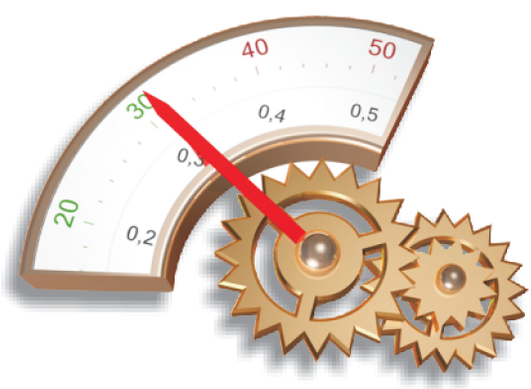
perpetuum software

Instrumentation ModelKit



Instrumentation ModelKit

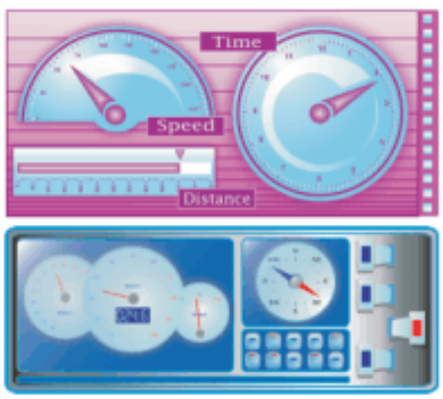
Instrumentation ModelKit™ is a revolutionary solution in the field of instrumentation and graphic components for .NET. Full featured graphics editor allows creating new visual components having unique look and functionality with a few mouse clicks. It can be both common controls such as Meters, Dials, Sliders, Gauges, Switches and specialized elements for your industry: Manipulators, Special-purpose Devices, etc. A library of ready made components featuring more than 130 controls is available.

General

The Library of 100% .NET Managed Components Written in C#. The Instrumentation ModelKit™ package contains only .NET native components which are written in C# and contain only 100% managed code.

Compatible with the Most Popular .NET IDEs. It Is Also Possible To Use The Product without an IDE. Instrumentation ModelKit works with Microsoft Visual Studio.NET, Borland C# Builder, Delphi.NET, and other .NET IDEs. Moreover, the product can be used without an IDE at all provided that .NET Framework is installed.

WinForms and ASP.NET WebForms Support. Instrume-ta-tion ModelKit™ can be used both for WinForms and ASP.NET WebForms applications.



Instrumentation ModelKit™ Is an Ideal Solution for Creating Hardware Emulators, Computer Assisted Training, SCADA Systems and Human-engineered Interfaces.

Easy to use.

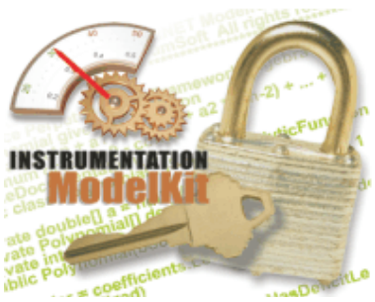
Instrumentation ModelKit™ is extremely easy to use. The product package includes detailed documentation and extended base of utilization examples. Moreover, the film-loops that have been designed to give a better estimate of Instrumentation ModelKit™ and provide some simple tutorials of its use are available for viewing on our site. The videos represent short step-by-step presentations each of them illustrating a single capability or a set of capabilities intrinsic to Instrumentation ModelKit™. The handy playback format and explanatory remarks provide a clear notion of what is happening on the screen.

Easy to Deploy.

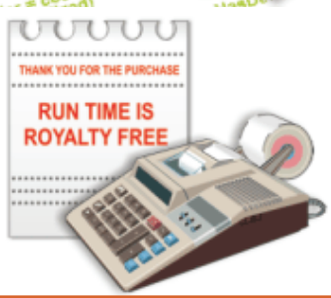
In order to make the application which uses Instrumentation ModelKit™ work on a user's machine, it is enough to copy only few DLLs to the program directory.

General

Unified Samples Browser.
The unified sample browser provides a set of comprehensive examples which facilitate exploration of the library and allow searching the example demonstrating the required functionality on the fly.

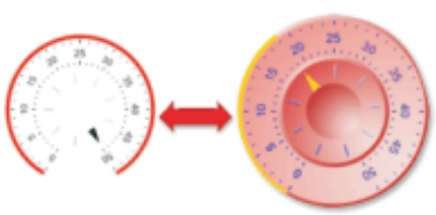


Source Code and Unit Tests Available.
The availability of the product source code and unit tests gives you a free hand over managing your application's destiny.



Royalty Free Run Time.
Instrumentation ModelKit™ is run-time royalty free. This means that you can distribute Instrumentation ModelKit™ with your application to end-users without any additional fees.

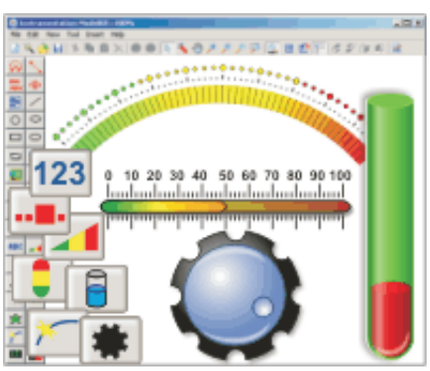
Instruments Design

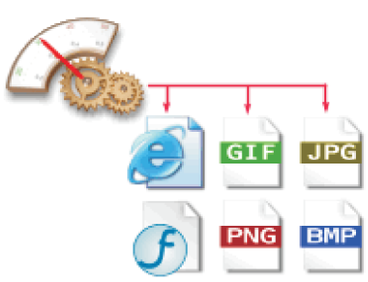


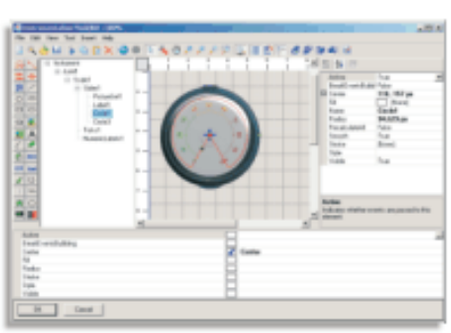
You Can Create New Template-based Controls by Means of a Few Mouse Clicks Using the Wizard.
If you wish to design a new graphic control there is no need to create it from scratch. Any control included in the package can be used as a template of your own instrument. This ability considerably streamlines the process of control creation.

Look & Feel of Real-life Instrumentation Hardware.
Instrumentation ModelKit provides developers with a great number of features which are to make controls realistic. Support for 3D skins, double buffering, ability to specify interactive behavior to the controls, GDI+ capabilities for elements drawing all together these characteristics allow a developer to reproduce real-life instrumentation hardware appearance and behavior.

Instruments Design







Full Support for OPC Industry Standard DataAccess Specification; Allows Moving Data from and to PLCs, DCSs, and Other Control Devices.
Virtually any hardware device supporting the OPC DA standard may be monitored and managed in your applications using the DataChannel component. The OPC DataChannel component included in Instrumentation ModelKit allows you to incorporate your real-time data channels with the OPC industry standard so there is no need to use complicated COM interfaces. Just enjoy monitoring data using the unified .NET component technology with a simple design-time tuning.

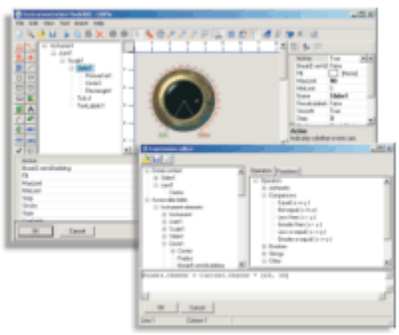
The Library of Controls Can Be Infinitely Expanded.
The library of controls is being constantly expanded and the collection enlarges from one product version to another. Moreover, it is possible to compose your own collection of instrumentation controls, either the common ones or related to a particular industry.

High-level elements accelerate development of complex gauges.
RangedLevel allows assigning levels and ranges to the scale. This element automatically takes scale shape in view of the elements layout, supports gradient fill along the scale, division by sectors and many additional settings.
LinearLevel is a highly effective element for creating different kinds of linear progress bars and thermometers. The element can be automatically placed on to the scale. It supports gradient fill along the scale, division by sectors. A set of 3-D effects is available.
Tank is a representation of the 2-D or 3-D tank with indication of the liquid level.
ScaleTitle allows positioning the title along the scale.
ScaleMarks allows using arbitrary shape marks on the scale.
Hightlight allows emulating catchlights on cylindrical objects (for example, dial handle)
Gear allows emulating cylindrical objects of sophisticated form with equidistributed notches along the object contour.

SVG, GIF, BMP, PNG JPG and Flash export.
Instrumentation ModelKit™ offers a wide range of export options SVG, GIF, BMP, PNG, JPG and Flash.

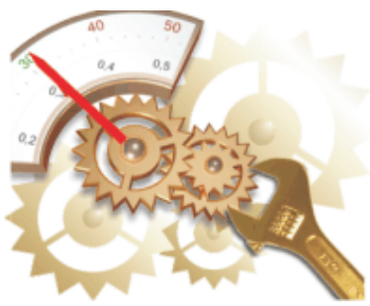
Full Featured Designer.
Full featured designer delivered within Instrumentation ModelKit, grants you the opportunity to design a wide range of visual controls without the need to write a single line of code. You can create common controls as well as specialized instruments peculiar for your industry by a few mouse clicks.

Instruments Design

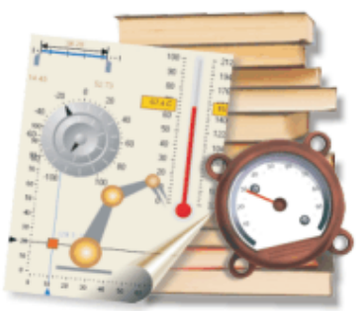


Convenient Expression Editor.
Instrumentation ModelKit™ includes the expression editor that represents a convenient visual interface for expressions writing where all available expression language constructions and elements are available for viewing and editing. They can be selected, moved to the required entry field position and so on.

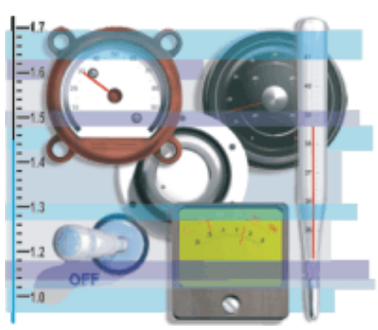
Instruments model



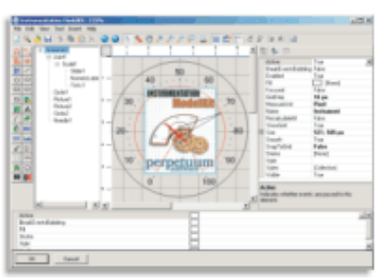
Instrumentation ModelKit™ is fully customizable this allows designing unique user interfaces which can advantageously distinguish your products form the competing ones.



A Rich Library of Ready-made Controls.
Instrumentation ModelKit contains more than 130 ready-made instrumentation controls such as ProgressBars, Meters, Dials, Sliders, Gauges, Odometers, Thermometers, Switches and so on. These controls can be nested into an application as they are or used as templates or constituent parts for custom controls.

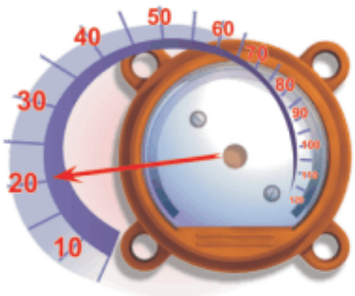


An Extensive Package of 3D Skins.
An extensive package of 3D skins makes it possible to design a User Interface comprised of instruments that seem to be touchable.

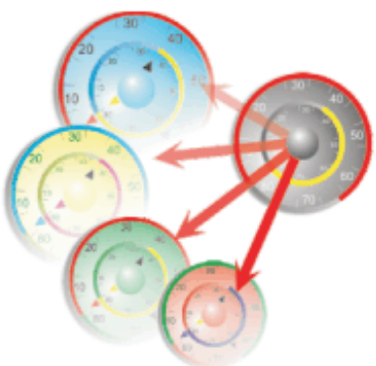


Individual Control Settings.
Due to availability of a convenient control designer and powerful property editors, you are in position to change any property of any control element at any time without the need to write a single line of code. All modifications are carried out visually in a fast and convenient way.

Instruments model



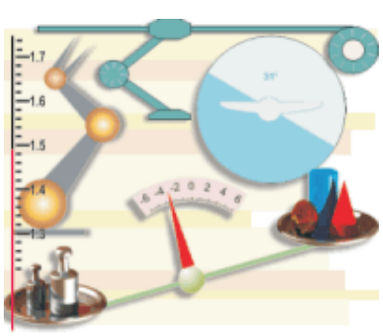
Support for Bitmapped Images (e.g. for skins support).
The elements you create can arbitrarily combine drawing primitives, bitmapped images and specialized elements (such as scales and sliders). The use of real-life instrument images allows creating fully functional controls with the appearance which is indistinguishable from hardware instruments.



Multiple Template Reuse.
The newly-created custom controls as well as control templates can be saved to a file for further editing and reuse. You can design an unlimited number of custom controls on the basis of one and the same instrument or instrument template.

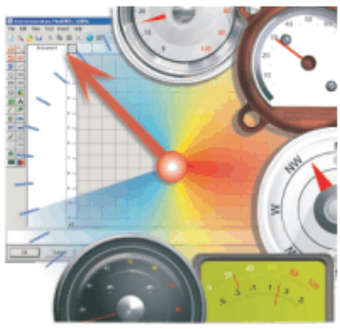
Elaborate Interactive Action of any Object Can Be Assigned Without a Single Line of Code.
In Instrumentation ModelKit, there is no need to code in order to assign interactive and complex behavior to various objects. It is enough to specify a simple expression for a corresponding control property in the property grid to make such control behave like a real-life instrument.

Support for Double Buffering
The double buffering is used to produce smooth animation and avoid flickering of a control when its properties are being dynamically changed.

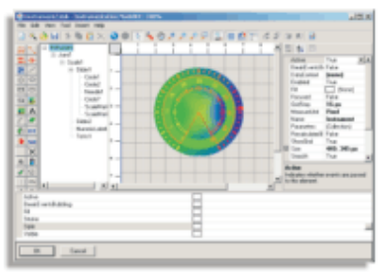


Ability to Create Specialized Elements (horizons, scales, manipulators and many more).
Instrumentation ModelKit grants you an advanced capability to design specialized elements for practically any industry from scratch as well as on the basis of ready-made controls even without profound knowledge of programming and design. Along with Progress Bars, Meters, Dials, Sliders, Gauges, Odometers, Thermometers, Switches etc. you are able to create horizons, scales, manipulators and many other instruments. The field of controls utilization unlimitedly spreads from the digital dashboards design to SCADA systems engineering.

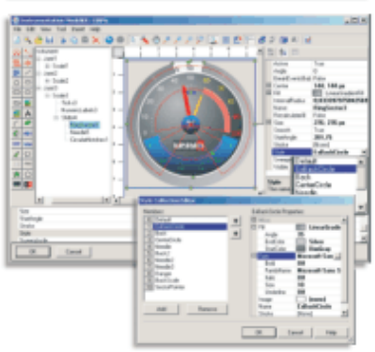
Instruments model



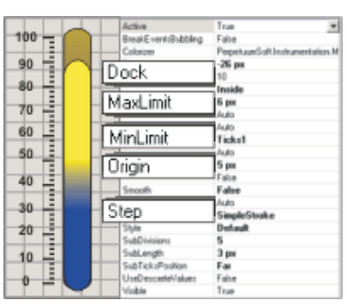
Fast Creation of New Visual Components.
Instrumentation ModelKit allows creating a wide range of variable controls without challenging any special knowledge or qualification. The template-based model of control design, the availability of the wizard and the powerful graphics editor grant you an opportunity to design unique visual controls in a couple of minutes.



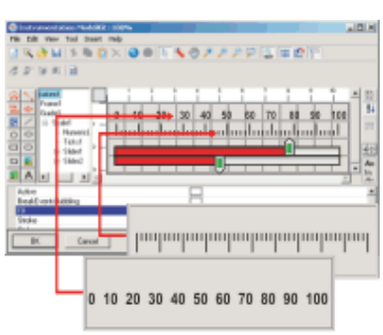
The Use of Advanced GDI+ Capabilities (gradient fills, alpha blending, antialiasing etc.)
Instrumentation ModelKit™ allows to use the full extent of GDI+ advantages for elements drawing thus making your controls look professional and high-end.



It Is Possible to Assign Individual Styles to Controls.
The process of adjusting controls' appearance can be considerably streamlined due to the availability of various individual styles. Each instrument has its own collection of styles which can be modified and amplified by a developer.



Scale Elements Architecture
Automatic layout of the scale elements.
MinLimit and MaxLimit properties that can be assigned both in absolute and relative values. It is possible to assign the Auto value.
The Origin property allowing a developer to assign a reference point manually taking into account the step.
The newly-added Step property which makes it possible to specify the interval value between divisions. When the Auto value is specified for the Step property the interval is defined taking into account the number of divisions on the scale.



Layout Management System.
Layout management system allows performing automatic layout of such scale elements as ticks and labels taking into account specified values, font size etc.

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