EAP-E (ZigBee Technology)
Wireless Mesh Networking Ethernet Access Point

To accompany the Telegesis ETRX2 wireless mesh networking modules the EAP-E Ethernet Access Points offer an easy way to interact with remote ZigBee networks using Ethernet.

Via Telnet, or a virtual COM port, the Telegesis AT-Command interface - based on the EmberZnet meshing stack - can be easily accessed by the application software. Custom firmware development is also supported.

EAP – ETHERNET ACCESS POINT FEATURES

- Combines a Telegesis ETRX2 module with a Lantronix® serial to Ethernet bridge.
- Complete TCP/IP protocol stack and Windows deployment software.
- Interface: Ethernet 10Base-T or 100Base-TX (Auto-Sensing).
- Management: Telnet and Microsoft Windows®-based utility for configuration.
- Can offer access to the remote AT-Command Interface via a virtual COM port.
- SIF interface for Custom application development and real time debugging of custom firmware.

ETRX2 FEATURES

- The ETRX2 is based on the Ember Corporation EM250 single chip ZigBee/802.15.4 solution with on-die 16-bit XAP2b microprocessor.
- No need for RF design experience or expertise.
- 2.4GHz ISM Band digital direct sequence spread spectrum transceiver.
- Hardware acceleration for IEEE802.15.4 operations.
- Hardware supported encryption (AES-128).
- Pre-programmed with Telegesis AT-Command interface based on the EmberZNet meshing stack.
- Can be configured to act as a ZigBee coordinator, router or end device.
- Up to 4dBm output power.
- Sensitivity up to -98dBm (1% PER).

WINDOWS SOFTWARE

As a helpful starting point for developers, Telegesis supplies the simple Telegesis Terminal Application with the EAP. Device deployment and network initiation are simplified with Dynamic Host Protocol Support (DHCP) and additional IP configuration methods via the included Windows®-based Lantronix DeviceInstaller™ software.

The supported Com Port Redirector™ (CPR) software maps 'virtual COM' ports on a PC platform and redirects application data destined to an attached device. Rather than going out of the local COM port, the data is transmitted across the Ethernet network to/from the Lantronics ® XPort Direct™ using TCP/IP. CPR is also licensed as an API to OEMs for incorporation into their applications on non-PC platforms such as a web pad or PDA.

The EAP-E is also available in a Power Amplified form – see ETRX2-PA for range & specification details

SUGGESTED APPLICATIONS

- Remote Diagnostics and upgrades.
- Networked monitoring and remote control.
- Remote data acquisition – e.g. temperature monitoring.
- Bridging between Ethernet and ZigBee .

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