VipWin software for process visualisation

FESTO

- Modular software structure

- Modern network technology

- Standardised system family

- Simple planning

VipWin software for process visualisation

Key features

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Electronic control systems
Front End Controllers

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VipWin at a glance

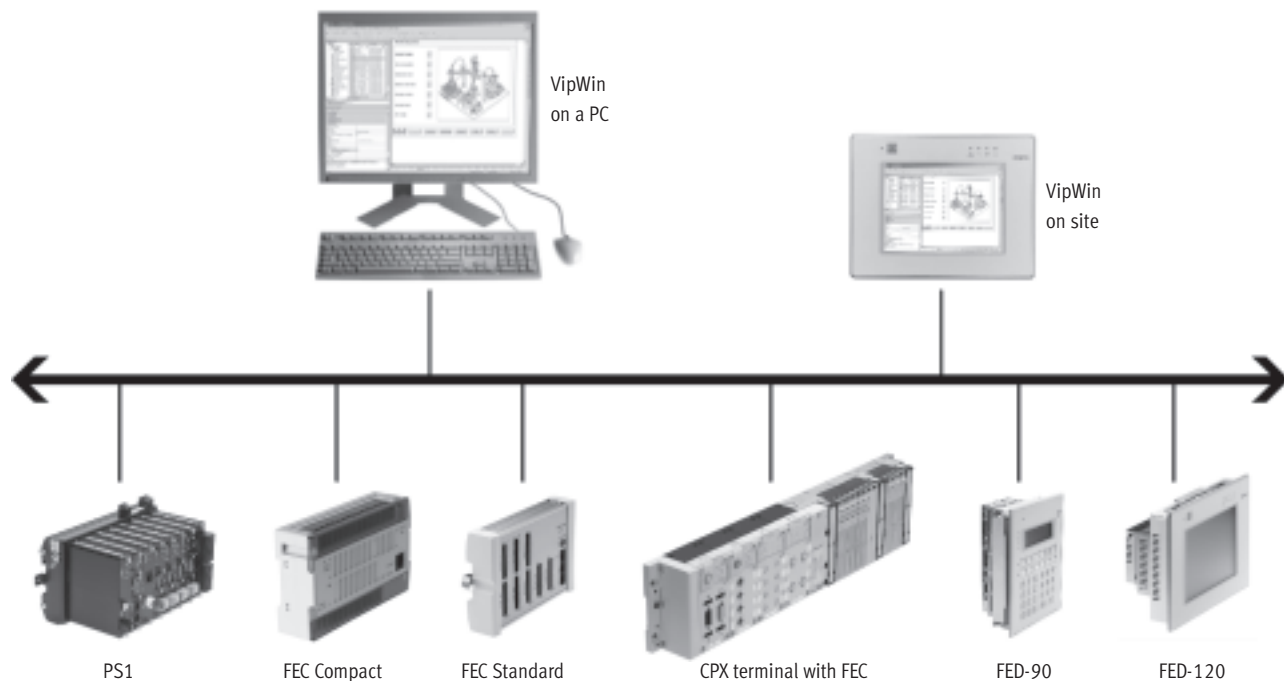| Clear	Handy	Modular	Flexible
VipWin is an easy-to-use, yet powerful piece of software for industrial automation. Whether you are looking for a machine control system (HMI), a process visualisation or control system (SCADA) or an interface system for the acquisition of operational data, VipWin is the right product for you.	VipWin is an "upward" enhancement of the FED Front End Display. It is a HMI (Human-Machine Interface), SCADA (System Control And Data Acquisition) and software package in one and is suitable for all types of industrial applications. VipWin runs on standard and industrial PCs under the Windows 2000, Server 2003 and XP platforms via the Festo controller systems IPC und FEC.	VipWin's flexible expansion modules enable it to grow with your requirements, thereby guaranteeing investment protection. Among other things, it offers simple archiving of process data and visualisation in trend graphs, a configurable system for the acquisition of fault detection and operational data as well as storage and selective evaluation of the data gathered.	VipWin offers special features not only for production automation, but also for the process industry, for water/sewage technology, building automation, process engineering, the pharmaceuticals, food, drink and tobacco industries and even the power supply industry.

VipWin in the Festo controller landscape

VipWin on a PC

VipWin on site

PS1   FEC Compact   FEC Standard   CPX terminal with FEC   FED-90   FED-120

Reliable	Adaptable	Simple	Modern
■ Standardised, reliable system family, executable under Windows CE/NT/2000/XP/Server 2003 ■ High availability project development with platform-neutral development studio ■ Automatic distribution of user and planning data	■ Demand-driven functionality supported by a modular software structure ■ Simple archiving of process data and visualisation in trend graphs ■ Efficient acquisition of operational data using configurable data analysis	■ Simple project engineering via standardised and freely selectable parameters ■ Time-saving project engineering thanks to intuitive graphical interface ■ Flexible project extension thanks to unlimited number of variables	■ Modern network technology supported by a distributed client/server structure ■ Facilitates decentralised data acquisition and management ■ Integrated remote management for remote project engineering and maintenance ■ Flexible multi-driver structure for connection to Festo controllers ■ Open, standard OPC interface (OLE for Process Control) for data exchange in all directions

VipWin software for process visualisation
Key features

Features of VipWin Version 6.01

Automatic Projecting
Intelligent wizards can handle recurring tasks on their own. Because of the short training period you can concentrate on the really important things.

Object-oriented Parameterisation
Even complex objects have to be defined only once, changed properties are inherited quickly and without errors.

Efficient Reusability
Follow-up projects can be created in the twinkling of an eye. Enormous timesaving because of smart import/export features for parts of projects or entire projects.

International Language Switching
Full Unicode integration allows font and language change in Editor and Runtime.

Elegant Networking
Decentralization and direct access to sub-projects is standard in VipWin. Fast reaction times with a low bandwidth requirement minimize the maintenance effort considerably.

Runtime Redundancy
Fully integrated redundancy features allows building of redundant configurations by simply activating a checkbox.

OPC Support
On the one hand VipWin is able to communicate with OPC servers, on the other hand, VipWin can act as an OPC Server and distribute all data via this standard interface

License Information

VipWin licenses are restricted in the number of useable process variables. The table on the right can be used to determine the required license:

Data Type	Example (FST)	Valence
1 bit	Input, Output, Flag	1 I/O or 1/16 Variable
1 word	Flag-Word, Register	16 I/O's or 1 Variable
1 string (max. 64 characters)	String	16 I/O's or 1 Variable

Example

Let's assume, you have 256 digital and 40 analogue values which you want to visualise in VipWin. Divide the 256 digital I/O's by 16, which equals 16 variables. Add these to the 40 analogue values. As a result you receive 56 variables, which represents the basis for selecting the license size.

The following order is derived from this among other things:
With development environment:
VW-K-64 VipWin 64K Complete package 64 Var, 1024 I/O's
Runtime only:
VW-R-64 VipWin 64R Runtime package, 64 Var, 1024 I/O's

Software Protection

VipWin is delivered with a security adapter (hard lock). This adapter has to be plugged into an USB port of the PC VipWin is running on. Additionally serial number and activation code have to be entered during installation or into the Editor.

Without security adapter and/or correct serial number and activation code VipWin is running in DEMO-mode, which means that VipWin programmes are terminating after 30 minutes with a prompt for saving data.

Ordering

VipWin is a modular product and can be easily configured to your individual needs.

Notes on configuration:
➔ 4 / 7.1-42 for new VipWin / OPC EasyServer configurations
➔ 4 / 7.1-43 for VipWin upgrades and enhancements.

Modular products:
➔ 4 / 7.1-44 for new VipWin / OPC EasyServer configurations
➔ 4 / 7.1-46 for VipWin upgrades and enhancements.

- ▮ -   Note

Data types available are related to the drivers used. To determine the license size the process variables (I/O's) of the following drivers are involved:
– PLC and bus driver

Internal process variables of the drivers
– system driver
– mathematics driver and
– simulator driver
  are not counted.

VipWin software for process visualisation

Configuration references

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VipWin Complete Package 6.01 (-K)

Components	Editor characteristics		Options
– Editor – Runtime	– Automatic projecting – VBA for Editor and Runtime – Multi project administration – Efficient reusability – Object-oriented parameterisation – International language switching	– Clearly arranged tree and list display – Remote projecting – Level technology – Online help – Multi-driver interface and much more	– Manual – PLC and bus drivers – Modules – Processes

VipWin Complete Package full version with unlimited process variables (-UNL)

Features	Additional features	Options
– All features of VipWin Complete Package 6.01 for Windows® (see above)	– Unlimited process variables – Festo PLC drivers – All extension modules	– Manual – Processes

VipWin Runtime Package 6.01 (-R)

Components			Options
– Editor with 30 minutes runtime restriction – Runtime – Various System drivers – Video integration, HTML window, soft-keyboard, variable overview – FDA compatible user administration	– Standard recipe – Online switching of language and character set – Alarm management and journal (chronological event list) with extensive filter options – Network technology – Multi project and multi server technology	– Redundancy – Online project reload – Online help – Menus and context menus – Remote maintenance – Multi driver interface and much more	– Manual – PLC and bus drivers – Modules – Processes

Modules – Extensions for Complete and Runtime Packages

Archiving (-ARV)

- Graphical user guidance
- Random group definition of process variables
- Cyclic, spontaneous or triggered recording
- Event triggered start and stop
- Cascading archives
- Batch and shift protocols
- Export to XML, ASCII or dBase

- License: This module must be licensed in runtime.

Extended Trend (-ETM)

- Access of historical data
- Trend scrolling
- Ruler function
- Zooming
- Many different Y axes
- Trend analysis
- 2 X-axes simultaneously
- XY-display

- License: This module must be licensed in runtime.

Report Generator (-REP)

- Cell-oriented report generator with random graphic draft of listings and extensive analysis
- Documentation, analysis and presentation of production data
- Comfortable tabular user interface with app. 150 functions for calculation
- Access to online and historical data
- Manual input
- Set and read values

- License: If tables or lists are only to be viewed without making changes, there is no need to license this module in runtime. If the values shown in the table are to be edited, e.g. enter manually or outline set point, this module has to be licensed in runtime version as well.

Recipe Management (-REZ)

- Tabular layout design (standard format or format random shaped with report generator)
- Random layout design with dynamic elements
- Formula addressable via OLE
- Indirect formula call e.g. process value dependent
- Random group allocation

- License: If formulas are only to be viewed without making changes, there is no need to license this module in runtime. If formulas are to be edited, e.g. enter manually or change and save values, this module has to be licensed in runtime version as well.

Message Control (-MCO)

- Output of messages to email, or mobile phones
- For most mobile phone nets. Ask for details!
- Speech output

- License: This module must be licensed in runtime.

- Transfer of random text or limit value text
- Message transfer status is logged in CEL
- Random group allocation
- Access data base

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Configuration references

Processes			OPC Server
W@P Portal (-WAP)	SQL Access (-SQL)	Web-Server (-WS1 ... -WS100)	OPC Easy Server (-OPC)
– Connects VipWin Runtime with a mobile telephone network – Online data, alarms and CEL events can be displayed on a W@P mobile phone – Sending of information (e.g. confirmation of alarms) – Display as text for fast update and structured display	– Transparent access to all VipWin historical data via SQL – Based on a OLE BD (interface standard for data base access) Provider – Can be called directly from Microsoft SQL Server	– All process data in Intranet / Internet – Full process overview from every station with MS Internet Explorer or Netscape Navigator – No additional projecting necessary – Process pictures are displayed exactly as in the Runtime – Setting values is not allowed – Allows simultaneous access of 1, 3, 5, ... users	– Supports OPC specification V1.0a and V2.03 – Standardised interface for SCADA and data acquisition packages – Comfortable editor for variable definition including variable import from FST projects – Runtime with diagnostic and logging functions – Test OPC client included – License: An OPC EasyServer license is required for each PC it is installed on, regardless how many instances of the OPC EasyServer with licensed communication are started!

License Extension and Upgrade			
Basics	Software Update (-U6)	License Upgrade (-K)	
– Extension or upgrade of an existing VipWin package – Serial number (printed on the security adapter) required!	– Update of an existing VipWin Complete or Runtime package from version V5.x to version V6	– Upgrade of an existing VipWin Runtime package to a Complete package (e.g. VW-R-64 to VW-K-64)	**Note** Upgrading from VipWin Runtime Unlimited (VW-R-UNL) to VipWin Complete Unlimited (VW-K-UNL) is not possible!
Variable Extension (-V2 ... -V64)	Modules (see previous page)	Web-Server (-WS1, -EWS...)	Driver (-IP, -O...)
– Variable extension of an existing VipWin Complete or Runtime package (e.g. V4 extends a VW-R- 16 to VW-R-64 package)	– License extension of an existing VipWin Runtime or Complete package with an additional module	– Upgrade of an existing VipWin Web-Server to a higher user number – To extend users by more than one step order all necessary extensions (e.g. EWS3 and EWS5)	– Upgrade of an existing VipWin Runtime or Complete package with an additional driver

Electronic control systems
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VipWin software for process visualisation

Ordering data – Modular products

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M Mandatory data				O Options				→
Module No.	**Function**	**Licence type**	**No. of variables**	**Archiving**	**SQL interface**	**Extended trend**	**Report generator**	**Recipe management**
536 793	VW	K R	16 32 64 128 256 512 1024 UNL	ARV	SQL	ETM	REP	REZ
Ordering example								
536 793	**VW** –	**R** –	**128** –	**ARV** –	**SQL** –	–	–	

Ordering table

			Condi-tions	Code	Enter code
M	Module No.	**536 793**			
	Function	Software for Visual System Control		**VW**	VW
	Licence type	Complete package with USB dongle		**-K**	
		Runtime package with USB dongle		**-R**	
	No. of variables	16 variables	1	**-16**	
		32 variables		**-32**	
		64 variables		**-64**	
		128 variables		**-128**	
		256 variables		**-256**	
		512 variables		**-512**	
		1024 variables		**-1024**	
		Unlimited number of variables	2	**-UNL**	
O	Archiving	Module for archiving operational data		**-ARV**	
	SQL interface	Interface for exporting operational data to an external SQL database	3	**-SQL**	
	Extended trend	Trend module that provides extended display options and access to operational data history		**-ETM**	
	Report generator	Report generator for freely definable reports		**-REP**	
↓	Recipe management	Module for defining/managing process parameters		**-REZ**	

1 **16** TCP/IP driver IP and OPC driver OPC are already included in conjunction with licence type K (complete package).

2 **UNL** TCP/IP driver IP and OPC driver OPC as well as ARV (archiving), ETM (extended trend), REP (report generator), REZ (recipe management) and MCO (message control) are already included in conjunction with licence type k (complete package).

3 **SQL** Only with ARV (archiving).

Transfer order code

536 793	VW	–	–	–	–	–	–	–

VipWin software for process visualisation

Ordering data – Modular products

FESTO

→ | O | **Options**

Message control	WAP portal	Web server	User docu-mentation	TCP/IP driver	OPC driver	Serial OPC server	TCP/IP OPC server	VipWin OPC server
MCO	WAP	WS1 WS3 WS5 WS10 WS25 WS50 WS100	D E	IP	OPC	OCI	OIP	OVW
– ⬚	– **WAP**	– **WS100**	– **E**	– **IP**	– ⬚	– ⬚	– ⬚	– ⬚

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Ordering table		Condi-tions	Code		Enter code
⬇ Message control	Module for outputting process messages via telecommunications devices (SMS, e-mail)		**-MCO**		
O WAP portal	Module for querying/controlling processes via WAP		**-WAP**		
Web server for process queries via Internet/Intranet	Web server for max. 1 user		**-WS1**		
	Web server for max. 3 users		**-WS3**		
	Web server for max. 5 users		**-WS5**		
	Web server for max. 10 users		**-WS10**		
	Web server for max. 25 users		**-WS25**		
	Web server for max. 50 users		**-WS50**		
	Web server for max. 100 users		**-WS100**		
User documentation	German manual		**-D**		
	English manual		**-E**		
TCP/IP driver	VipWin Easy IP driver for Festo controllers with Ethernet		**-IP**		
OPC driver	Driver for VipWin for connection of Festo Ethernet controllers by means of "OPC Easy Server TCP/IP" or OPC servers from other manufacturers		**-OPC**		
Serial OPC server	Serial OPC Easy Server for serial connection of Festo controllers to an OPC client (e.g. VipWin or another SCADA package)		**-OCI**		
TCP/IP OPC server	TCP/IP OPC Easy Server for Ethernet connection of Festo controllers to an OPC client (e.g. VipWin or another SCADA package)		**-OIP**		
VipWin OPC server	VipWin OPC Easy Server for connection of VipWin as a server to an OPC client (e.g. VipWin or another SCADA package)		**-OVW**		

Transfer order code

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VipWin software for process visualisation

Ordering data – Modular products

M Mandatory data			O Options							➜
Module No.	Function	Serial number	Software update	Upgrade licence type	No. of variables	Archiving	SQL interface	Extended trend	Report generator	Recipe management
536 794	VWE	…S	U6	K	V2 V4 V8 V16 V32 V64	ARV	SQL	ETM	REP	REZ
Ordering example										
536 794	**VWE** –	**200S** –	**U6** –	**K** –	**V16** –	–	**SQL** –	–	**REP** –	

Ordering table			Conditions	Code	Enter code
M	Module No.	**536 794**			
	Function	Software enhancement module for Visual System Control		**VWE**	VWE
	Serial number of authorisation adapter	1 … 9 999		**-…S**	
O	Software update	Update to version 6.01		**-U6**	
	Upgrade licence type	Complete package with USB dongle	1	**-K**	
	Increased number of variables	2-fold increase in number of variables	2	**-V2**	
		4-fold increase in number of variables	2	**-V4**	
		8-fold increase in number of variables	2	**-V8**	
		16-fold increase in number of variables	2	**-V16**	
		32-fold increase in number of variables	2	**-V32**	
		64-fold increase in number of variables	2	**-V64**	
	Archiving	Module for archiving operational data		**-ARV**	
	SQL interface	Interface for exporting operational data to an external SQL database		**-SQL**	
	Extended trend	Trend module that provides extended display options and access to operational data history		**-ETM**	
	Report generator	Report generator for freely definable reports		**-REP**	
↓	Recipe management	Module for defining/managing process parameters		**-REZ**	

1 **K** UNL only on request with previous licence type R (runtime package) with unlimited number of variables.

2 **V…** Max. 1,024 variables possible. The multiplication factor selected depends on the existing number of variables.
Increase to unlimited number of variables only on request.

Existing no. of variables	2-fold	4-fold	8-fold	16-fold	32-fold	64-fold
16	32	64	128	256	512	1024
32	64	128	256	512	1024	–
64	128	256	512	1024	–	–
128	256	512	1024	–	–	–
256	512	1024	–	–	–	–
512	1024	–	–	–	–	–

Transfer order code

536 794	VWE	–	–	–	–	–	–	–	–	–

VipWin software for process visualisation

Ordering data – Modular products

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→ ☐ **Options** →

Mess-age control	WAP portal	Web server for process queries via Internet/Intranet	Web server extension to 3 users	Web server extension to 5 users	Web server extension to 10 users	Web server extension to 25 users	Web server extension to 50 users	Web server extension to 100 users
MCO	WAP	WS1	EWS3	EWS5	EWS10	EWS25	EWS50	EWS100

– [ ] – **WAP** – [ ] – **EWS3** – **EWS5** – **EWS10** – [ ] – [ ] – [ ]

Ordering table

			Condi-tions	Code	Enter code
↓ Message control		Module for outputting process messages via telecommunications devices (SMS, e-mail)		**-MCO**	
☐ WAP portal		Module for querying/controlling processes via WAP		**-WAP**	
Web server	Process queries via Internet/Intranet	Web server for max. 1 user		**-WS1**	
	Extension to 3 users	Increase in web server users, 1st level	☐3	**-EWS3**	
	Extension to 5 users	Increase in web server users, 2nd level	☐3	**-EWS5**	
	Extension to 10 users	Increase in web server users, 3rd level	☐3	**-EWS10**	
	Extension to 25 users	Increase in web server users, 4th level	☐3	**-EWS25**	
	Extension to 50 users	Increase in web server users, 5th level	☐3	**-EWS50**	
	Extension to 100 users	Increase in web server users, 6th level	☐3	**-EWS100**	

☐3 **EWS…** If extending the users by a number of levels, the interim levels must also be selected.

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Transfer order code

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2006/03 – Subject to change – Products 2006

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➜ ☐0☐ **Options**

User documentation	TCP/IP driver	OPC driver	Serial OPC server	TCP/IP OPC server	VipWin OPC server
D E	IP	OPC	OCI	OIP	OVW
– **E**	– **IP**	–	–	– **OIP**	–

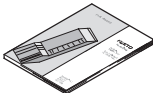| Ordering table			Condi- tions	Code		Enter code
↓ ☐0☐ User documentation		German manual		**-D**		
		English manual		**-E**		
TCP/IP driver		VipWin Easy IP driver for Festo controllers with Ethernet		**-IP**		
OPC driver		Driver for VipWin for connection of Festo Ethernet controllers by means of "OPC Easy Server TCP/IP" or OPC servers from other manufacturers		**-OPC**		
Serial OPC server		Serial OPC Easy Server for serial connection of Festo controllers to an OPC client (e.g. VipWin or another SCADA package)		**-OCI**		
TCP/IP OPC server		TCP/IP OPC Easy Server for Ethernet connection of Festo controllers to an OPC client (e.g. VipWin or another SCADA package)		**-OIP**		
VipWin OPC server		VipWin OPC Easy Server for connection of VipWin as a server to an OPC client (e.g. VipWin or another SCADA package)		**-OVW**		

Transfer order code

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VipWin software for process visualisation

Accessories

Ordering data				
	Designation		Part No.	Type
User documentation				
	Manual	German	**195 339**	**VW-MAN-DE**
		English	**195 340**	**VW-MAN-EN**
OPC Easy Server software				
	Data coupling of FEC to OPC clients via serial interfaces		**526 809**	**OPC-CI**
	Data coupling of FEC to OPC clients via Ethernet		**526 808**	**OPC-IP**
	Data coupling of VipWin to OPC clients via Ethernet		**539 706**	**OPC-VW**

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