Product Brief

Harmony™ Multi-Protocol HAN
Gateway / Controller—Model #6005A

The Harmony™ automation gateway provides the bridge between an Ethernet connection and a wireless or hybrid home/ building automation network. The gateway has a built-in IEEE802.15.14 radio transceiver that is configurable for ZigBee PRO, 6LoWPAN and JenNet, plus an interface to a SmartLabs PLM (INSTEON and X10) giving it the ability to manage automation networks utilizing a variety of protocols. The device truly harmonizes the diverse protocols, allowing for a wide array of choices for automation devices.

Harmony™ runs a sophisticated automation software package that is easy to use, fully capable of automation chores for homes and buildings, and totally accessible from a web browser. No PC is required for operation of the HAN since Harmony acts as a stand-alone network appliance with all the needed functionality. Operating on the Linux system, the unit makes custom applications easy to develop and deploy.

Benefits

- Sophisticated and powerful computing platform based on 32-bit RISC CPU (AVR32), Linux and Jennic 5148 radio
- Complete home/building automation and energy management software built-in
- Ethernet 10/100 dual speed interface provides network connectivity into any wired computer network
- Accessible from anywhere including the Internet through built-in web services
- Available Rich Internet Application (RIA) that provides easy-to-use graphical and multi-media user interface
- Configurable, programmable and expandable through SD memory card slot and a USB 2.0 interface
- Serial interface with RS-232C and RS-485 drivers. Physical connection configured to interface with INSTEON/X10 PLM (not included).
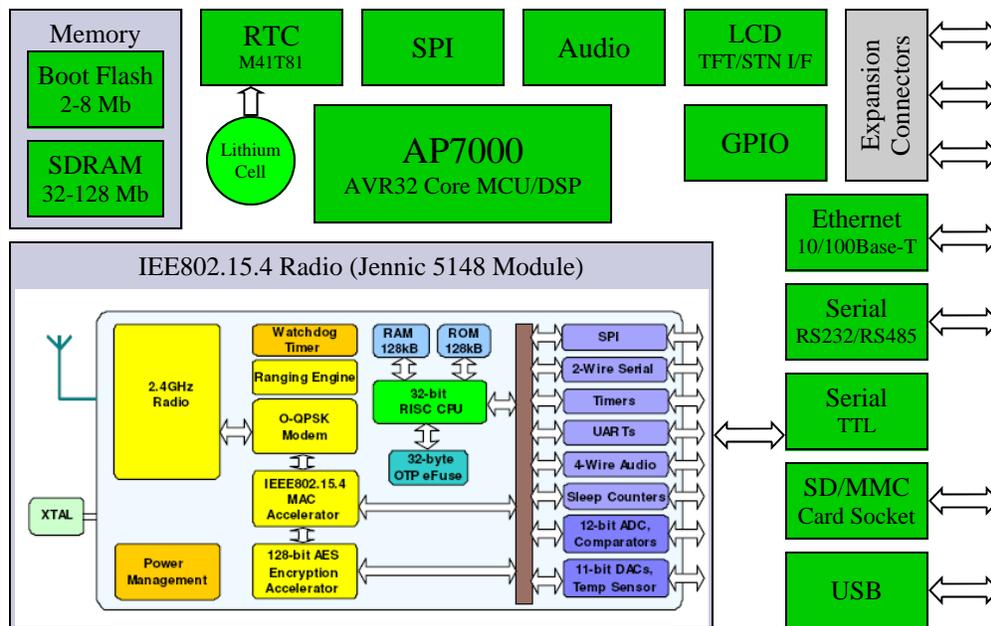- Accurate time-keeping with built-in RTC.

SPECIFICATIONS:

Electrical	
Operating Voltage:	7.5—12 VDC @ 0.2A max
Internal Memory:	2Mb Flash, 32Mb DRAM
Interfaces:	Ethernet: 10/100MBS USB: 2.0 Compliant Serial: RS-232C and RS-485

Mechanical	
Size:	5.50" W X 4.00" W X 1.25" H Exclusive of antenna
Weight:	7.2 Oz.
Mounting:	None required. Can be placed on any flat surface.

Operation	
Indicators:	Red LED for power
Available Wireless Protocols:	ZigBee PRO, JenNet, 6LoWPAN
Real Time Clock	Built-in, battery-backed RTC
Reset:	Accessible reset switch

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Harmony™ HAN Gateway Details

Technical Features:

Processor:	AP7000—32-bit MCU/DSP
Internal Memory:	Parallel Flash: 2 or 8Mb DRAM: 32Mb or 128Mb
Ethernet Interface:	One port, 10/100Base-T
Wireless Interface:	JN5148 IEE 802.15.4 radio transceiver. Available with either ZigBee PRO, JenNet or 6LoWPAN
USB:	One port, USB 2.0 Compliant.
Serial:	One port on RJ45 jack with RS-232C and RS-485 drivers. Pin-out compatible with Smarthome 2412S PLM.
Real Time Clock:	Battery-backed RTC
JTAG:	Available internal connector
Resource Expansion (OEM version):	Connectors J5-J7 (similar to Atmel NGW100) for interfacing GPIO, SPI, I2C, Graphics, Audio, etc.
Storage Expansion:	SD/MMC socket.
Power required:	7.5V—19V DC input. From either Serial or dedicated jack.

Harmony™ Gateway Block Diagram

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