

MACdongle[™]

IEEE 802.15.4 MAC layer firmware for UZBee USB adapter

Summary

MACdongle allows USB-enabled devices to implement the IEEE 802.15.4 communications protocol for low data-rate wireless personal area networks. It is ideal for OEMs who need to add USB capability to their ZigBee networks. lt incorporates an FCC / CE certified IEEE 802.15.4 transceiver and USB interface.

MACdongle provides a gateway between IEEE 802.15.4 systems and Microsoft Windows PC As a derivative of the FlexiPanel software. USBoot family, its firmware may be reprogrammed interchangeably with any other compatible firmware via the USB port.

Firmware Features:

- Fully compatible with free-of-charge Sniffer software for Windows PCs
- MAC-layer services include:
 - Data packet transmission & reception
 - Associate & disassociate
 - Beacon notification
 - Orphan notification
 - Energy density scan
 - Active scan
 - Passive scan
 - Orphan scan
 - COMM status
 - PIB set & get
 - Sync request / sync loss indication
 - Poll request
 - Transmission purge
- PHY-layer services include:
 - Data packet hook for packet sniffing
- Device-layer services include:
 - LED control
 - Pushbutton indication
 - Error report
 - Device information report
 - One-time MAC address configuration



Hardware Features:

- USBoot bootloader allows firmware interchange between:
 - MACdongle™ IEEE 802.15.4 MAC layer and sniffer
 - **Zongle™** ZigBee RFD APS layer
 - StarLite USB™ transparent IEEE 802.15.4 communications
- 2.4GHz IEEE 802.15.4 RF module
- FCC / CE / IC compliant
- Signature 'G' antenna, free-space range 120m, compact, low 'hand-effect' design
- Bind button, status LED
- 56mm x 20mm x 9mm



MACdongle operating with Flexipanel's free Sniffer software

Ordering Information

Table 1. Ordering information	
Part No	Description
UZBee	USB IEEE 802.15.4 radio adapter

Manufactured to ISO9001:2000



Patents may apply and/or pending

www.FlexiPanel.com