Solution Overview

Sensor Network Analysis

DaintreeNetworks
Enabling a Smart World

About Daintree

ZigBee Expertise and Leadership

Daintree Networks is an active member of the ZigBee Alliance, and promotes and educates people about ZigBee technology at Developer Conferences and similar events.

The Daintree Sensor Network Analyzer (SNA) plays an essential role in ZigBee Interoperability events, where it is used as the primary platform-independent means of visualizing, recording and verifying conformance to ZigBee specifications and test plans.

The SNA provides decode support for ZigBee application profiles (including ZigBee RF4CE).

Specializing in wireless sensor networking, Daintree's range of products is used by 802.15.4 and ZigBee technology leaders around the globe for internal development and support.

Additional Wireless Protocols

Daintree's SNA also provides a flexible decode engine, allowing it to be used to decode proprietary ZigBee application profiles and also custom and standards-based (non-ZigBee) protocol stacks such as 6LoWPAN, JenNet, Simplicity and Synkro.

Daintree Networks provides the industry's most comprehensive solution for testing, analyzing and commissioning wireless embedded networks

Wireless embedded networks, such as those based on ZigBee® and IEEE 802.15.4™, consist of many devices working together supporting sensing and control applications.

Daintree Networks is a leading provider of tools for developing, testing, commissioning, monitoring and managing wireless sensor and control devices and networks based.

Daintree's Sensor Network Analyzer is both intuitive and powerful, suitable for those new to the technology right through to seasoned professionals. The SNA's unique visualization shows the network in an easy-to-understand format with devices and interactions shown graphically, and the ability to drill down for additional detail to provide a more complete picture of what is going on. The intuitive user interface makes it easy to perform complex tasks such as multi-node captures and commissioning. The SNA also provides customization options in the form of editable XML-based protocol stack definitions and ZigBee application profiles, and an API, which can be used to transmit and receive packets. With support for an extensive range of third-party semiconductor boards and kits, the SNA is the industry's most comprehensive solution for wireless embedded development, analysis, commissioning, and monitoring.

Daintree's 2400E Sensor Network Adapter is a data capture accessory that acts as an observation and control point enabling the use of the SNA in live 802.15.4 network environments. You can join a live network and "actively" poll devices to obtain information not available through "passive" sniffing alone. You can also interact with devices to perform tasks such as commissioning and over-the-air firmware upgrades.

Benefits

- Increase productivity: Daintree's intuitive solutions and unique visualization tools help even those who are new to the technology achieve results quickly.
- The right tool for the job: Designed specifically for wireless embedded networks with strong analysis and ZigBee management capabilities.
- Bring products to market faster: The most comprehensive set of tools available for development, field trials and troubleshooting.
- Reduce deployment costs: Intuitive ZigBee commissioning tool helps to hide complexity, while rich visualization capabilities make it easy to see what is happening.
- Customize and extend: XML-based protocol stack and ZigBee application profile definitions allow you to customize the SNA to meet your exact requirements.
- A solution you can trust: The industry-standard tool used by key semiconductor and software companies, and at all product certification and interoperability test events hosted by the ZigBee Alliance.

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Features

The following is an overview of key features. For detailed product and feature descriptions, refer to the individual product datasheets available for the Sensor Network Analyzer (SNA) and 2400E Sensor Network Adapter.

- Visualize and understand IEEE 802.15.4-based network and device behavior with system-level network analysis.
- Analyze and debug associated protocols with detailed packet analysis.
- Obtain measurements on 802.15.4 and ZigBee network, device and route performance.
- Cross-reference information by using context filters to quickly obtain a filtered packet list by selecting similar packets or objects from visual displays.
- Customize analysis with the SNA's XML-based flexible decode engine, which allows creation of custom ZigBee application profiles and also proprietary and standards-based (non-ZigBee) protocol stacks.
- Obtain information on ZigBee internal device states with Active Analysis.
- Use multi-node sniffing for large distributed networks and multi-channel capture.
- Record live network operation and review with playback controls such as pause or fast forward. Store network designs and layouts for future reference.
- Commission and configure 802.15.4/ZigBee systems during development, field trials and deployment with easy-to-use GUI and standards-based over-the-air commands.
- Monitor and manage deployed networks to ensure optimal operation.

Pricing and ordering

For pricing and ordering information, visit the Daintree Networks web site at www.daintree.net or send an email to sales@daintree.net

The Sensor Network Analyzer is available in two editions: Professional and Standard. The less expensive Standard edition contains a subset of the capabilities of the Professional edition, and is specifically targeted at application developers. A simple upgrade path is available for those wanting to move from the Standard to the Professional edition.

	Application development	System testing & analysis	Field trials	Installation & commissioning
100A: SNA Professional Edition	●	●	●	●
101B: SNA Standard Edition	●			
2400E Sensor Network Adapter	○	●	●	●

○ Optional (The SNA can also be used with third-party devices from many of Daintree's semiconductor partners.)

See the Sensor Network Analyzer Ordering Guidelines for system requirements and a detailed product comparison. When selecting the SNA Professional or Standard Edition as an application development tool, you need to consider the functionality required for your specific project.

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