Agilent VEE Pro 9.3

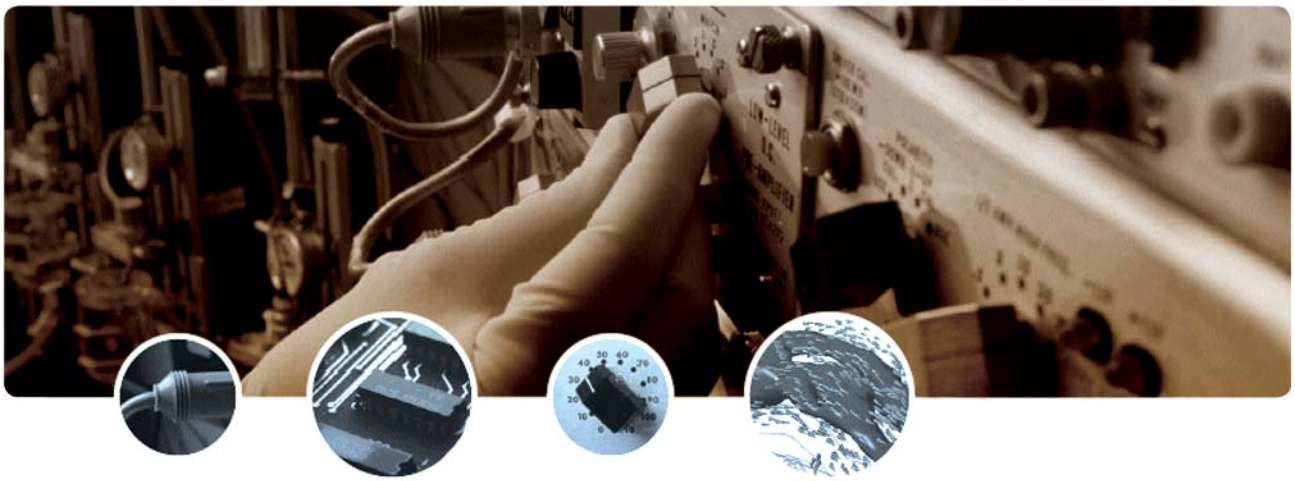
Data Sheet

Agilent VEE 9.3 Features

- New sample programs for Agilent 33500 series function/arbitrary waveform generator, 34411A digital multimeter and DSO/MSO oscilloscopes.
- General vTools and USB Modular DAQ vTools
- Windows 7 operating system support
- Multithreading and multicore programming support
- SCPI completion
- Private UserFunction
- LXI support
- Conditional breakpoints and breakpoints window
- Error call stack
- Integrated database support
- Supporting custom menu in XML format
- Enhanced default preferences dialog box
- NaN and Infinity support
- Toolbars for VEE objects
- More Windows standard dialog boxes.

Agilent's software products make you more productive, so you can focus on solving engineering problems, not on programming. Agilent VEE is a powerful intuitive graphical language environment that provides you the quick and easy path to measurement analysis.

Agilent Technologies



For Faster Programming

Agilent VEE (Visual Engineering Environment) is an easy-to-use graphical language environment that provides a quick path to measurement and analysis.

- Select and edit objects from pull-down menus or toolbars and connect them to each other by wires to specify the program's flow, mimicking the order of tasks you want to perform.
- Illustrate objects and connections between them with color coding for easy program differentiation.
- Create programs easier and faster with SCPI completion, code completion and code insight.
- Debug programs on the fly and quickly test and update codes with Conditional Breakpoints, Watch Window and Output Window.
- Improve your system performance with multithreading technology and multicore programming.

Agilent VEE can be used as a standalone solution or as part of a custom in-house solution, and includes all the capabilities and support you need to be successful.

A Better User Experience

Designed for engineers and scientists who need to quickly create and automate measurements and tests, Agilent VEE comes with features that help users do their job faster and more effectively.

The Modern Integrated Development Environment with dockable tool windows gives users a more modern and streamlined programming experience, while numerous sample programs, demos and context-sensitive help provide support for beginner and veteran programmers alike.

Agilent VEE now includes new sample programs with simple VEE programming for the latest Agilent instruments – the Agilent 33500 series arbitrary/function generator, Agilent 34411A digital multimeter and InfiniiVision 2000X/3000X/5000/6000/7000 series DSO or MSO oscilloscopes..

Test and Measure Efficiently

Agilent VEE verifies instrument addresses and other parameters at runtime and allows users to change these parameters without reconfiguring programs. The software handles different data types automatically, providing automatic conversion and data handling capabilities with minimal complex programming.

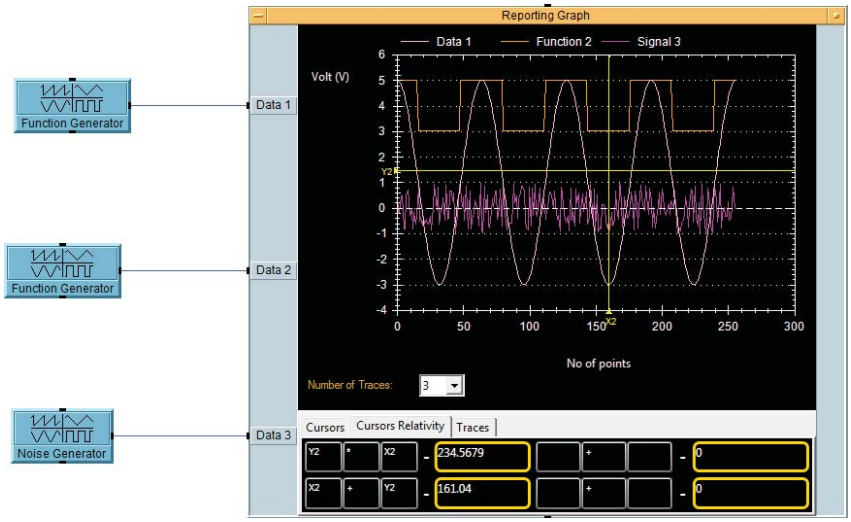
Generate optimized codes with Agilent VEE's compiler, and further enhance those codes with the built-in Profiler. The Profiler analyzes critical sections of code to save development time when fine-tuning the programs.

Agilent VEE Pro comes standard with a RunTime execution engine that provides the ability to distribute run-only Agilent VEE Pro applications at no additional cost. The users are allowed to redistribute the RunTime installer.

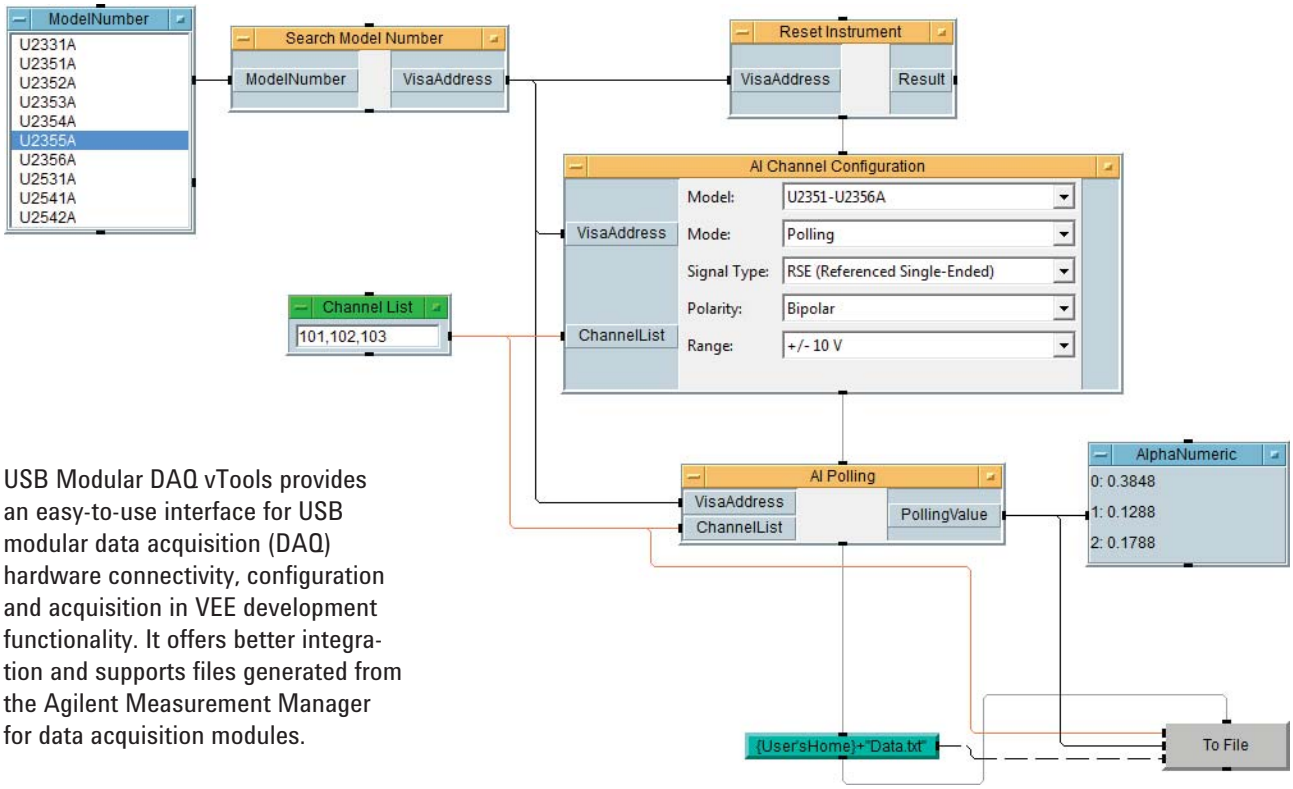
Simplify your programming with vTools

There are two available vTools: General vTools and USB Modular DAQ vTools.

General vTools offers an easy-to-use interface for data analysis, including support for simple trending data analysis, statistical filters, alert and events, data scaling and data charting and graphing. It contains enhanced reporting graph objects with panning, scroll zoom, graphic saving features and printing capabilities. General vTools also supports objects and components such as averaging and marker lookup.



Enhanced reporting graph



Sample programs from USB Modular DAQ vTools help you understand how to set up channel settings and poll data.

USB Modular DAQ vTools provides an easy-to-use interface for USB modular data acquisition (DAQ) hardware connectivity, configuration and acquisition in VEE development functionality. It offers better integration and supports files generated from the Agilent Measurement Manager for data acquisition modules.

USB Modular DAQ vTools is only available for the Agilent U2300A and U2500A series USB modular data acquisition.

Download vTools for free at
www.agilent.com/find/vee_download

Software and Hardware Compatibility

Agilent VEE interfaces with popular software and hardware tools, and provides easy, menu-driven control of database. Agilent VEE uses the .NET Framework and ActiveX to simplify common tasks, and supports industry standard instrument drivers, including IVI-COM and VXI*plug&play*. Users may also use SCPI or the .dll library supplied with many instruments.

Agilent VEE Pro supports all popular programming languages, including Visual Basic, C/C++, Visual C# and all.NET compliant languages.

Agilent VEE Pro supports various instruments and data acquisition devices, and works with surface-mount machines, robots and other manufacturing equipment via the .NET Framework or supplied ActiveX libraries. The .Net Framework (Common Language Runtime and Framework Class Libraries) is installed with Agilent VEE Pro, so it is instantly available.

Agilent VEE Pro can communicate with any instrument from any vendor using GPIB, LAN, USB, RS-232, VXI and LXI, and controls most standard instruments' plug-in cards with an instrument driver, a vendor-supplied DLL or with Agilent VEE Pro's direct IO capability.

Powerful Features for Increased Productivity

MATLAB Script and the MathWorks Signal Processing Toolbox are embedded in Agilent VEE Pro at no additional cost, and come with 1800 MATLAB functions, more than 1000 of the most popular MATLAB analysis and visualization functions preprogrammed as one-click objects.

Built-in MATLAB functions include:

- Numeric computation
- Engineering and scientific graphics (2D, 3D, waterfall, bar, pie)
- Signal processing
- Arrays and matrix math.

Evaluate Agilent VEE Pro

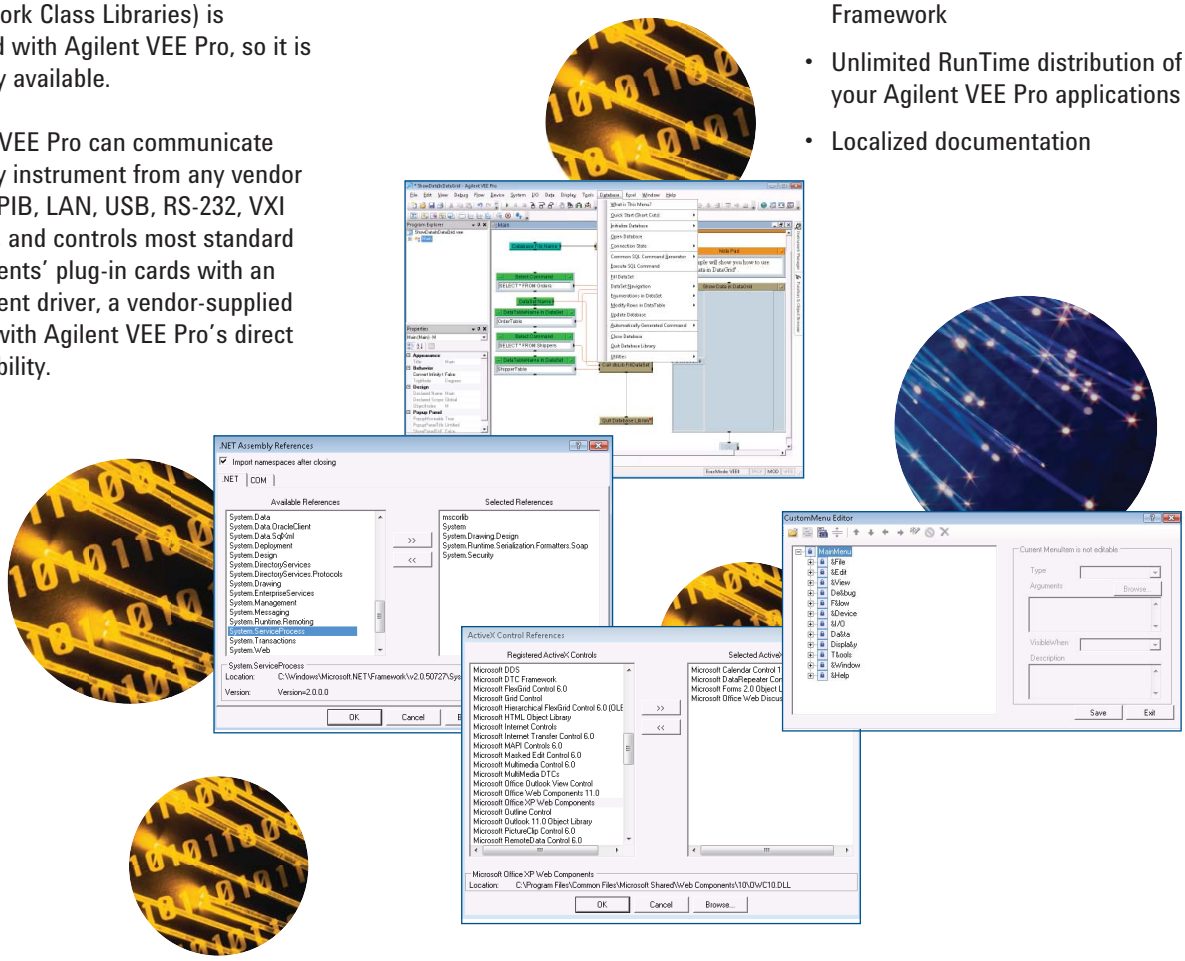
Test a trial version of Agilent VEE Pro and see its benefits for yourself. Download a free, fully functional 30-day evaluation copy, or request a CD to be shipped to you.

For more information, visit www.agilent.com/find/vee_download

A Complete Solution

There is no need to buy expensive add ons to get the full set of Agilent functionality. Agilent VEE includes all the capabilities and support you need to be successful, including:

- Built-in MATLAB Script and Signal Processing Toolbox
- Menu-driven control of Excel and databases
- Support for Microsoft .NET Framework
- Unlimited RunTime distribution of your Agilent VEE Pro applications
- Localized documentation



Minimum System Requirements for Agilent VEE Pro 9.3

Prior to installing Agilent VEE Pro 9.3, ensure that your PC meets the following minimum system requirements for installation and operation.

Hardware Requirements	
Processor	Windows XP, 450 MHz Pentium II or higher Windows Vista/Windows 7, 1 GHz Pentium III or higher
Operating system	One of the following Microsoft Windows versions: • Windows XP (Service Pack 3 or higher) • Windows Vista Business, Ultimate or Enterprise edition (Service Pack 1 or higher) • Windows 7 Professional, Ultimate or Enterprise edition Please note that 64-bit Windows 7 support is only available by running 32-bit application on a Windows-on-Windows emulator
RAM	Windows XP, 128 MB or higher Windows Vista/Windows 7, 1 GB or higher
Hard disk space	470 MB
Video	Windows XP, Super VGA (800x600) or higher resolution, 256 colors or more Windows Vista/Windows 7, Support for DirectX 9 graphics with 128 MB graphics memory recommended; Super VGA graphics supported
PC requirements	Keyboard, 2-button mouse and CD-ROM drive (if installing from CD)

Software Requirements
Windows XP: Microsoft Internet Explorer 6.0 or higher Windows Vista/Windows 7: Microsoft Internet Explorer 7.0 or higher
Microsoft Office 2003 and 2007 (if using Office products with Agilent VEE Pro)
Agilent IO Libraries Suite 16.1 or higher (if communicating with instruments using Agilent VEE)
Microsoft .NET Framework 3.5 SP1

Connectivity options for instrumentation
Agilent 82350B PCI-GPIB interface
Agilent 82351A PCIe/GPIB interface
Agilent 82357B USB/GPIB interface
Agilent E5810A LAN/GPIB gateway
USB connectivity to instruments supporting the USBTMC protocol
Standard RS-232
LAN connectivity to instruments supporting the VXI-11 protocol

For more details, visit
www.agilent.com/find/vee

Agilent VEE Comparison Table

	Agilent VEE 9.3		Agilent VEE 8.5			Agilent VEE 8.0		Agilent VEE 7.5
	Pro	Student	Pro	Express	Student	Pro	Express	Pro
Development Tools								
MultiThreading	▲	▲						
Multicore Programming	▲	▲						
SCPI Completion	▲	▲						
Private UserFunction	▲	▲						
Toolbars for VEE Objects	▲	▲						
Enhanced Default Preferences dialog box	▲	▲						
Color Coding	▲	▲	▲	▲	▲			
Modern Integrated Development Environment [IDE]	▲	▲	▲	▲	▲			
Microsoft Windows 7 Support	▲	▲						
Microsoft Office 2007 Support	▲	▲	▲	▲	▲			
Programmatic Properties for VEE Objects	▲	▲	▲	▲	▲	▲	▲	
Code Completion and Code Insight	▲	▲	▲	▲	▲	▲	▲	
Minimap	▲	▲	▲	▲	▲	▲	▲	
Project Explorer Window	▲	▲	▲	▲	▲	▲	▲	▲
.NET ActiveX and IVI-COM Support	▲	▲	▲	▲	▲	▲	▲	▲
Support for Microsoft .NET Controls	▲	▲	▲	▲	▲	▲	▲	▲
The Callable Server Feature	▲		▲			▲		▲
The Remote Function Feature	▲		▲			▲		▲
Creating RunTime Version of Agilent VEE Programs and Secured Version of Agilent VEE Objects	▲		▲			▲		▲
General vTools and USB Modular DAQ vTools	▲	▲						
Debugging Tools								
Conditional Breakpoints	▲	▲						
Error Call Stack	▲	▲						
Output Window	▲	▲	▲	▲	▲			
Watch Window and Edit and Continue	▲	▲	▲	▲	▲	▲	▲	
Breakpoints	▲	▲	▲	▲	▲	▲	▲	▲
Automatic Error Handling	▲	▲	▲	▲	▲	▲	▲	▲
Show Data Flow and Show Execution Row	▲	▲	▲	▲	▲	▲	▲	▲
Line Probe and Object Probe	▲	▲	▲	▲	▲	▲	▲	▲
Step-into, Step-out and Step-over	▲	▲	▲	▲	▲	▲	▲	▲
Connectivity Tools								
LXI Support	▲	▲						
Industry-standard Connectivity	*1	*1	*1	*2	*1	*1	*2	*3
Dynamically Change VISA Interface and Address	▲	▲	▲	▲	▲			
Using Agilent IO Monitor to Monitor Instant Communications	▲	▲	▲	▲	▲			
Instrument Manager Auto-detect and Configure of Instruments	▲	▲	▲	▲	▲	▲	▲	▲
VEE I/O Configuration File Saved with Program	▲	▲	▲	▲	▲	▲	▲	▲
Other Tools								
Integrated Database Library	▲	▲						
Custom Menu in XML Format	▲	▲						
MATLAB 2007a Support	▲	▲	▲	▲	▲			
Built-in MATLAB Engine	▲		▲			▲		▲
MATLAB Script Objects	▲	*4	▲		*4	▲		▲
Integrated Excel Library	▲	▲	▲	▲	▲	▲	▲	▲

**1 - GPIB, RS-232, GPIO, USB, LAN, VXI*
**2 - Agilent USB only*
**3 - GPIB, RS-232, GPIO, USB, LAN, VXI*
**4 - Support only when MATLAB is installed on your machine*

Agilent VEE Education 9.3 has all the features of Agilent VEE Pro 9.3 and comes packaged with 10 standalone licenses. Agilent VEE 9.3 does not come with an express version.

Ordering Information

Note: All products listed below are structured as options under the W4000C product number.

Core product	Notes
Agilent VEE Pro 9.3 Software (W4000C-PRO)	Includes the full feature of Agilent VEE Pro 9.3 CD and Quick Start Guide (6 languages)
Agilent VEE Pro 9.3 Student Software (W4000C-STU) (for students only)	Includes the full feature of Agilent VEE student 9.3 CD and Quick Start Guide (6 languages)
Agilent VEE Pro Education 9.3 (W4000C-EDU) (for education customers only)	Includes 10 licenses of Agilent VEE Pro 9.3 and Quick Start Guide (6 languages)
Upgrade licenses	**Notes**
Upgrade from Agilent VEE Pro 8.5 to Agilent VEE Pro 9.3 (W4000C-U85)	Includes CD and Quick Start Guide (6 languages)
Upgrade from Agilent VEE Pro 8.0 to Agilent VEE Pro 9.3 (W4000C-U80)	Includes CD and Quick Start Guide (6 languages)
Upgrade from Agilent VEE Pro 7.5 & below to Agilent VEE Pro 9.3 (W4000C-U75)	Includes CD and Quick Start Guide (6 languages)
Upgrade from Agilent VEE Express to Agilent VEE Pro 9.3 (W4000C-UEX)	Includes CD and Quick Start Guide (6 languages)
Additional options	**Notes**
Agilent VEE Education 9.3 10-license option (W4000C-E10)	Includes Software Entitlement Certificate to add on 10 licenses to VEE Education 9.3 (W4000C-EDU)
*No Documentation/Education Package (W4000C-0B0)	Includes Software Entitlement Certificate only/ Basic Education package only (default for W4000C-STU and W4000C-E10)

For additional ordering information, technical policy, part numbers, and pricing assistance please refer to: **www.agilent.com/find/vee**.

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