Automation for a Changing World

Delta DIAView SCADA System
Delta DIAView SCADA System

Your Best Choice for Data Collection, Factory Visualization, Real-Time Monitoring and Management

To succeed in a highly competitive marketplace, your plants, machines, systems and facilities all require more efficient management to collect, analyze, and monitor real-time factory and production data, achieving high-efficiency factory production and management.

Delta's DIAView SCADA System is an industrial data visualization software designed for smart management of factory equipment and production processes. The system employs automated management function including real-time system monitoring, data acquisition and analytics, to assist users to collect data of whole plant, as well as constructing a management interface for production line visualization, achieving remote monitoring, system management, digitalization of whole plant, and increasing overall factory production efficiency. The DIAView SCADA System is suitable for machinery, metallurgy, water treatment, HVAC, packaging, central heating control, environmental monitoring, textiles, energy management, transportation, smart buildings, and more.

The DIAView SCADA System is easily compatible with Delta's industrial automation products to help customers in a variety of industries establish a complete automation solution for high-efficiency monitoring and managing their factories and every subsystem situation. The DIAView can also optimize production distribution by enhancing data traceability. Delta's DIAView SCADA System, realizing digitalization, visualization, and real-time monitoring, is the best choice for meeting your industry demands and "Automation for a Changing World"!

- Stable industrial communication, seamless integration with Delta PLC and I/O products
- WPF technology for intuitive displays and easy-to-navigate interfaces for data and I/O products visualization
- Flexible variables dictionary and batch editing parameters
- A variety of data visualization tools: reports, alarms, charts and trend graphs
- Robust and efficient alarm management
- VBScript language for easy programming
- Easy-to-use and flexible management program
- Reliable user authority management
- Highly real-time database for data visualization and analytics
- Fulfills the needs of various industrial environments when matched with fanless industrial PCs
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DIAView SCADA System for Efficient Facility Management

- **DIAView SCADA System**
  - Stand-alone version
  - Server

- **Equipment IoT Platform**
  - DIALink

- **Ethernet**
  - Managed 10-Port Ethernet Switch
  - DVS-110W02-3SFP

- **Fiber Ring**

- **Air Compression System**

- **Water Treatment**
  - Inflow Station
  - Sedimentation
  - Aeration Tank
  - Disinfection

- **DIAView:**
  - SCADA System
  - DIAView
  - DIAView
  - DIAView

- **Dialink:**
  - Managed 10-Port Ethernet Switch
  - DVS-110W02-3SFP

- **Advanced Multifunction Power Meter**
  - DPM-C530

- **Advanced Intelligent Temperature Controller**
  - DT3

- **Fan/Pump Vector Control Drive**
  - CP2000

- **Analyzer**

- **Advanced Multifunction Power Meter**
  - DPM-C530
Monitoring and Management

**DIAView**
SCADA System
Client

**Equipment IoT Platform**
DIALink

**Managed Industrial Ethernet Switch**
DVS-110W02-3SFP

**Network Type**
Advanced Slim PLC
DVP-12SE

**Advanced Intelligent Temperature Controller**
DT3

**Advanced Multifunction Power Meter**
DPM-C530

**Fan/Pump Vector Control Drive**
CP2000

**HVAC System**

**Ethernet**

**DVS-110W02-3SFP**

**Hot Swappable Mid-range PLC**
AH500

**Advanced Multifunction Power Meter**
DPM-C530

**HMI**
DOP-W

**Fan/Pump Vector Control Drive**
CP2000

**Production Line & Workshop Environment**

**Lighting System**

**Power System**

**DIA View**
SCADA System for Efficient Facility Monitoring and Management
Features

Stable and Reliable Industrial Communication

- Supports Modbus and OPC Server / OPC Client communication
- Seamless integration with Delta and third-party PLCs
- Built-in communication gateways
- Data simulation function
- Equipment auto turn on/off, sampling and data acquisition optimization, and communication retry function

OPC Modbus

C/S client/server structure

- C/S client/server structure, it is usually built on a dedicated network, providing connections and data exchange services through servers between the local networks
- DIAView Server can support 10 clients to access at the same time. The DIAView Server as both a server and a client for local monitoring
**Excellent Graphical Demo Platform**

Graphical interface development is a critical factor for the SCADA system. DIAView provides an intelligent graphical symbol library that allows users to quickly create graphical elements and true color objects. It is easy to design an intuitive and easy-to-navigate operator interface for system configuration, and is suitable for facility/production monitoring and management.

- Industrial graphical symbol database for abundant animations and control interfaces
- Supports extension attributes and event functions for users to self-define symbols
- Supports rich and complex animated effects
- Adopts WPF and XAML technologies to create professional image quality, as well as complex and delicate user interfaces
- Image compression technology to automatically adjust symbol size

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**Intelligent Graphical Symbol Library**

![Intelligent Graphical Symbol Library](image)
Features

Flexible Variables Dictionary

The variables dictionary is a collection of variables in a project, and the variable group is an unit for grouping and managing variables.

► Easy to add, delete and modify variables
► Supports variables managing and sorting to classify different variables group
► Quick and easy variables input/output and batch parameter editing management
► Variables branching and management via tree structure
► Batch parameter editing to improve development efficiency
► Supports smart variables searching/substitution, quotation browsing, usage statistics, and error detection
**Flexible User Interface**

Allows users to manage backstage via script, achieving comprehensive logic control

- Easy, flexible script editing
- Trigger function allows users to self-define trigger conditions according to system operation
- Timer trigger function allows automatic system operation based on a schedule defined by users

**Efficient Recipe Management**

- Provides variables browser for fast setting and recipe maintenance
- Supports VBScript interface for editing
- Recipe parameter input / output

**Bread Recipe**

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>Variable</th>
<th>Sweet</th>
<th>Salty</th>
<th>Coffee Flavor</th>
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<tr>
<td>Sugar</td>
<td>Variable1</td>
<td>85</td>
<td>10</td>
<td>30</td>
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<tr>
<td>Cream</td>
<td>Variable2</td>
<td>10</td>
<td>10</td>
<td>10</td>
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<tr>
<td>Salt</td>
<td>Variable3</td>
<td>5</td>
<td>80</td>
<td>10</td>
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<tr>
<td>Coffee Powder</td>
<td>Variable4</td>
<td>0</td>
<td>0</td>
<td>50</td>
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</table>
Features

Data Visualization Tools

- Microsoft Office Excel editing interface
- Provides various sampling templates for users to self-define report formats
- Batch parameter editing function to enhance development efficiency
- Reports import and export functions for information print-out and timely analysis
- Supports VBScript for database editing
- Provides CRUD (Create, Read, Update, Delete) editing function
► Provides real-time data curve, history data curve, and X-Y curve to show various data information
► Supports 2D / 3D statistical data, including pie charts, bar charts, and more
► Supports database connection and data exchange
► Supports data export/import in Microsoft Office Excel format
► Provides real-time trend graph updates, printing, saving and image zoom in/out

**Trend Graphs**

**Real-time Data**

**Historical Data**

**Reports and trend graph data exchange in relational databases**

**Pie Chart**

**XY Chart**

**Bar Chart**
Features
Robust and Efficient Alarm Management

The DIAView provides real-time alarms and early warning for faster response to critical situations. This prevents damage to equipment, ensures a safer working environment, and meets other operational needs.

► Alarm levels
► Smart alarm filtering
► Various alarm notifications
► Real-time alarm records and history logs

Supports Third-party Database

Easy to expand data types
► Easy data exchange among different software/systems
► Supports SQL Server, SQL Compact, MySQL, Oracle Database
► Integrates with 3rd Party Databases
**Reliable User Authority Management**

User authority management includes: login, logout, password change, and user adding / delete

- System administrators can operate in all security sections and manage all user accounts
- Allows administrating authority to add and delete users, and modify user information
- Operators can specify the security sections and perform tasks in these sections

**User Authority Table**

<table>
<thead>
<tr>
<th>Users</th>
<th>Authorities</th>
<th>Remarks</th>
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</thead>
<tbody>
<tr>
<td>Administrator</td>
<td>Add and remove users, security area management, associated security areas and operator's authority</td>
<td>System default is for a one system administrator</td>
</tr>
<tr>
<td>Operator</td>
<td>Login, logout, and edit relevant screens and variables</td>
<td>Objects can only be edited in relevant security areas</td>
</tr>
</tbody>
</table>

**Open Software Structure**
**Applications**

**Wastewater Treatment Monitoring & Control System**
- With DIAView, control and process monitoring of wastewater plants can be easily managed from the central control room. All process data and historical alarms / events can also be viewed and recorded for enhanced monitoring.
- DIAView offers analysis and calculation functions, enabling various aspects of flow analysis and sophisticated water quality analysis and calculation. This helps to properly control chemical feed systems and automatically adjusts the chemical feed pump or valve, reducing associated risks and operation costs.

**HVAC Energy-Saving Monitoring & Control System**
- Integrates DIAView, PLC and AC motor drives to fulfill requirements for constructing an intelligent HVAC monitoring and control system, providing energy savings of 20% ~ 60%.
- DIAView helps to automatically adjust fan frequency and chiller load according to the indoor temperature and monitor the status of the air conditioning system in real-time for excellent HVAC control and monitoring.
- Automatically adjusts fan frequency and the chiller unit according to indoor temperature, and monitors the density of indoor CO₂; and then lets in fresh outdoor air to reduce reliance on the air conditioning system, saving more energy and creating comfortable indoor environment for users.
**Electronic Equipment Inspection & Monitoring**
- Coordinates PLCs, schedules the equipment to perform inspection, and provides group control functions
- Records daily production conditions, identifies yield / defect rate, and provides data acquisition and inquiry functions

**Remote Control & Monitoring of 4-Color Printing Machines**
- Provides remote and real-time monitoring for printing processes in the entire operation
- Suppliers can use the remote lock function to lock machines remotely for easier management
System Requirements of DIAView

<table>
<thead>
<tr>
<th>Hardware / Software</th>
<th>System Requirements</th>
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<tbody>
<tr>
<td>CPU</td>
<td>Pentium 2.0GHz and above (Intel Core i3 and above is recommended)</td>
</tr>
<tr>
<td>Memory</td>
<td>2GB RAM and above is recommended</td>
</tr>
<tr>
<td>Hard Disk</td>
<td>Capacity: 20GB and above</td>
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<tr>
<td>Display</td>
<td>Supports resolution: 1024 x 768 or higher full-color display</td>
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<tr>
<td>Operating System</td>
<td>Windows 7 Professional / Ultimate (32-bit &amp; 64-bit)</td>
</tr>
<tr>
<td></td>
<td>Windows 8 Professional / Ultimate (32-bit &amp; 64-bit)</td>
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<tr>
<td></td>
<td>Windows 10 Professional / Ultimate (32-bit &amp; 64-bit)</td>
</tr>
<tr>
<td></td>
<td>Windows Server 2008 / 2012 (32-bit &amp; 64-bit)</td>
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<tr>
<td>Web Installer</td>
<td>Microsoft .NET Framework 4.0</td>
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</table>

Software Licensing (Stand-alone & C/S version)

Licensing
- DIAView licensing is calculated based on the I/O tags in customer’s connected devices, and the software itself is free of charge
- When licensing is authorized, users can use a USB dongle key to carry out all authorizations. If unauthorized, trial session can be operated for 2 hours

I/O Tags
- Eight standard options: 64, 128, 256, 512, 1000, 1500, 3000 and unlimited
- C/S version: 5, 10 clients

Cost of I/O Tags
- The DIAView SCADA System is charged by I/O tags
  (Please refer to ordering information)
## Ordering Information

<table>
<thead>
<tr>
<th>Product type</th>
<th>Model Name</th>
<th>Descriptions</th>
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<td><strong>Standalone Version</strong></td>
<td><strong>Standard Version</strong></td>
<td>DIAV-010640000A DIAView SCADA standalone version, 64 tags, USB dongle key</td>
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<td>DIAV-0101K0000A DIAView SCADA standalone version, 1000 tags, USB dongle key</td>
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<td><strong>C/S Version</strong></td>
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Model Information

Product Name
Delta Industry Automation View

Product Type
00 = Upgraded Version
01 = Standalone Version
02 = C/S version

I/O Tags
000 = no licensed tags
064 = 64 licensed tags
128 = 128 licensed tags
256 = 256 licensed tags
512 = 512 licensed tags
01K = 1000 licensed tags
1K5 = 1500 licensed tags
03K = 3000 licensed tags
... ...
99K = unlimited licensed tags

Versions
00 = 00 version
01 = 01 version
xx = xx version
UP = Upgraded version

Amount of C/S Licenses
05 = 5 Clients
10 = 10 Clients
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