# High Speed Ethernet (HSE) Conformance Test Kit (CTK)

## Frequently Asked Questions

<table>
<thead>
<tr>
<th>Question</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is the HSE Conformance Test Kit?</td>
<td>2</td>
</tr>
<tr>
<td>What is a Communication Stack?</td>
<td>2</td>
</tr>
<tr>
<td>Why should I purchase the HSE CTK?</td>
<td>2</td>
</tr>
<tr>
<td>What components are included in a new license of the HSE CTK?</td>
<td>2</td>
</tr>
<tr>
<td>What other hardware is required for HSE conformance testing?</td>
<td>3</td>
</tr>
<tr>
<td>I do not have a license to the HSE Conformance Test Kit. How do I purchase a new one?</td>
<td>3</td>
</tr>
<tr>
<td>What are the system requirements for the HSE CTK?</td>
<td>3</td>
</tr>
<tr>
<td>Does the HSE CTK come with a warranty?</td>
<td>4</td>
</tr>
<tr>
<td>How do I obtain support for this product?</td>
<td>4</td>
</tr>
<tr>
<td>What support is covered?</td>
<td>4</td>
</tr>
<tr>
<td>How do I receive updates to my HSE Conformance Test Kit?</td>
<td>4</td>
</tr>
<tr>
<td>How do I get Support?</td>
<td>5</td>
</tr>
<tr>
<td>Is it important to use only Foundation-registered stacks in my device?</td>
<td>5</td>
</tr>
<tr>
<td>I’m a device supplier, am I required to register the stack in my device?</td>
<td>5</td>
</tr>
<tr>
<td>I’m a stack supplier, why should I register my stack with the Fieldbus Foundation?</td>
<td>6</td>
</tr>
<tr>
<td>If I use the same stack in multiple devices, am I required to test it for each implementation?</td>
<td>6</td>
</tr>
<tr>
<td>How much does stack registration cost?</td>
<td>6</td>
</tr>
</tbody>
</table>
What is the HSE Conformance Test Kit?

The High Speed Ethernet (HSE) Conformance Test Kit (CTK) allows the user to ensure a manufacturer’s communication stack complies with the interoperability standards of the Foundation technology and conforms to the Fieldbus Foundation’s official HSE registration testing. The HSE CTK is used to develop, test and register HSE field devices and HSE linking devices.

What is a Communication Stack?

The fieldbus communication stack is the messaging component of a field device. Specifically, the stack is composed of the HSE Management Agent, System/Network Management, Field Device Access Agent, and Transport/Datagram/Internet Protocols.

Why should I purchase the HSE CTK?

The HSE CTK is the perfect tool for debugging and troubleshooting a FOUNDATION fieldbus communication stack in order to ensure proper communication from device to device and between devices and host systems. This tool is designed for use by anyone developing a stack, or anyone who buys a stack and wishes to modify it. The tool kit will help ensure the stack performs correctly before being sent to the Fieldbus Foundation for registered stack testing.

What components are included in a new license of the HSE CTK?

The HSE CTK includes (1) the HSE Conformance Test Kit Install CD, (2) an H1 Test Device, (3) a Hardware Dongle, (4) a Bridge Function Tester (BFT) with Install CD, and (5) a SMAR PCI Interface Board for BFT.
What other hardware is required for HSE conformance testing?

In order to successfully test your HSE stack for conformance, you will also need:

- Power Supply
- Power Conditioner
- Ethernet Cables
- Two (2) Terminators
- Ethernet Switch
- DB-9 to H1 Cable
- H1 cable to connect components together

I do not have a license to the HSE Conformance Test Kit. How do I purchase a new one?

New licenses/test kits for the HSE CTK can be purchased by filling out an order form from the Fieldbus Foundation’s Development Resources webpages and accompanying that form with a company purchase order or other form of payment. Please fax these items to sales at 512-794-8893 or e-mail them to sales@fieldbus.org. Once both items have been received, we will start the purchase process and license agreements will be mailed. These agreements must be signed and returned before your product can ship.

What are the system requirements for the HSE CTK?

- Computer running Windows® 2000/XP
- Available parallel or USB port
- Network Interface Card
Does the HSE CTK come with a warranty?

Yes. The CTK has a one (1) year parts warranty from the date of delivery.

How do I obtain support for this product?

Licensed CTK users will be given access to a support forum for the latest information and upgrades/patches. Contact member services (member.services@fieldbus.org) with proof of your license number to enable access to the support forum.

What support is covered?

Support includes general questions, corrections, bug fixes and product enhancements and is granted for the first 90 days under new signed license agreements.

How do I receive updates to my HSE Conformance Test Kit?

- If you have an active maintenance agreement you will be eligible to download all new updates
- Maintenance agreements are available for purchase at a discounted rate, and will give you an additional 12 months of support beyond the standard included support. Pricing for the maintenance agreement can be found on the tools page of our website
- Contact the Fieldbus Foundation if you do not have a maintenance agreement or if your maintenance agreement has lapsed
- The latest versions are available for electronic download on the Fieldbus Forums for all maintenance agreement holders
How do I get Support?

You may email support@fieldbus.org.

Or call the Fieldbus Foundation at (512) 794-8890.

Questions may be posted to the Fieldbus Forums at http://forums.fieldbus.org.

If you do not have access to the Fieldbus Forums and wish to join, please be sure to follow the instructions located in the “Register” menu. If you need assistance, please contact us.

Is it important to use only Foundation-registered stacks in my device?

It is always good practice to use a Foundation-registered stack in your device in order to ensure your product development goes as smoothly as possible. Devices that do not pass registration must be debugged and re-worked, which costs companies both time and money.

I’m a device supplier, am I required to register the stack in my device?

Device developers who register their device are not required to independently register their stack. However, stacks are tested during the registration process to ensure they conform to the FOUNDATION test specifications. Testing of the HSE stack is done exclusively by the Fieldbus Foundation, and is separate from the Fieldbus Foundation device registration process. Stack registration typically occurs after a user has run their own interoperability tests by sending the stack to the Fieldbus Foundation for official registration which involves a lab testing fee and a product registration fee. The registration fees from the Fieldbus Foundation can be found on our website. Device registration can follow stack testing, and uses the HSE ITK.
I'm a stack supplier, why should I register my stack with the Fieldbus Foundation?

Stack registration allows a stack supplier to use the Foundation’s product registration mark in advertisements and literature. It is important to register your stack so that instrument manufacturers employing it in a device submitted for registration will know that the stack adheres to the Foundation fieldbus test specifications. A list of registered stacks can be found at http://www.fieldbus.org/registered.

If I use the same stack in multiple devices, am I required to test it for each implementation?

No. Once a stack has been registered, it can be used in as many devices as you would like so long as the stack is not changed. See the stack registration process document on the Fieldbus Forums for further clarification on what constitutes changes to a stack. Contact the Fieldbus Foundation at (512) 794-8890 or e-mail member.services@fieldbus.org if you need assistance.

How much does stack registration cost?

Stack registration costs for both members and non-members can be found on our website in the “Development Resources” section under the “FOUNDATION™ Technology” tab or by going to the following link: http://www.fieldbus.org/index.php?option=com_content&task=view&id=145&Itemid=321.
This page intentionally left blank
**AT-442 HSE Analyzer Toolkit Professional Frequently Asked Questions**

<table>
<thead>
<tr>
<th>Question</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is the HSE Analyzer Toolkit (HAT)?</td>
<td>2</td>
</tr>
<tr>
<td>What are the benefits of the HAT?</td>
<td>2</td>
</tr>
<tr>
<td>What are the system requirements?</td>
<td>2</td>
</tr>
<tr>
<td>What products work with the HAT?</td>
<td>2</td>
</tr>
<tr>
<td>Are there optional components to the HAT?</td>
<td>2</td>
</tr>
<tr>
<td>What are some of the features of the HSE Packet Analyzer?</td>
<td>3</td>
</tr>
<tr>
<td>What are some of the features of the sample HSE Field Device?</td>
<td>3</td>
</tr>
<tr>
<td>Will the tool have design/implementation examples?</td>
<td>3</td>
</tr>
<tr>
<td>Where can I buy the HAT?</td>
<td>4</td>
</tr>
<tr>
<td>Who do I contact for purchases?</td>
<td>4</td>
</tr>
<tr>
<td>How do I get support?</td>
<td>4</td>
</tr>
</tbody>
</table>
What is the HSE Analyzer Toolkit (HAT)?

The HSE Analyzer Toolkit, or HAT, is a kit designed to ease development of HSE products, including linking devices and field devices.

What are the benefits of the HAT?

Product developers can speed new Fieldbus products to market and take advantage of the growing demand for Foundation technology. Since HSE packet decoding is built-in, there is no need to develop your own tool. HAT significantly reduces new product development time by helping engineers quickly find and diagnose errors in packets from HSE devices. In addition, it enables verification of correct device behavior against an HSE device provided in the toolkit.

What are the system requirements?

- Microsoft Windows 2000/XP Platform
- Network Interface Card

What products work with the HAT?

You may want the HSE Interoperability Test Kit (HSE ITK) or HSE Conformance Test Kit

Are there optional components to the HAT?

Yes. You can purchase additional seat licenses for use at different work stations.
What are some of the features of the HSE Packet Analyzer?

- Real-time decoding and display of HSE messages into plain text (including errors) speeds troubleshooting and development
- Symbolic message search makes it easy to pinpoint messages of interest
- Filtering by address or message type allows capture of user-defined traffic for analysis
- Pre- and post-filtering makes finding specific messages easy
- Save and load HSE Fieldbus message captures for later analysis
- Continuous message capture mode allows hands free monitoring
- Windows® 98, ME, 2000, NT, XP compatible.

What are some of the features of the sample HSE Field Device?

- Field device provides device annunciation and publishing features needed for debugging
- Field device produces messages that have been validated to be correct
- Field device runs on any standard Windows® PC with an Ethernet interface

Will the tool have design/implementation examples?

Yes. The HAT provides an overview tutorial on the Fieldbus Foundation integrated architecture as well as a top level design example based on a real device implementation. In addition to the top level design, the HAT provides the message structure for all of the HSE messages, including the ASCII C header files.
Where can I buy the HAT?

Purchasing the HSE Analyzer Toolkit can be done by filling out an order form from the “Tools” page under the “Development Resources” tab in the FOUNDATION Technology section of our website (www.fieldbus.org). A company purchase order will also be needed with the order form. These items can be emailed to sales@fieldbus.org or faxed to (512) 794-8893.

Who do I contact for purchases?

Contact the marketing/sales department for purchase inquiries at sales@fieldbus.org
Or call at (512) 794-8890 ext. 21

How do I get support?

You may e-mail support@fieldbus.org.

Or call the Fieldbus Foundation at (512) 794-8890.

Questions may also be posted to the Fieldbus Forums at http://forums.fieldbus.org/.

If you do not have access to the Fieldbus Forums and wish to join, please be sure to follow the instructions online at the forums site to do so. If you need assistance please contact us.