



ETRX357USB+8M ZigBee Wireless Mesh Networking USB Stick with 8Mbit flash memory



USB features

- ETRX357USB acts as a USB2.0 to serial bridge connected to an ETRX357 module
- Driver Support for Windows XP, Vista and Win7, WinCE, MAC OS-X, Linux
- Telegesis Terminal support for Windows
- Allows access to the module's command line interface via a virtual COM port
- USB 2.0 Full Speed Device, backwards compatible to USB1.1 hosts
- Form factor: L82mm x W26mm x H8.5mm
- In circuit Programming/Debugging Header allows for custom firmware development based on the EM357 platform
- On Request application specific firmware can be developed.
- Operating Temperature range -20°C - +85°C

ETRX357 Features

- ETRX357 is based on the EM357 – the industry's first ARM® Cortex-M3 based family of ZigBee modules
- 192kB flash and 12kB of RAM on-chip
- 8Mbit of flash memory off-chip
- 2.4GHz ISM Band digital direct sequence spread spectrum transceiver
- Hardware acceleration for IEEE802.15.4 operations
- Hardware supported encryption (AES-128)
- No need for RF design experience or expertise
- Firmware upgrades via serial port or over the air (password protected)
- Ideal for use as a commissioning tool when setting up networks
- ETRX357USB-LRS+8M Long Range version with 20dBm output power available in the same form factor

Compatibility

- Devices are despatched with the latest Telegesis AT command set firmware
- As supplied, devices are fully compatible with Telegesis devices that do not have flash memory

To accompany the Telegesis ETRX357 wireless mesh networking modules the ETRX357USB universal serial bus stick offers an easy way to ZigBee-enable personal computers.

Using a virtual COM port the ZigBee firmware - based on the EmberZNet meshing stack - can be easily accessed by the application software. Custom firmware development is also supported.

Windows Software

As a helpful starting point for developers, Telegesis supplies the Telegesis Terminal application with the ETRX357USB. This terminal program fully supports the USB stick

Host application development is very straightforward as the ETRX357USB stick is simply accessed via a virtual COM port

Off-chip memory

The ETRX357USB+8M and ETRX357USB-LRS+8M have an 8Mbit Winbond flash memory chip with SPI interface to the ETRX357 module. Uses of the extra memory include:

- Data-logging
- Routing information in very large networks
- Over-the-air download of ZigBee firmware and host processor software

Suggested Applications

- AMR – ZigBee Smart Energy applications
- Wireless Alarms and Security
- Home/Building Automation
- Wireless Sensor Networks
- M2M Industrial Controls
- Lighting and ventilation control
- Remote monitoring
- Environmental monitoring and control

The ETRX357USB is also available in a long range form – see ETRX357-LRS module for specification details

Telegesis
Abbey Barn Business Centre
Abbey Barn Lane
High Wycombe, Bucks
HP10 9QQ, United Kingdom
Telephone: +44 (0) 1494 510199
Fax: +44 (0) 5603 436999
Email: sales@telegesis.com