

# RF AMPLIFIERS

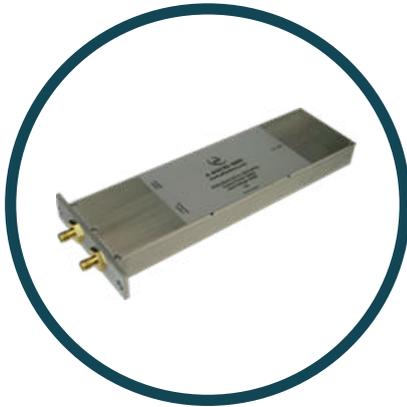
Frequency ranges from DC to 24 GHz

ETL Amplifiers cover a range of frequencies including IF, L, S, C, X, Ku, Wideband and Broadband. The units can be supplied with a variety of connectors including SMA, N-type, BNC or F-type, in 50Ω to 75Ω.

Different housings are available, including standard rectangular or a compact tubular design. The tubular design is in-line powered.

## Benefits & Applications

- Variety of housing and connector types.
- Amplifiers cover IF, L, S, C, X, Ku, Wideband and Broadband frequency ranges.
- Easy to use and cost effective.



Automatic Gain Control (AGC) Amplifiers



Fixed Gain (GAB) Amplifiers



Variable Gain (VGA) Amplifiers



SMART VGA Amplifiers

**Fixed Gain (GAB) Amplifier Product List**

Model Number	RF Connectors	Frequency Range	Gain (dB)	Output P1dB Typ. (dBm)	OIP3 Typ. (dBm)	Noise Figure Typ. (dB)	DC Supply Voltage
A-GABL1-3110	B7, F7, N5, S5	850 - 2150 MHz	20	15	25	8	8-24V
A-GABL1-3111	S5, B7, N5	850 - 2150 MHz	10	12	22	10	8-24V
A-GABL1-3112	B7, F7, N5, S5, B5	850 - 2150 MHz	15	13	22	9	8-24V
A-GABL1-3113	S5, N5, B7, F7	850 - 2150 MHz	25	11	18	8	8-24V
A-GABL1-3114	S5, B7, F7, N5	850 - 2150 MHz	30	15	25	8	8-24V
A-GABL1-3131	B7, F7, N5, S5	850 - 2150 MHz	10	15	25	10	8-24V
A-GABL1-3132	S5, N5, B5, F7	850 - 2150 MHz	15	15	25	10	8-24V
A-GABL1-3133	B7, F7, N5, S5	850 - 2150 MHz	25	15	25	8	8-24V
A-GABL1-3134	B5, B7, F7, N5, S5	850 - 2150 MHz	30	15	25	8	8-24V
A-GABL1-3140	B5, B7, F7, N5, S5	850 - 2150 MHz	20	15	25	8	8-24V
A-GABL1-3141	B5, B7, F7, N5, S5	850 - 2150 MHz	10	15	27	12	8-24V
A-GABL1-3143	F7, B7, N5, S5	850 - 2150 MHz	25	12	23	8	8-24V
A-GABL1-3207	B5, F7, N5, S5	850 - 2150 MHz	15	15	25	7	8-24V
A-GABL1-3208	B5, B7, F7, N5, S5	850 - 2150 MHz	20	12	23	8	8-24V
A-GABL1-3210	B5, B7, N5, S5	850 - 2150 MHz	30	17	23	7	8-24V
A-GABL1-3213	B7, S5	850 - 2150 MHz	10	18	28	13	8-24V
A-GABL1-3214	N5, B5, B7, F7	850 - 2150 MHz	20	18	28	10	8-24V
A-GABL1-3217	B5, B7, F7, N5, S5	850 - 2150 MHz	20	15	23	9	8-24V
A-GABL1-3219	N5	850 - 2150 MHz	10	12	20	13	8-18V
A-GABL1-3220	B5, N5	850 - 2150 MHz	15	16	22	10	8-18V

Note 1: All specifications are for 50 Ohm SMA connector type unless otherwise specified.

**Variable Gain (VGA) Amplifier Product List**

Model Number	RF Connectors	Frequency Range	Output P1dB Typ. (dBm)	OIP3 Typ. (dBm)	Noise Figure Typ. (dB)	DC Supply Voltage
A-VGAL1-3011	N5	850 - 2150 MHz	15	30	8	+24V
A-VGAL1-3014	B5, F7, N5, S5	850 - 2150 MHz	15	30	8	+24V
A-VGAL1-3016	F7, N5, S5, B5	850 - 2150 MHz	15	30	8	8-18V
A-VGAL1-3018	N5, S5	850 - 2150 MHz	15	30	8	+24V
A-VGAL1-3019	F7, N5, S5, B7	850 - 2150 MHz	15	30	8	+24V
A-VGAL1-3025	B5, N5, S5, F7, B7	850 - 2150 MHz	15	27	12	8-24V
A-VGAL1-3026	B5, N5, S5, B7	850 - 2150 MHz	18	27	12	8-24V
A-VGAL1-3027	F7, N5, S5	850 - 2150 MHz	18	27	12	8-24V
A-VGAL1-3028	N5, S5	850 - 2150 MHz	18	27	12	8-24V
A-VGAL1-3029	B7, F7, N5, S5	850 - 2150 MHz	18	27	12	8-24V
A-VGAL1-3030	F7, N5	850 - 2150 MHz	18	27	12	8-24V

**Variable Gain (VGA) Amplifier Product List**

Model Number	RF Connectors	Frequency Range	Output P1dB Typ. (dBm)	OIP3 Typ. (dBm)	Noise Figure Typ. (dB)	DC Supply Voltage
A-VGAL1-3053	B7, N5	850 - 2150 MHz	18	27	12	8-24V
A-VGAL1-310002	N5, S5	850 - 2150 MHz	15	25	9	8-24V
ODU-3014	F7, N5	850 - 2150 MHz	15	30	9	+24V
ODU-3053	F7	850 - 2150 MHz	18	27	12	8-24V

**Automatic Gain Control (AGC) Amplifier Product List**

Model Number	RF Connectors	Frequency Range	Output Level (dBm)	Input Power Min. (dBm)	Input Power Max. (dBm)	Typical Input Return Loss (dB)
A-AGCB3-3503	S5	50 - 2500 MHz	0	-50	5	-20
A-AGCB3-3504	S5	50 - 2500 MHz	-5	-55	0+	-20
A-AGCB3-3505	S5	50 - 2500 MHz	-10	-60	0+	-20

Note 2: The specification is subject to regular reviews and will be updated from time to time as part of our continuing product development and improved spec accuracy.

Note 3: Operation beyond the quoted limits stated above may cause instantaneous and permanent damage.