

# Turbo Treck SNMP

product information

## Product Overview

*The Simple Network Management Protocol is the industry standard method of configuration and management of networked devices.*

*Turbo Treck SNMP consists of an SNMPv1/v2c/v3 agent, Turbo Treck SNMP Abstraction Layer, and the Turbo Treck Code Generator (Turbo Treck CG) based on the industry standard SMIcng MIB compiler.*

*The Turbo-Treck SNMP product family provides powerful tools for embedding SNMP into your product including the easy development and integration of enterprise-specific agents.*

*To give you the flexibility and control needed for a smooth integration, Turbo Treck SNMP is sold in source code form.*

## Features

### • Custom-built for Embedded Systems

This code was designed from the ground up to meet the stringent requirements of the embedded systems market.

### • Optimized Set Operations

The code uniquely provides 2 pass SET operations with full rollback support.

### • System and Protocol Stack Independent

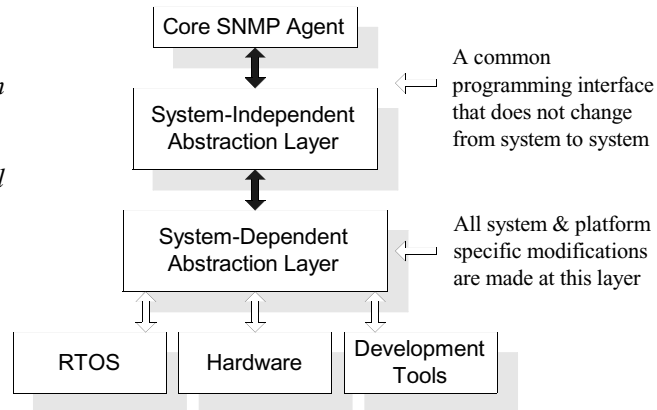
Functions accessing system-specific kernel variables are concentrated in one code module. The system and protocol stack dependence is done under a compiler flag and affects those functions only.

### • Transport Protocol

Turbo-Treck SNMP runs on the UDP transport protocol.

### • Abstraction Layer API

This API isolates system dependencies thus permitting use of the same agent code on an unlimited number of development environments. In addition, the API provides a clear interface to the system dependent portion of the agent code.



### • Compact Code Size

Turbo-Treck SNMP is extremely compact. Elmic Systems is committed to the continual improvement of code size and performance.

### • Portability

Elmic Systems Turbo-Treck SNMP was designed for the embedded systems market and is extremely portable. The code is RTOS, compiler, and processor independent.

### • Extensibility

Elmic Systems' Turbo-Treck SNMP is fully extensible and allows for the addition of an unlimited number of MIBs.



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- **Common Source Code Set**

Turbo-Treck SNMP supports SNMPv1, v2c & v3 from a common source code software package. This simplifies upgrade and customer support issues.

- **RTOS Support**

Turbo-Treck SNMP is portable to all standard operating system environments. The code has been ported to multiple RTOS products including ThreadX, Linux, VxWorks, and eCos.

- **Processor Support**

The Turbo-Treck SNMP system is portable to all standard 8bit to 64bit processors.

- **Modularity**

There is no requirement to integrate new MIB extensions into the source code when extending the existing agent. Any Third party developer can provide new MIBs for your design. Individual development teams can produce their agent extensions without the need for creating a single executable.

- **Trilingual Support**

The Turbo-Treck SNMP agent supports SNMPv1, SNMPv2c, and SNMPv3. This ensures that your system can handle everything from the industry standard SNMPv1 up to the latest in authorization and privacy provided by SNMPv3.

## SNMPv3 Security

Turbo Treck SNMP offers access control, authentication, privacy, and support for industry standard encryption protocols including: MD5 (Message Digest 5), DES (Data Encryption Standard) and SHA-1 (Secure Hash Algorithm, available in Q1 02).

- **RFC Compliance**

RFC 1155: SNMP and SNMP MIB  
RFC 1157: SNMP, version  
RFC 1212: Concise MIB definitions  
RFC 1213: MIB II for TCP/IP  
RFC 1215: Convention for defining traps for use with the SNMP  
RFC 1901: Introduction to Community-based SNMPv2  
RFC 1902: Structure of Management Information (SMI), v2  
RFC 1903: Textual Conventions  
RFC 1904: Conformance Statements  
RFC 1905: Protocol Operations  
RFC 1906: Transport Mappings  
RFC 1907: Management Information Base  
RFC 1908: Co-existence between Version 1 and Version 2  
RFC 2271: An Architecture for Describing SNMP Management Frameworks  
RFC 2272: Message Processing and Dispatching for SNMP  
RFC 2273: SNMPv3 Applications  
RFC 2274: User-based Security Model (USM) for SNMPv3  
RFC 2275: View-based Access Control Model



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*For more information on Turbo Treck SNMP or other products from Elmic Systems, please visit our website at [www.elmic.com](http://www.elmic.com)*

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