.5	3	15	2:01	200
GW-A710-70	7.0-10.0	70	2	2.5	10	2:01	500
GW-A714-35	7.0-14.0	35	1.5	1.8	15	2:01	100
GW-A812-20	8.0-12.0	20	0.5	1	8	1.8:1	50
GW-A812-40	8.0-12.0	40	1.5	1.1	15	1.8:1	100
GW-A818-20	8.0-18.0	20	1	1.8	12	2:01	40
GW-A818-30	8.0-18.0	30	1.5	1.8	16	2:01	120
GW-A818-40	8.0-18.0	40	1	1.8	17	2:01	150

P/N	Frequency (GHz)	Gain (dB)	Flatness ( $\pm$ dB)	N.F(dB) max	P1dB Out (dBm)	VSWR (max)	Current @+12V (mA)
GW-A820-26-15	8.0-20.0	26	1.5	3.2	15	1.8:1	200
GW-A820-26-25	8.0-20.0	26	1.5	3.2	25	2 :1	350
GW-A1113-33-10	11.0-13.0	33	1	1	10	2 :1	100
GW-A1113-35-15	11.0-13.0	35	1	1.3	15	1.8:1	100
GW-A1218-30	12.0-18.0	30	1.5	1.6	15	2:01	100
GW-A1218-45	12.0-18.0	45	2	1.5	7	2:01	60
GW-A1219-25	12.0-19.0	25	1.5	1.5	2	1.8:1	30
GW-A1219-35	12.0-19.0	35	2	1.5	15	2:01	130
GW-A1220-28	12.0-20.0	28	1.5	1.6	6	1.8:1	90
GW-A1220-35	12.0-20.0	35	2	2.6	17	2.2:1	130
GW-A1330-23	13.0-30.0	23	2	2.5	14	2.5:1	130
GW-A1526-35	15.0-26.0	35	2	1.8	10	2:01	120
GW-A1722-25-20	17.0-22.0	24	1	1.5	20	2:01	110
GW-A1723-25	17.0-23.0	25	1	1.8	3	1.8:1	50
GW-A1723-50	17.0-23.0	50	2	1.8	3	2:01	100
GW-A1826-40	18.0-26.0	40	3	1.5	15	2.2:1	180
GW-A1832-20	18.0-32.0	20	2	2.5	10	2.2:1	62
GW-A1832-30	18.0-32.0	30	1.5	2.6	10	2.2:1	100
GW-A1832-40	18.0-32.0	40	2.5	2.6	10	2.2:1	150
GW-A1840-30	18.0-40.0	30	2.5	3.2	12	2.2:1	150
GW-A1840-33	18.0-40.0	30	2.5	4	12	2.2:1	200
GW-A1840-45	18.0-40.0	43	3	3.4	10	2.2:1	200
GW-A2232-35	22.0-32.0	35	2	2.8	12	2.2:1	150
GW-A2440-20	24.0-40.0	20	2	2.8	10	2.2:1	90
GW-A2440-35	24.0-40.0	35	2.5	2.8	12	2.2:1	140
GW-A3040-20	30.0-40.0	20	1	2.5	4	2.2:1	60
GW-A3040-35	30.0-40.0	35	1.5	2.5	12	2.2:1	120