

ZigBee USB Adapter, ProBee-ZU10



Features

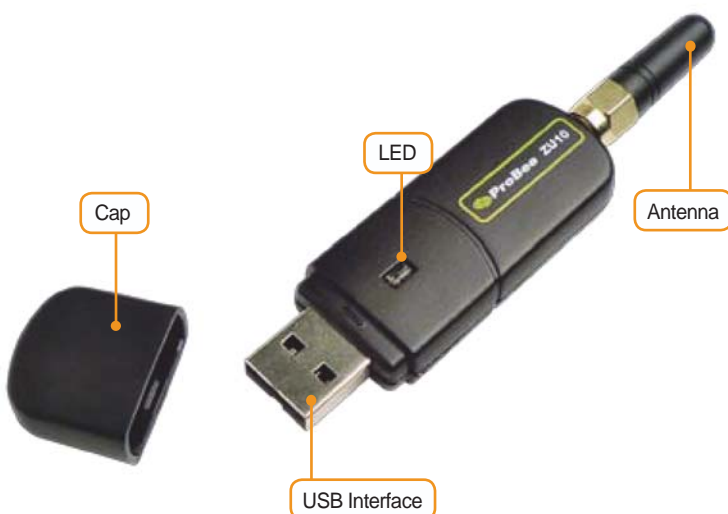
- Fully supports ZigBee 2007 / ZigBee Pro stack
- Integrated 2.4GHz, IEEE 802.15.4-compliant coprocessor
- Various antenna options according to users' requirement, up to 1.6km (1 mile) with optional 5 dBi dipole antenna
- USB 2.0 interface
- Supports remote management features wirelessly such as firmware upgrade and system configuration by using modem AT command set
- Easy to use Windows configuration tool available

The **ProBee-ZU10** is an ZigBee USB adapter with integrated ZigBee core and radio/antenna circuits together with high level software library.

The ZU10 USB Adapter is designed to meet specific requirements to low cost and low power wireless applications such as Home Automation, Smart Energy, Health care, Building Automation and Telecom Services by adopting the ZigBee technology.

Despite of its cost effective and low power consumptions, the ZU10 provides high performance and robust data transfer capability for wide range of applications. The ZU10 can transfer data at up to 250 kbps and reach up to 1.6 km (1 mile) outdoor line-of-sight.

Exterior



Applications

- Advanced Metering Infrastructure
- Home Area Networks (HAN)
- Neighborhood Area Networks (NAN)
- Home Automation
- Advanced Lighting, Entertainment, and Climate Control Systems
- Service-based Monitoring, Security, and Awareness Systems
- Commercial Building Automation
- Climate & Lighting Control Systems
- Industrial and Domestic Applications

Specifications

RF Characteristics

- Frequency Band: 2.4 GHz
- Interface Immunity: DSSS
- Transmit Power: +20dBm E.I.R.P (max.)
- Receiver Sensitivity: -102dBm @1% BER
- RF Data Rate: 250 kbps
- Working Distance: Up to 1.6km using 5 dBi dipole antenna
- Various Antenna Options from standard 1 dBi antenna to 3/5 dBi dipole antenna
- Channels: 14
- Channel Spacing: 5 MHz

ZigBee Network

- Network topology: Mesh
- Stack profile: ZigBee 2007 / ZigBee Pro
- Network addressing: Channel, PAN ID, EPID

ZigBee Data Transmission

- Unicasting
- Multicasting
- Broadcasting
- Many-to-One Communication
- Enhanced Reliability based on data retransmission

ZigBee Security

- Network Layer security with one Trust Center for efficient operation
- 128 bit AES encryption algorithms
- Strong, NIST-approved security

Power Requirements

- Supply Voltage: 5.0 VDC
- TX Current: 210mA @5.0V (max.)
- RX Current: 65mA @5.0V (max.)
- Sleep Current: ≤ 100uA

Device Management and Configuration

- Configuration Method: AT Commands, ProBee Manager
- Remote Configuration
- Remote Firmware Upgrade using both Cloning and Pass-thru methods
- Supports rich neighborhood device scanning and monitoring using AT commands

Antenna

- Default Stub Antenna: 1 dBi
- Optional Dipole Antenna: 3/5 dBi
- RP-SMA connector

Interface

- USB 'A' type Connector
- USB 2.0 Full Speed compatible

Computer OS Support

- Windows XP/Vista/7 (32/64bit)
- Linux (3rd party driver required)
- MAC OS X (MAC OS X driver required)

Environmental

- Operating Temperature: -20°C to 70°C
- Storage Temperature: -40°C to 85°C
- Humidity: 90% Non-condensing

Physical Properties

- Dimension (L x W x H): 70.9 x 22 x 10(mm) / 2.8 x 0.9 x 0.4(in)
- Weight: 10 g / 0.36 oz

Certification: FCC, CE, TELEC, KCC

Warranty: 3-year limited warranty

Ordering Information

Part number	Description
ZU10-G01	ProBee ZU10 ZigBee USB Adapter, Exchangeable Antenna

Optional Accessories

Part number	Description
SAT-G01R	1 dBi Stub Antenna, RP-SMA Plug, Right-hand Thread
DAT-G01R	3 dBi Dipole Antenna, RP-SMA Plug, Right-hand Thread
DAT5-G01R	5 dBi Dipole Antenna, RP-SMA Plug, Right-hand Thread
SEC-G01R	15cm RPSMA Antenna Extension Cable, Right-Hand Thread