AMETEK®
COMPLIANCE TEST SOLUTIONS

MILMEGA
RF/Microwave Amplifiers

The MILMEGA Series 2000 Broadband Class A Solid State Microwave Amplifier Modules & Kits

High reliability combined with compact size and low weight make the MILMEGA amplifier and kit family ideal for use in commercial applications where space is at a premium and portability can be used to advantage.

Broadband Solid State

Available in a range of bandwidths from 800MHz - 6GHz with power outputs from 1W - 230W.

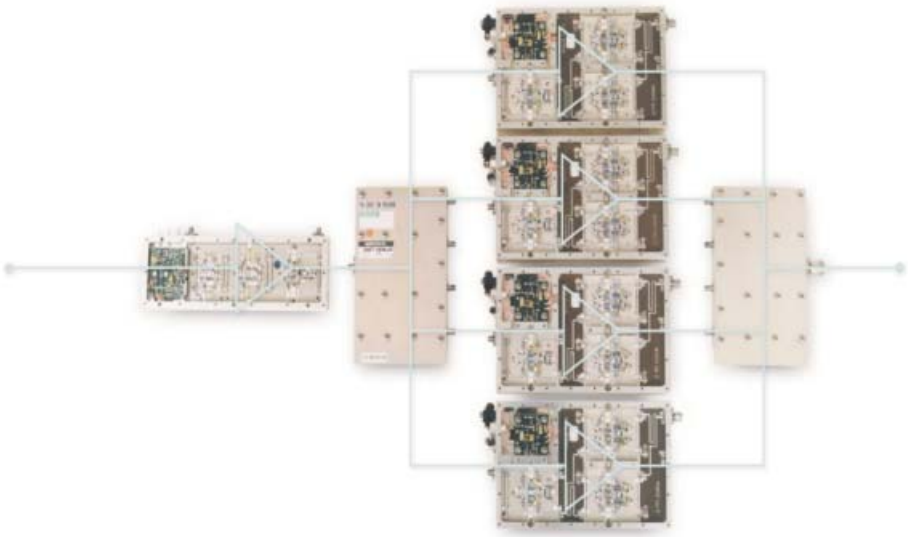
Bandwidths 0.8-2.7GHz, 1.0-2.0GHz, 1.8-6.0GHz and 2.0-4.0GHz.

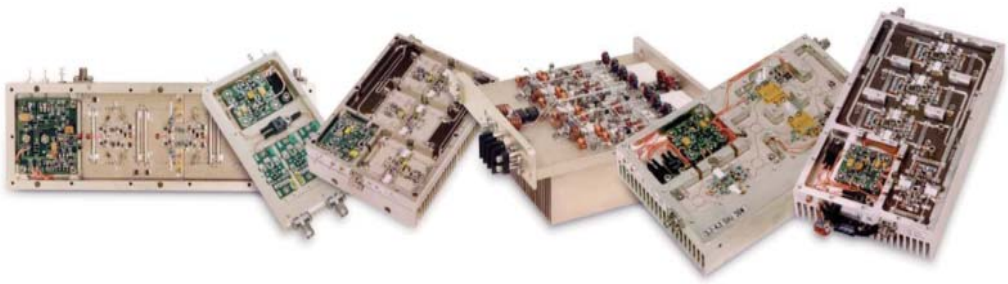
Maximum Power

100% tested into a short and an open circuit. The modules will maintain full forward power into any load condition.

Consistent Power performance over greater than octave bandwidths.

Choose between stand alone modules or amplifier kits, consisting of power modules, driver modules and the combiner/divider.





Frequency GHz	Model	Minimum Psat	Minimum Psat	Minimum P1dB	Minimum P1dB	Mimimum Gain	Harmonic Level (Maximum)	Maximum Current Requirement @ 11V	Maximum Current Requirement @ 24V	Maximum input for rated output	Weight (kg)	Dimensions
MODULES		dBm	Watts	dBm	Watts	dB	dBc	Amps	Amps	dBm	0.5	Cms
0.8-2.7	AS0827-5M	37.5	5.62	37.0	5.01	31.0	-18	4		5	1.4	1.7 x20.7 x 6.5
0.8-2.7	AS0827-20M	43.0	19.95	42.5	17.78	17.0	-18	17		25.5	1.4	3.8 x 23 x 11
1.0-2.0	AS0102-1M	31.1	1.29	30.6	1.15	23.0	-20	1.2		5	0.5	1.7 x20.7 x 6.5
1.0-2.0	AS0102-8M	39.0	7.94	38.5	7.08	35.0	-20	4		5	0.5	1.7 x20.7 x 6.5
1.0-2.0	AS0102-30M	45.0	31.62	44.5	28.18	41.0	-20	15		24.5	1.4	3.8 x 23 x 11
1.8-6.0	AS1860-10M	40.0	10.00	39.0	7.94	35.0	-20		2.2	5	2.3	2.1 x 29 x 11.3
1.8-6.0	AS1860-20M	45.0	31.62	43.0	19.95	16.0	-20		5	27	2.3	2.1 x 29 x 11.3
2.0-4.0	AS0204-2M	33.6	2.29	33.1	2.04	25.0	-20	3.2		5	0.5	1.7 x 20.7 x 7.6
2.0-4.0	AS0204-7M	38.8	7.59	38.3	6.76	32.0	-20	4.3		5	0.5	1.7 x 20.7 x 7.6
2.0-4.0	AS0204-17M	42.8	19.05	42.3	16.98	12.0	-20	16		30.3	1.2	3.3 x 23 x 11
0.8-2.7	AS0827-30K	45.4	34.67	44.9	30.90	41.4	-18	38		5	12	73 x 34 x 61 (s)
0.8-2.7	AS0827-55K	48.1	64.57	47.6	57.54	43.6	-18	70		5	14	73 x 24 x 61 (s)
0.8-2.7	AS0827-110K	51.0	125.89	50.5	112.20	47.0	-18	140		5	19	73 x 24 x 61 (s)
0.8-2.7	AS0827-230K	54.0	251.19	53.6	229.09	50.0	-18	280		5	38	73 x 68 x 61 (s)
KITS												
1.0-2.0	AS0102-55K	47.8	60.26	47.3	53.70	43.8	-20	38		5	12	73 x 24 x 61 (s)
1.0-2.0	AS0102-100K	50.6	114.82	50.1	102.33	46.6	-20	70		5	14	73 x 24 x 61 (s)
1.0-2.0	AS0102-200K	53.4	218.78	52.9	194.98	49.4	-20	140		5	19	73 x 68 x 61 (s)
1.8-6.0	AS1860-30K	47.0	50.12	45.0	31.62	43.0	-20		13	5	15	73 x 24 x 61 (s)
1.8-6.0	AS1860-50K	49.0	79.43	47.0	50.12	45.0	-20		23	5	20	73 x 24 x 61 (s)
1.8-6.0	AS1860-100K	51.7	147.91	50.0	100.00	47.7	-20		46	5	40	73 x 68 x 61 (s)
2.0-4.0	AS0204-30K	45.5	35.48	45.0	31.62	41.5	-20		37	5	12	73 x 24 x 61 (s)
2.0-4.0	AS0204-60K	48.3	67.61	47.8	60.26	44.3	-20		40	5	14	73 x 24 x 61 (s)
2.0-4.0	AS0204-100K	51.0	125.89	50.5	112.20	47.0	-20		140	5	19	73 x 24 x 61 (s)

(s) = Shipping dimensions

Other standard features

All data is measured at 25C driven from a 50 R source and driving into a 50 R load

Typical Spurious level -60 dBc

Input VSWR (impedance 50 R nominal) 2:1 max.

Output VSWR (impedance 50 R nominal) 2:1 typically

Load VSWR (any phase) is infinite

The modules are tuned to give optimum performance at 11.0V input. The amplifier may be damaged by an input voltage greater than 14V or by a negative input voltage. There is no reverse voltage protection.

Operating temperature (case) 0-60C. Cooling will be required by the addition of blowers (not supplied). The minimum airflow required is 25 litres per second (90 cubic metres per hour). Should the internal temperature of the module exceed 70C, the device will automatically reduce power.

Storage temperature -40 to 70C

Warranty

12 months parts and labour warranty on all Series 2000 modules and kits.

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Designers and Manufacturers of High Power Microwave and RF Amplifiers

MILMEGA
RF/Microwave Amplifiers

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