



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

Features

- Includes 12VDC Power Supply, DC Injector and Mast-Mount Hardware
- Receive Bandpass Filter
- Standard Models: 100 mw to 2 Watt
- IEEE 802.11g (b/g) and 802.11b Only Compatible (see chart below)
- 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



Outdoor "GX" Model (Top)
Outdoor "G" Model (Bottom)

Models

Outdoor Models	Max Output	802.11b	802.11g	Streaming Media Ready	FCC Certified Radio Models
HA2401G-100	100 mW	✓	✓		H-PC325-G-1
HA2401G-250	250 mW	✓	✓		H-PC325-G-1
HA2401G-500	500 mW	✓	✓		H-PC325-G-1
HA2401G-1000	1 Watt	✓			H-PC325-G-1
HA2401GX-500	500 mW	✓	✓	✓	H-PC325-GX-1
HA2401GX-1000	1 Watt	✓	✓	✓	H-PC325-GX-1
HA2402GX	2 Watt	✓	✓	✓	N/A

Description

HyperAmp® HA2401G/GX amplifiers are compatible with 802.11g (b/g) and 802.11b only wireless LAN equipment (see chart above for model compatibility). Hyperlink's Active Power Control circuit automatically adjusts the amplifier's gain to provide a constant output power regardless of cable length.

The HyperAmp® HA2401G/GX series improves range by delivering full transmit power directly at the antenna where it is most effective. In addition the unit's receive gain compensates for cable losses. 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.

Outdoor Models

The "G" and "GX" models feature rugged cast aluminum weatherproof construction to ensure years of reliable operation in the harshest environments. The integral mast mount gives this amplifier superior strength as well as simplifies installation. Included with the outdoor models, the DC Power Injector provides power to the HyperAmp® through the antenna cable, simplifying installation. Current-sensing circuits provide remote amplifier diagnostic LEDs. In addition, this unit provides effective lightning protection with multi-strike capability.

DC Injector



Integral Mast-Mount



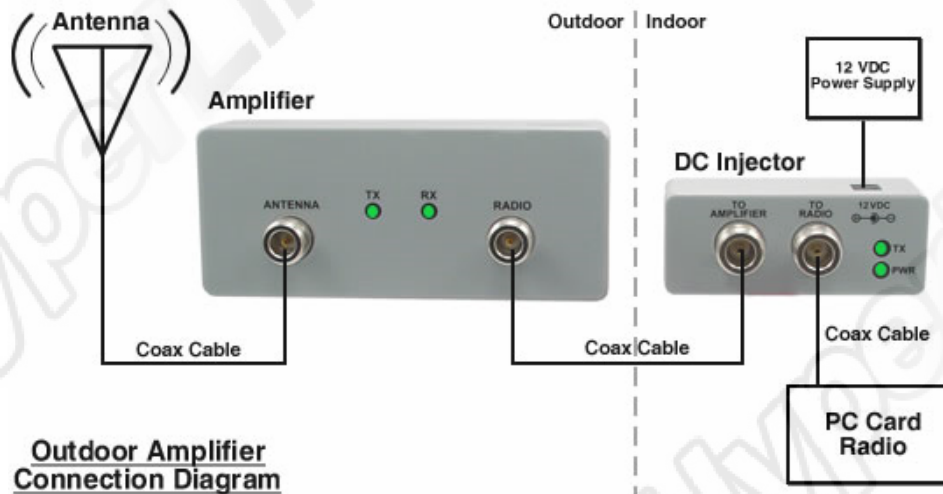
Power Supply

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

Outdoor Amp Models	Transmit Power	Receive Gain	802.11b	802.11g	Dimensions-Weight
HA2401G-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)
HA2401G-250	250 mW (24 dBm)	15 dB nom.	✓	✓	
HA2401G-500	500 mW (27 dBm)	15 dB nom.	✓	✓	
HA2401G-1000	1 Watt (30 dBm)	15 dB nom.	✓	✓	
HA2401GX-500	500 mW (27 dBm)	20 dB nom.	✓	✓	5.9 x 2.5 x 1.3 (inches) 150 x 64 x 33 (mm) .95 lbs. (.44 Kg)
HA2401GX-1000	1 Watt (30 dBm)	20 dB nom.	✓	✓	
HA2402GX	2 Watt (33 dBm)	20 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.