



## IQA-IPA Internet Protocol Adapter



### Intelligent Internet Protocol Adapter Designed for Home Automation Needs

The IQA-IPA™ is a state-of-the-art Intelligent Internet Protocol Adapter designed to enable wireless (Ethernet) control for Home Automation needs. The unique device is connected to or in-line with any home automation control offering that provides RS-232C or RS-485 connectivity and generates an Internet Protocol (IP) data stream that can drive any Wireless (802.11b/g) Access Point (customer provided). Then, any customer provided Wi-Fi (802.11b/g) compatible PocketPC, notepad or tablet can then be used to provide standard wireless control of home automation products. An innovative dual processor configuration within the IQA-IPA™ supports fast network communication while providing exceedingly fast generation and processing of keypad (menu button) web pages embedded within the Interface. When connected to an Access Point and a compatible wireless remote device, a set of easy to navigate keypad image motifs can be accessed and activated to control a targeted home automation product anywhere within range of the system, whether inside or outside the home and without wires or power cables.

The IQA-IPA™ integrates several other very useful features for home automation purposes. If the IQA-IPA™ is connected to a home network with Internet access, a built-in Internet Clock within the IQA-IPA™ can provide real time corrections to targeted device's time clock settings year round automatically without user intervention. This feature is especially useful where alarms and macros have been pre-set into an home automation systems and where continuity of those alarms and macros is desired without the requirement of re-programming the home automation system twice a year (in areas where Savings Time changes occur). And finally, accessory output connections within the IQA-IPA™ can be used to control via IR an additional piece of home automation equipment. This feature is especially handy if new automation equipment is added within the home and control of that

equipment is desired without re-programming the targeted system.

### Unique Product Family Offering

The IQA-IPA™ is designed to bring low-cost functional wireless capability to many home automation offerings. Standard embedded keypad motifs mirroring easy to navigate keypads provide identical functionality to that offered by its hardwired counterparts.

## FEATURES

- ❑ **Easy Installation**—Small foot print allows unit to be installed easily behind the equipment rack. Industry standard RS-232C and RS-485 interfaces (direct and pass-thru) permit easy connection to a home automation component.
- ❑ **Built-in “virtual” configurable wireless interactive keypads** — Keypad server pages are embedded within IQA-IPA™ device and are “served-up” on any connected wireless PocketPC, notepad or Table PC. Individual zone or group or whole house control is possible anywhere within the house, inside or outside.
- ❑ **Real-Time Internet Clock Maintains Targeted Component System Clock's Accuracy 365 days a year**—Built-in SNTP server and Auto-System Time Upgrade technology maintains and updates home automation system time throughout the year and automatically takes into consideration Daylight Savings changes (provided adapter is connected to the Internet).
- ❑ **Additional Configurable IR Output**—A built-in IR connection can be used with an optional IR emitter to control an additional piece of automation gear using IR. This is particularly useful to control security lighting, outside lighting or additional AV equipment.
- ❑ **Easy Installation—IP Connectivity**—Industry standard 802.3 Internet Protocol support. Additionally, integration with wireless web-based appliances including PDAs, tablet PCs and notepads using standard 802.11b/g access points.
- ❑ **Easy to Configure Programmable Software**— IQA-IPA™ offers easy customization for additional device feature control and the separate IR programmed channel.
- ❑ **On-Board Secondary Z10 output**—A 3 pin accessory channel is configured for a future firmware upgrade to trigger a separate external X10 circuit.

### Easy to Customize

Minimal customization of feature options can be downloaded into the IQA-IPA™ using an easy to use downloader tool. However, for those homeowners who simply wish plug-and-play installation, generic functionality is provided standard. The installer may choose to customize the offering by learning one additional macro string or IR command into the web server.

### Built to Last

Design, verification and testing are critical to proper engineering design. In fact, the same engineers and team who have built the sophisticated electronic controllers driving today's most popular printers and copiers have lent their expertise to the IQA-IPA™ Interface. Unique technology integrated within the controller eliminates the need for components that have been found to fail within alternative systems. The system is designed to meet the highest reliability targets within the market.

### Typical Supported Wireless Device

Many innovative wireless devices are currently available. (The below photograph displays a HP/Compaq IPAQ PocketPC.) The IQA-IPA™ device with a compatible Access Point can make nearly any wireless device a controller for a home automation installation.



## SPECIFICATIONS

IP Control	Intelligent Internet Protocol Adapter designed to enable wireless (Ethernet) control for home automation components using a separately purchased (i) Wi-Fi Access Point and (ii) Compatible Wireless Device. Control is through pre-programmed keypad motif templates which generate standard programming codes through the 802.3 protocol.
Connectors	Two 6-position RJ11 connectors (In, and Thru) for RS-232C or RS-485 connectivity. External IR output or X10 contact closure (future upgrade) available through extra pins available on RJ-11 connectors.
Serial Pass Thru	Unique circuitry permits additional serial devices to be physically located upstream of Adapter (using Pass Thru). For simpler configurations, only the "Out" connector is used.
Communication	Input/Pass-Thru: Bi-directional RS485, unidirectional RS-232C front end control. Output—802.3 Internet Protocol Data Stream Output.
Wireless Feature	With 802.11b/g Access Point, wireless range of approx 150ft (Indoors) can be obtained from Wireless Panel to Access Point (Results may vary depending upon type and location of Access Point.
Identification	Built-in NetBios discovery feature provides Windows-type naming convention on IP bus
IR Control	On-board IR connection to support remotely mounted IR transmitter. .
X10 Control	On-board X10 connection block to support remote X10 equipment. (future firmware upgrade)
Size	4" x 2" x 2"
Enclosure	Molded plastic enclosure.
Ext Power	External UL-listed 9v DC power adapter. 250 ma
Weight	12 oz. (.34 Kg.)
Manufacturing	Made in the USA
Compliance	PCB UL listed

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