

## HyperAmp® 2.4 GHz 802.11b and 802.11g (b/g) Compatible Indoor Bi-Directional WiFi Amplifiers with Active Power Control

### Features

- 12VDC Power Supply Included
- Receive Bandpass Filter
- Standard Models: 100 mw to 2 Watt
- IEEE 802.11g (b/g) and 802.11b Only Compatible (see chart below)
- 802.11g (b/g) models supports 108 Mbit/sec "Turbo Mode" data rates
- Streaming Media Ready Models (see chart below)
- Cast Aluminum Construction
- N-Female connectors
- Durable UV-Stable Finish
- Transmit and Receive LEDs
- 1 Year Limited Warranty



Indoor Model ("GI" Version)



Indoor Model ("GX1" Version)

### Models

Indoor Models	Max Output	802.11b	802.11g	Streaming Media Ready
HA2401GI-100	100 mW	✓	✓	
HA2401GI-250	250 mW	✓	✓	
HA2401GI-500	500 mW	✓		
HA2401GI-1000	1 Watt	✓		
HA2401GX1-500	500 mW	✓	✓	✓
HA2401GX1-1000	1 Watt	✓	✓	✓
HA2402GX1	2 Watt	✓	✓	✓

### Description

**HyperAmp® HA2401GI/GX1** amplifiers are compatible with 802.11g (b/g) and 802.11b only wireless LAN equipment (see chart above for model compatibility). The 802.11g (b/g) models support 108 Mbit/sec "Turbo Mode" radios as well. Hyperlink's Active Power Control circuit automatically adjusts the amplifier's gain to provide a constant output power regardless of cable length.

The HyperAmp® HA2401GI/GX1 series improves range by delivering full transmit power and receive gain directly at the antenna where it is most effective. This gain compensates for cable losses and actually increases the receive sensitivity of most wireless LAN radios. The unit can be configured to deliver the full transmit power with as little as 1 mW of input power, permitting cable runs of several hundred feet with no degradation in operating range.



## Streaming Media Ready

WiFi components used in a Streaming Video or Audio system work harder than ones carrying Data only. They are turned on for extended periods of time without the chance to cool off. Microwave devices are very sensitive to the heat generated from operating at high duty cycles. Most amplifiers, or for that matter many Radios, cannot pass Streaming Media content for extended periods of time without overheating. Some products were designed for Data only use and have no method of heatsinking. If you use them in a Streaming Media system, those products will self-destruct or have their lifespan diminished. It would be the equivalent removing the Heatsink or Fans from your PC.

Hyperlink Technologies "Streaming Media Ready" amplifiers (see chart above for models) were designed from the start to survive the extreme conditions that Streaming Media imposes on an amplifier. Using proprietary heatsinking techniques, Hyperlink's Streaming Media amplifiers will remain at a safe operating temperatures for the most demanding Streaming Media applications, without the need for cumbersome heatsink plates, fins or fans.

## Indoor Models

Designed for indoor use or in weather-resistant enclosures such as the HyperLink NEMA enclosure, the "GI" and "GX1" series feature rugged cast aluminum housings with integral mounting tabs. The staggered mounting feet allow multiple amplifiers to be positioned next to each other with minimal wasted space. The indoor series amplifiers include a Power Supply.

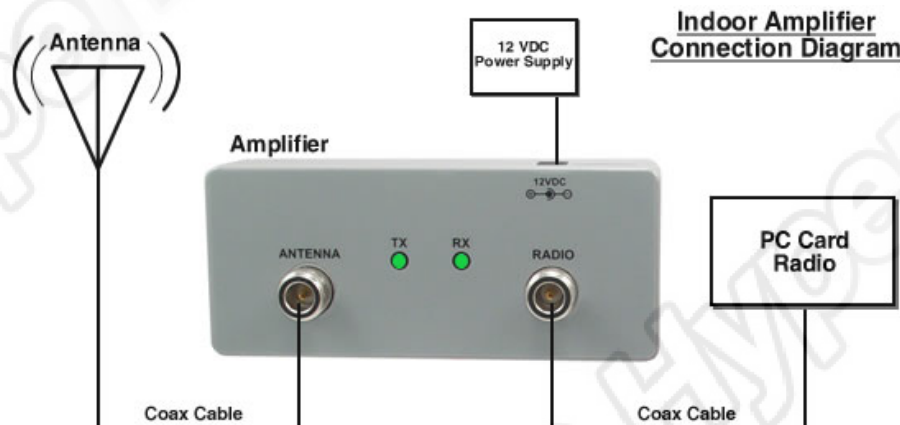
## Power Supply

The power supply included with the amplifier is rated at 100-240 VAC @ 50/60 Hz allowing it to be used in the US as well as in the EU when used with the optional PSX-EU2 Plug converter (US NEMA 6-15R Flat Blades to EU 4/4.8 mm round pins).

## Product Availability

Amplifier products are available for export, military, licensed amateur radio (ham radio) and OEM component sales only and as part of complete FCC Certified Systems. Individual amplifier products are not offered for sale in the USA.

## Connection Diagram





## Specifications

Indoor Amp Models	Transmit Power	Receive Gain	802.11b	802.11g	Dimensions-Weight
HA2401GI-100	100 mW (20 dBm)	15 dB nom.			4.5 x 2.5 x 1.3 (inches) 117 x 64 x 33 (mm) .68 lbs. (.30 Kg)
HA2401GI-250	250 mW (24 dBm)	15 dB nom.			
HA2401GI-500	500 mW (27 dBm)	15 dB nom.			
HA2401GI-1000	1 Watt (30 dBm)	15 dB nom.			
HA2401GXI-500	500 mW (27 dBm)	17 dB nom.			5.9 x 2.5 x 1.3 (inches) 150 x 64 x 33 (mm) .95 lbs. (.44 Kg)
HA2401GXI-1000	1 Watt (30 dBm)	17 dB nom.			
HA2402GXI	2 Watt (33 dBm)	17 dB nom.			

General Specifications (All Models)	
Frequency	2400 - 2500 MHz
Max. Input Power	100 mW (20 dBm)
Operating Mode	Bi-directional, half-duplex Time Division Duplex. Senses RF carrier from transmitter and automatically switches from receive to transmit mode
Water Resistant Rating (Outdoor Models)	IEC 60529 IPX7
Operating Temperature	-40°C to 50°C (-40°F to 122°F)
Current Draw (RTG and RTGI Models)	0.80A Peak Tx and 0.06A Peak Rx
Current Draw (RTGX and RTGXI Models)	1.25A Peak Tx and 0.14A Peak Rx
Supply Voltage (RTG and RTGI Models)	12VDC +/-1V
Supply Voltage (RTGX and RTGXI Models)	12VDC -0.5V / +1V

### Note:

This Hyperlink bi-directional amplifier is designed for burst half-duplex operation. It is not intended for constant transmit or CW operation. Operation of the amplifier in CW mode will damage the amplifier and void the warranty.

### Guaranteed Quality

HyperAmp® is designed and manufactured by HyperLink Technologies in the U.S.A. and is backed by Hyperlink's Limited Warranty.