

# **Introducing Agilent VEE Pro 6.0**

The Easy Graphical Programming Environment

For Fast Measurement Analysis Results



# Better Products, Delivered Faster

Agilent Technologies is in the business of connecting measurements to minds to market. Our tools and technologies help you take measurements, gain insights, and apply those insights in the area of manufacturing to get better products to market sooner.

That's the power of Agilent VEE 6.0. This software family builds upon the popularity of HP VEE 5.0 with its industry-standard approach to math analysis, visualization and signal processing.

Agilent VEE 6.0 goes even further. It integrates two separate software packages into a single graphical environment that handles both measurements/data collecting and spreadsheet/math analysis. With VEE 6.0, tests are developed faster, results are analyzed more easily, understanding is increased, and data analysis is greatly enhanced. VEE makes it possible within your familiar "home base" environment, leveraging the solutions you have in place today.

# It's Your "Home Base"

As an open graphical environment, VEE works with category-leading products across all market segments. It accepts data from any vendor's instrument or PC card. It supports leading applications such as Microsoft® Excel® and Word®, The MathWorks MATLAB, Microsoft® Internet Explorer® and Netscape Navigator®. It supports all popular programming languages including Visual Basic, C, Visual C++ and LabVIEW. It works with all manufacturing equipment via ActiveX—surface-mount machines, robots, you name

it. And Agilent VEE can be used as a standalone solution or it can deliver measurement analysis results as part of your custom in-house solution. It becomes part of your operating environment without changing the way you do business.

# **Embedded MATLAB, Built-In Analysis**

Along with the core functionality of VEE, you also get the built-in power of MATLAB script and the Signal Processing Toolkit from The MathWorks.

These capabilities are embedded within VEE at no extra charge, delivering unprecedented analysis and visualization capabilities in a single graphical environment. You get hundreds of functions with VEE, plus the 400 most popular MATLAB functions preprogrammed as one-click VEE objects, including:

- Numeric and symbolic computation, including linear algebra and matrix computation, Fourier & statistical analysis, differential equation solving, matrix manipulation, trigonometric and other math operations.
- Data analysis, manipulation and reduction.
- Volume Visualization of scalars and vectors, multiple lighting sources, camera-based viewing.
- Engineering and scientific graphics including 2-D and 3-D displays, triangular & gridded data, waterfall diagrams, and quiver, ribbon, scatter, bar, pie & stem plots.
- Signal processing functions including signal and linear system models, analog filter design, FIR and IIR digital filter design, spectrum estimation, and time-series modeling.
- Animation and sound processing and analysis.

# **VEE** is Graphical

VEE is an award-winning, uniquely productive, two-dimensional programming environment. To create a program, you choose high-level graphical objects from the menu and connect them with wires (no more low-level icons to represent each textual line of code). The wire connections help specify functionality and sequence in intuitive block diagrams. You program at a higher, task-oriented level using built-in scientific and engineering routines. VEE jumpstarts your programming effort, and maximizes the 2-D programming space for faster measurement analysis results.

# **VEE** is Efficient

VEE is self-documenting: it illustrates the connections between individual objects and the wires that join them to create a program. Where appropriate, many objects (such as MATLAB objects) also include powerful textual code within the object itself. Objects include graphs, displays, advanced math, signal processing, sound and vibration analysis and more. The objects can be built into reusable, modular UserFunctions (or UFs), making it easy to configure and reconfigure programs. Events between objects can be managed by special sequencing wires or objects. Since execution of code is determined by dataflow through wires, VEE can multitask by



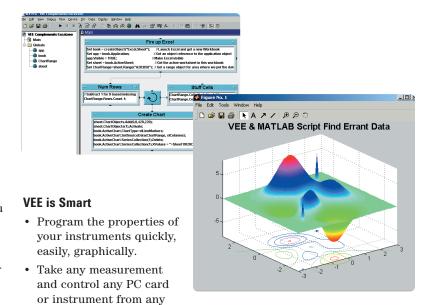
through wires, VEE can multitask by running multiple execution threads and UFs in parallel.

# **VEE** is a Multi-Language

VEE works with a variety of languages through ActiveX: C, LabVIEW, MATLAB, MATLAB script, Visual Basic, Visual C++, Visual Basic Script

# **VEE** is Customizable

You don't have to create a front panel for your VEE program, but if you want to create a user interface without access to your code, you simply add the objects and UserFunctions to your front panel. VEE's compiler generates optimized code that can be further enhanced with its built-in Profiler. The Profiler allows you to quickly analyze critical sections of code to save development time when fine-tuning your programs. When you're ready to distribute your VEE program, you can automatically create a runtime executable directly from the menu. You get unlimited runtime with VEE-distribute your programs however you want at no extra charge.



• Use over 500 National Instruments LabWindows/CVI drivers.

vendor.

- Create runtime executables easily with embedded I/O configuration, and distribute the programs however you see fit, at no extra charge.
- Verify instrument addresses and other parameters automatically at runtime.
- Troubleshoot instrument timeouts and other errors automatically.



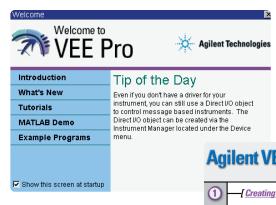
# VEE is Open Company of the Company o

- Use VEE's powerful instrument discovery and measurement expertise in Visual Basic or C/C++ via ActiveX.
- Use Microsoft functions within VEE: Word for reports, Excel for spreadsheets, Outlook® for paging and e-mail, and Access for database operations.
- Monitor programs and perform diagnostics remotely over the Web.
- Customize VEE and extend its capabilities through ActiveX controls.
- Connect with improved support for ISA, PCI, CPCI and PCMCIA standards.

# **VEE** is Highly Usable

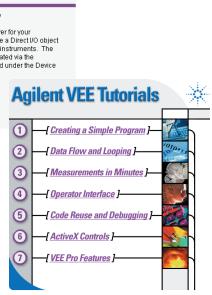
- Includes seven multimedia builtin tutorials (for Windows).
- Converts automatically among 16 data types without extra programming.
- Opens welcome windows automatically for the VEE example directory and MATLAB demos.
- Provides context-sensitive tips and help.

Free 60 Day VEE Pro 6.0 Evaluation Copy (order a free CD or download at www.agilent.com/find/vee)



# Minimum System Requirements for VEE 6.0

- PC with a Pentium 120 MHz processor; 266 MHz Pentium II or higher recommended
- Microsoft Windows 95, Windows 98, Windows NT 4.0, or Windows 2000 operating system
- 24 MB RAM with Windows 95/98, 48 MB RAM with Windows NT/ Windows 2000
- Hard disk free space: 25 MB minimum (without MATLAB);
   60 MB with MATLAB and tutorials
- CD-ROM drive
- 15-inch monitor 800x600 (Super VGA); 17-inch 1024x768 Ultra VGA recommended
- · PC keyboard
- 2-button mouse (3rd button, if present, is not used)



# **Ordering Information**

A German version of any VEE product may be ordered by requesting Option ABD (no charge); a Japanese version of any VEE product may be ordered by requesting Option ABJ (no charge).

All VEE Pro products ship with unlimited VEE Pro RunTime distribution rights, embedded MATLAB Script, The MathWorks' Signal Processing Toolbox, and full ActiveX capabilities at no extra charge. Full MATLAB can be purchased from The MathWorks at www.mathworks.com or 508 647-7000.

# www.agilent.com/find/vee 800 452 4844

# VEE Pro 6.0

Model Number	Option Number	U.S. List Price
VEE Pro 6.0 for Windows 95/98/NT/2000	E2120G	\$1,395
VEE Pro 6.0 PC ISA GPIB Automation Kit	82345G	\$1,625
VEE Pro 6.0 PC PCI GPIB Automation Kit	82351G	\$1,625
EE Pro 6.0 HP-UX 10.2	VE2111G	\$2,595

# **VEE Pro 6.0 Site License**

Model Number	Option Number	U.S. List Price
VEE Pro 6.0 Ten Seat Site License (quantity discounts available)	E2119G	\$11,400
Previous purchase credit per copy (up to five maximum)	CDT	\$600 each

# **VEE Pro 6.0 Educational Products\***

Model Number	Option Number	U.S. List Price
VEE Pro 6.0 Windows® Faculty Version (40 Lic.) Includes VEE Pro, 40 licenses, one set of CDs & documentation	H2327G	\$1,395
Adds PCI GPIB card and cable	WNT	At 50% discount for 40 students: \$18/student
	PCN	At 50% discount for 40 students: \$21/student

 $<sup>^{</sup>st}$  Only for faculty of accredited schools that qualify for Agilent's 50% educational purchase discount

# **VEE Pro 6.0 Upgrade Products\***

Model Number	Option Number	U.S. List Price
VEE Pro 6.0 for Windows 95/98/NT/2000	E2120G Option UP1	\$495 Net
VEE Pro 6.0 Ten Seat Site License	E2119G Option AGE	\$3,000 Net

<sup>\*</sup> Upgrade to VEE Pro 6.0 from Versions 3.2 or later. If earlier than 3.2, full product purchase is required. Upgrade products require previous version of VEE installed on your hard disk; you may upgrade from Unix to Windows, but you will need to call Support for a special serial number for your Windows PC.

# **VEE Pro 6.0 Training Classes**

Model Number	Option Number	U.S. List Price
4 Day Intro to VEE at Agilent	E2120G 24D	\$1,650
Customized 4 Day Intro to VEE at Customer Site or Agilent	E2120G 24A	Quote
4 Day Advanced VEE at Agilent	E2120G 24Q	\$1,650
Customized 4 Day Advanced VEE at Customer Site or Agilent	E2120G 24R	Quote

# **Authorized Agilent VEE Partners**

# **Amplicon Liveline**



Amplicon Liveline is a specialist supplier of IT and instrumentation to industry. Offering a complete range of PC plug-in cards for data acquisition, serial and HP-IB communications, industrial rack mounted PCs and single board computers. PC hardware solutions are available from 16 different suppliers to ensure that Amplicon can meet the varied demands from industry, higher education and research and development. All products offer support for HP VEE and are presented in a 408-page color catalog with full pricing and technical details.

Brighton, United Kingdom Tel: ++44 (0) 1273 570220 Web: http://www.amplicon.co.uk

# ComputerBoards, Inc.

# ComputerBoards, NC.

ComputerBoards, Inc. offers a complete line of 12-bit and 16-bit PC data acquisition products. The 16-bit products include replacements for all standard 12-bit boards, including PCI and PCMCIA boards, high-channel-count analog input boards, and 1 MHz 16-bit ISA and PCI boards. ComputerBoards Universal Library provides drivers for HP VEE.

Middleboro, Massachusetts Tel: 508-261-5100 Web: http://www.computerboards.com

# Data Translation®

# DATA TRANSLATION®

Data Translation Inc. designs, manufactures and sells data acquisition, image processing, and machine vision hardware and software. Data Translation makes DT VPI (visual programming interface) software that is an elegant interface allowing VEE users to configure and control virtually all Data Translation data acquisition boards. Data Translation offers a wide selection of high performance PCI, USB, ISA PC plug-in data acquisition hardware.

Marlboro, Massachusetts
Tel: 508-481-3700

Web: http://www.datatranslation.com

## **Meilhaus Electronic**



Meilhaus Electonic data acquisition products cover a range of hardware and software products for standard applications as well as for highly sophisticated test, measurement and control systems based on a PC platform.

Products include data acquisition cards for PCI, CompactPCI, ISA and PCMCIA bus, IEEE488 cards, LAN/GPIB, LAN gateway, sensor modules, intelligent sensor interfaces and system integration services.

Puchheim, Germany Tel: ++089 \ 89 01 660 Web: http://www.meilhaus.de

# The MathWorks



The MathWorks, Inc., develops, markets, and supports MATLAB, Simulink, and a family of data analysis toolboxes for engineers, scientists, and technical professionals. MATLAB provides the foundation and computational engine for all of The MathWorks products. Widely recognized as the industry's premier language for technical computing, MATLAB provides comprehensive math and visualization functionality, and a powerful high-level language for users to interactively explore, analyze, design, and prototype solutions to their problems. The MathWorks products are used throughout the world in industries such as automotive, aerospace, environmental, telecommunications, computer peripherals, finance, and medical. More than 500,000 users at the world's leading industrial, government, and education organizations rely on The MathWorks products for tremendous gains in productivity.

Natick, Massachusetts Tel: 508-647-7000

Web: http://www.mathworks.com

# **Agilent VEE Application Developers**

www.agilent.com/find/vee

There are currently over 30 companies available in North America, Europe, Middle East and Asia to help you develop your Agilent VEE solution. Here's a partial list. Please refer to the VEE website for a complete listing.

- Amplicon Liveline
   Brighton, United Kingdom
   +44 (0) 1273 570220

   www.amplicon.co.uk
- ComputerBoards, Inc.
   Middleboro, Massachusetts, USA (508) 946-5100
   www.computerboards.com
- CyberResearch
  Branford, Connecticut, USA
  (800) 341-2525
  www.cyberresearch.com
- Data Translation
   Marlboro, Massachusetts, USA
   (508) 481-3700 or (800) 525-8528

   www.datatranslation.com
- Meilhaus Electronic Puchheim, Germany ++089 \ 89 01 660 www.meilhaus.de
- The MathWorks, Inc.
  Natick, Massachusetts, USA
  (508) 647-7000
  www.mathworks.com

# C Let's get started—today

# Agilent Technologies' Test and Measurement Support, Services, and Assistance

Agilent Technologies aims to maximize the value you receive, while minimizing your risk and problems. We strive to ensure that you get the test and measurement capabilities you paid for and obtain the support you need. Our extensive support resources and services can help you choose the right Agilent products for your applications and apply them successfully. Every instrument and system we sell has a global warranty. Support is available for at least five years beyond the production life of the product. Two concepts underlie Agilent's overall support policy: "Our Promise" and "Your Advantage."

### **Our Promise**

Our Promise means your Agilent test and measurement equipment will meet its advertised performance and functionality. When you are choosing new equipment, we will help you with product information, including realistic performance specifications and practical recommendations from experienced test engineers. When you use Agilent equipment, we can verify that it works properly, help with product operation, and provide basic measurement assistance for the use of specified capabilities, at no extra cost upon request. Many self-help tools are available.

Your Advantage means that Agilent offers a wide range of additional expert test and measurement services, which you can purchase according to your unique technical and business needs. Solve problems efficiently and gain a competitive edge by contracting with us for calibration, extra-cost upgrades, out-ofwarranty repairs, and on-site education and training, as well as design, system integration, project management, and other professional engineering services. Experienced Agilent engineers and technicians worldwide can help you maximize your productivity, optimize the return on investment of your Agilent instruments and systems, and obtain dependable measurement accuracy for the life of those products.

For more assistance with your test & measurement needs or to find your local Agilent office go to

### www.agilent.com/find/assist

Or contact the test and measurement experts at Agilent Technologies

(During normal business hours)

# **United States**

(tel) 1 800 452 4844

# Canada

(tel) 1 877 894 4414 (fax) (905) 206 4120

# Europe

(tel) (31 20) 547 2000

### Japan

(tel) (81) 426 56 7832 (fax) (81) 426 56 7840

### **Latin America**

(tel) (305) 267 4245 (fax) (305) 267 4286

### **Australia**

(tel) 1 800 629 485 (fax) (61 3) 9272 0749

### **New Zealand**

(tel) 0 800 738 378 (fax) 64 4 495 8950

# **Asia Pacific**

(tel) (852) 3197 7777 (fax) (852) 2506 9284

Product specifications and descriptions in this document subject to change without notice

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