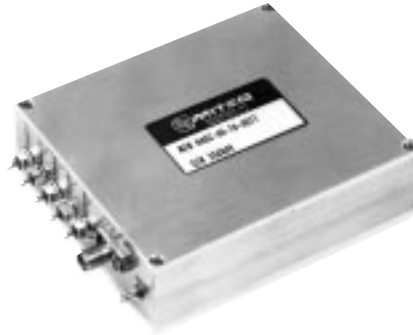


# HIGH-PERFORMANCE COMMUNICATION AUTOMATIC-CONTROL AMPLIFIER MODULE

## HAGC SERIES



HAGC series amplifiers provide constant output power over the entire input dynamic range automatically. Optionally, these amplifiers can be supplied with linearizers (dB/volt) for customized applications. These amplifiers are used in communication systems, such as satellite receivers, telemetry receivers and radar receivers.

### FEATURES

- Excellent passband gain flatness
- Very low gain variation through dynamic range
- Low noise figure
- Wide input dynamic ranges available

MODEL NUMBER *	CENTER FREQ. (MHz)	FREQ. SPAN (MHz)	DYNAMIC RANGE (dB)	GAIN FLATNESS (dB)	AGC GAIN VAR. (dB)
<b>30 MHz IF</b>					
HAGC-40-30-20-I/O	30	20	40	0.15	0.5
HAGC-50-30-20-I/O	30	20	50	0.15	0.4
HAGC-60-30-20-I/O	30	20	60	0.2	0.4
HAGC-70-30-20-I/O	30	20	70	0.25	0.5
<b>70 MHz IF</b>					
HAGC-40-70-40-I/O	70	40	40	0.15	0.5
HAGC-50-70-40-I/O	70	40	50	0.20	0.4
HAGC-60-70-40-I/O	70	40	60	0.25	0.4
HAGC-70-70-40-I/O	70	40	70	0.3	0.5
<b>140 MHz IF</b>					
HAGC-40-140-40-I/O	140	40	40	0.25	0.5
HAGC-50-140-40-I/O	140	40	50	0.25	0.4
HAGC-60-140-40-I/O	140	40	60	0.25	0.4
HAGC-40-140-80-I/O	140	80	40	0.5	0.5
HAGC-50-140-80-I/O	140	80	50	0.5	0.5
HAGC-60-140-80-I/O	140	80	60	0.5	0.5
HAGC-70-140-80-I/O	140	80	70	0.6	0.6
<b>160 MHz IF</b>					
HAGC-40-160-40-I/O	160	40	40	0.25	0.4
HAGC-50-160-80-I/O	160	80	50	0.5	0.5
HAGC-70-160-80-I/O	160	80	70	0.6	0.6
<b>200 MHz IF</b>					
HAGC-40-200-40-I/O	200	40	40	0.25	0.4
HAGC-50-200-80-I/O	200	80	50	0.5	0.5
HAGC-70-200-80-I/O	200	80	70	0.6	0.6

\* I = Input impedance; O = Output impedance.  
For impedance of 75 ohms, I or O = 7; for impedance of 50 ohms, I or O = 5.

## COMMON ELECTRICAL SPECIFICATIONS

Input/output impedance ..... 50 or 75 ohms  
Input return loss ..... > 18 dB  
Noise figure ..... < 8 dB  
Output power ..... 0 dBm  
Output return loss ..... > 18 dB

### PRIMARY POWER REQUIREMENTS

Current/voltage ..... 150 mA @ +15 volts  
40 mA @ -15 volts

## MECHANICAL SPECIFICATIONS

### PHYSICAL

Dimensions ..... 2.1" x 2.1" x .75"

### CONNECTORS

Input/output ..... SMA female  
DC power ..... Feedthru terminal  
Housing ground ..... 2-56 terminal

## OPTIONS

- HAG-1** Output test monitor port (impedance is the same as the main output).
- HAG-2** Other input frequencies (customer to specify).
- HAG-3** Wider frequency span (customer to specify).
- HAG-4** Other dynamic range (customer to specify).