Product Brief

ZBPLM™—Multi-Protocol Serial Interface

6LoWPAN

Model #5010N

Pass-Thru Outlet

ZBPLM™ builds on the popular Smarthome PLM to allow PCs and other controllers to access a ZigBee network in addition to the existing native INSTEON and X10 devices. The unit transparently extends the PLM serial protocol with messages to control and monitor ZigBee devices. It is thus possible for an existing home automation software/controller package to add support for this newer, industrial-grade protocol.

Software using the ZBPLM could inter-operate the various protocols in a way that is totally transparent to the user. This would lead to a wider array of choices in the devices to address the various needs for home and building automation.

Serial Connection

LED and Push-button for Linking/ Binding

A built-in battery-backed clock keeps track of time even in the event of a power loss. This clock is available to the interfacing PC/Controller via the serial command set.

The built-in IEEE 802.15-4 radio is based on the Jennic 5148, and can be supplied to support other industrial automation protocols such as JenNet and 6LoWPAN.

Benefits

- Sophisticated and powerful PC/HAN interface that includes the SmartLabs INSTEON engine and the Jennic JN5148 IEEE 805.15.4 radio module.
- Simple serial commands can be used by any PC or controller to monitor and control ZigBee, INSTEON and X10 devices such as lights, heaters, pumps, air conditioners, etc.
- Built-in real-time clock with battery back-up keeps track of time even while the unit is unpowered.
- Large INSTEON EEPROM memory allows storage of up to 2000 links.
- Switch-mode power supply reduces weight and makes the ZBPLM better than 85% efficient.
- Supplies 19VDC at up to 100ma to connected equipment, thus eliminating the need for additional power supplies in most cases.
- Fully documented and supported command set and technical support forum to assist in the development of applications.
- Pass-through outlet means not losing the outlet that the unit plugs into.
- ZigBee certified for interoperability with devices made by many other manufacturers.

SPECIFICATIONS:

Operating Voltage:	120 VAC
Internal Flash Memory:	INSTEON: 32Kb, ZigBee: 128Kb
Interfaces:	RS232C through RJ45 connector
Size:	3.9" H X 2.6" W X 1.5" H Exclusive of antenna
Weight:	6.4 Oz.
Mounting:	Plug-in to standard 3-prong out-let. With pass-through outlet rated 120V 15A
Indicators:	White LED for all ZBPLM indications
Powerline Protocols:	INSTEON, X10
Available Wireless Protocols:	ZigBee PRO, JenNet, 6LoWPAN (defaults to ZigBee Pro)
Real Time Clock	Built-in, battery-backed RTC
Reset:	Accessible reset switch

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<tr><td colspan="4" align="center">OTHER SPECIFICATIONS:</td></tr>
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Indicators:	White LED for all ZBPLM indications
Local Control:	Multifunction pushbutton. Used for joining network, permit joining and binding.
ZigBee function:	Manufacturer ID: 0x1075; ZigBee Pro Router device

HA Profile: (0x0104)		Device ID: 0x0007 **ZBCID**	
Cluster ID	**Cluster Name**	**Client/Server**	**Cluster Description**
0x0000	Basic	Client/Server	Attributes for determining basic information about a device, setting user device information such as location, and enabling a device
0x0001	Power Configuration	Client/Server	Attributes for determining more detailed information about a device's power source(s), and for configuring under/over voltage alarms
0x0002	Temperature Configuration	Client/Server	Attributes for determining information about a device's internal temperature, and for configuring under/over temperature alarms
0x0003	Identify	Client/Server	Attributes and commands for putting a device into Identification mode (e.g. flashing a light)
0x0004	Groups	Client	Attributes and commands for group configuration and manipulation
0x0005	Scenes	Client	Attributes and commands for scene configuration and manipulation
0x0006	On/Off	Client	Attributes and commands for switching devices between "On" and "Off" states
0x0007	On/Off Switch Configuration	Client	Attributes and commands for configuring On/Off switching devices
0x0008	Level Control	Client	Attributes and commands for controlling devices that can be set to a level between fully "On" and fully "Off"
0x0009	Alarms	Client	Attributes and commands for sending notifications and configuring alarm functionality
0x000A	Time	Client	Attributes and commands that provide a basic interface to a real-time clock
0x000B	RSSI Location	Client	Attributes and commands that provide a means for exchanging location information and channel parameters among devices
0x000C	Analog Input (Basic)	Client	An interface for reading the value of an analog measurement and accessing various characteristics of that measurement
0x000D	Analog Output (Basic)	Client	An interface for setting the value of an analog output (typically to the environment) and accessing various characteristics of that value
0x000E	Analog Value (Basic)	Client	An interface for setting an analog value, typically used as a control system parameter, and accessing various characteristics of that value
0x000F	Binary Input (Basic)	Client	An interface for reading the value of a binary measurement and accessing various characteristics of that value
0x0010	Binary Output (Basic)	Client	An interface for setting the value of a binary output (typically to the environment) and accessing various characteristics of that value
0x0011	Binary Value (Basic)	Client	An interface for setting a binary value, typically used as a control system parameter, and accessing various characteristics of that value
0x0012	Multistate Input (Basic)	Client	An interface for reading the value of a multistate measurement and accessing various characteristics of that measurement
0x0013	Multistate Output (Basic)	Client	An interface for setting the value of a multistate output (typically to the environment) and accessing various characteristics of that value
0x0014	Multistate Value (Basic)	Client	An interface for setting a multistate value, typically used as a control system parameter, and accessing various characteristics of that value
0x0100	Shade Configuration	Client	Attributes and commands for configuring a shade
0x0200	Pump Configuration and Control	Client	An interface for configuring and controlling pumps
0x0201	Thermostat	Client	An interface for configuring and controlling the functionality of a thermostat
0x0202	Fan Control	Client	An interface for controlling a fan in a heading/cooling system
0x0203	Dehumidification Control	Client	An interface for controlling dehumidification
0x0204	Thermostat User Interface Configuration	Client	An interface for configuring the user interface of a thermostat (which may be remote from the thermostat)
0x0400	Illuminance Measurement	Client	Attributes and commands for configuring the measurement of illuminance, and reporting illuminance measurements

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