

HFET Preamplifier High Level +40 dBm IP₃ 0.7 dB noise Figure 400 to 510 MHz

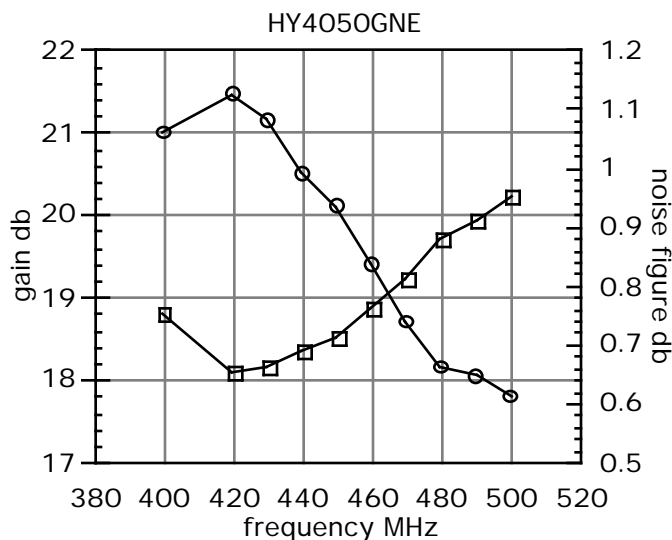
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Angle Linear, in it's desire to continue producing the best of present day technology in receiver front end design, has now introduced a higher level, low noise figure, hybrid combined redundant pair, HFET preamplifier. This amplifier offers the high output intercept of silicon bipolar amplifiers but with the low noise figure of AlGaAs FETs.

Hybrid combiners and common port inductance yield excellent input and output return losses while maintaining the low noise figure characteristics of AlGaAs FET devices and enhancing stability.

Output compression level is typically +27 dBm and 3rd order intercept is typically +40 dBm. Input intercept level is typically greater than +18 dBm. Gain is about 22 dB at 400 MHz, 23 dB at 450 MHz. Noise figure is 0.8 dB \pm 0.2 dB over this range. Input and output return losses are better than 20 dB. As always, Angle Linear guarantees unconditional stability of every preamplifier. Each amplifier has it's own independent voltage-current regulator.



External and internal high voltage transient suppressors provide 40kV, 1 micro sec. pulse protection.

An internal voltage pre-regulator permits operation from +11 to +16VDC. An external dropping resistor allows operation from higher voltages <+35 VDC. DC current requirement is typically 240 mA. Filtering on the DC terminal provides >80 dB attenuation from 5 MHz to several GigaHertz.

Construction is rugged: an irridited aluminum enclosure with stainless steel hardware throughout. Twenty four screws attach the covers and give maximum shielding for the most hostile RF environments.

Connectors have ptfe (Teflon) dielectric with gold pins and are available in type N, SMA, TNC. Dimensions: 3" x 3" x 0.7". Mounting and connector positions give maximum versatility for high density rack panel mounting. These amplifiers are also available in our line of receiver multicouplers.x

Part number: HY4050G +(conn type) + (conn. Config),
Connectors: N = N, T = TNC, S = SMA
Connector configuration: (T) Top, (E) End mounting
example, with N conn: HY4050GNE, shown in picture

Specifications subject to change

.2.99