

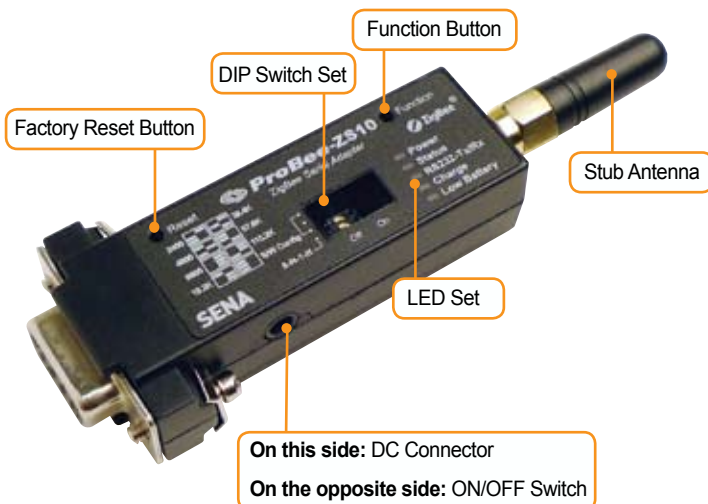
ZigBee Serial Adapter, ProBee-ZS10



Features

- Fully supports Zigbee®/Zigbee Pro 2007 wireless connectivity
- Integrated 2.4GHz, IEEE 802.15.4-compliant coprocessor
- Various antenna options according to users' requirement, up to 1.6km with optional 5 dBi dipole antenna
- Supports RS232 serial communication with up to 115 kbps baud rate
- Supports various self management features wirelessly such as firmware upgrade and system configuration by using modem AT command set
- Enhanced portability: standard & extended battery pack
- Easy to use Windows configuration tool available

Panel Layout



The **ProBee-ZS10** is an ZigBee RS232 Serial Adapter with integrated ZigBee core and radio/antenna circuits. The ZS10 Serial Adapter is designed to meet specific requirements of low cost and low power wireless applications such as home automation or smart energy by adopting the ZigBee technology fully certified under the latest ZigBee Pro standard for the maximum compatibility. The ZS10 provides high performance and robust data transfer capability for wide range of 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 / ZigBee Pro 2007
- 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

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

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

ZigBee Serial Adapter, ProBee-ZS10

Specifications

Interfaces

- Serial Data Interface: RS232
- Serial Data Rate up to 115 kbps

Battery Pack

- Capacity
 - 240 mAh (standard)
 - 900 mAh (extended)
- Charging Power: minimum 5V/200mA
 - Approximately 2 hours (standard)
 - Approximately 5 hours (extended)
- Battery life (Test based on 9600bps data loopback. Actual battery life varies by configuration, operating conditions and other factors)
 - Approximately 4.5 hours (standard)
 - Approximately 16.5 hours (extended)

Physical Properties

- Dimension (L x W x H)
 - 73.9 x 31 x 16(mm) / 2.9 x 1.2 x 0.6(in) (No battery pack)
 - 73.9 x 31 x 19.5(mm) / 2.9 x 1.2 x 0.8(in) (with standard battery pack)
 - 73.9 x 31 x 31.4(mm) / 2.9 x 1.2 x 1.2(in) (with extended battery pack)
- Weight
 - 24 g / 0.85 oz (No battery pack)
 - 30 g / 1.1 oz (with standard battery pack)
 - 42 g / 1.5 oz (with extended battery pack)

Certification: FCC, CE, TELEC, KCC

Warranty: 3-year limited warranty

Ordering Information

Part number	Description
ZS10-A1	ProBee ZS10 ZigBee Serial Adapter single-unit only pack, ZigBee/ZigBee Pro, No antennas and accessories included
ZS10-01	ProBee ZS10 ZigBee Serial Adapter single-unit pack, ZigBee/ZigBee Pro, Int'l DC power adapter included (US/EU), battery-pack optional
ZS10-B10	ProBee ZS10 ZigBee Serial Adapter 10-unit bulk pack, ZigBee/ZigBee Pro, DC power adapter and battery-pack optional

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
DPA-G01	DC power cable for ZS series
UPA-G01	USB Power Cable
OPA-G01	External Power Adaptor - Includes one of four (EU, America, UK, Australia) regional power plugs
BPC-G02	Standard Battery Pack for ZS10
BPC-G03	Extended Battery Pack for ZS10
FM9GD-G01	DB9 Female to Male Gender Changer

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

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